



“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार” – शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin- 416 312 ☎ - STD : 02346-250665, 250575 FAX : 250575

● **Affiliated to Shivaji University, Kolhapur** ●

E-mail : san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

Established Year : June 1962 P. B. No. : 14 Jr. College No. : J22-10-001 Sr. College Code No. :  $\frac{SVAC14}{X}$  Jr.: C-8



NAAC Reaccredited 'B' (2.76)

ISO Certified : 9001:2015

**Shikshanmaharshi  
Dr. Bapuji Salunkhe**  
B.A., B.T., D.Lit.  
FOUNDER

**Hon. Chandrakant (Dada) Patil**  
PRESIDENT  
B.Com.  
Ex- Minister of Revenue, Public Works  
Govt. of Maharashtra

**Prin. Abhaykumar Salunkhe**  
M.A.  
CHAIRMAN

**Prin. Mrs. Shubhangi Gawade**  
M.Sc., B.Ed.  
SECRETARY

**Dr. Milind S. Hujare**  
M.Sc., Ph.D.  
PRINCIPAL

Ref.No. : PDVPMT /

Date :

## **Criterion VI**

# **Governance, Leadership and Management**

### **6.5.1**

**Internal Quality Assurance Cell (IQAC) has  
contributed significantly for institutionalizing  
the quality assurance strategies and  
processes**

1. IQAC Meetings, Proceeding and Action Taken Reports: (Pages 03-118)
2. Vasan Avishkar (Pages 119-141)
3. Research Committee Proceeding (Pages 142-152)
4. Research Innovative Committee and Institutional Promotion Scheme (Pages 153-174)
5. Research Output:
  - a. Number of Research Projects(Under DST, UGC, CSIR, Govt of Maharashtra, University and: Institutional Promotion Scheme) 24 (Pages 175-213)
  - b. A Patent and Number of Research Papers: 223 (Pages 215-)
  - c. Grants received from ICSSR:
6. Workshops on IPR and Research Methodology (Pages 465-538)
7. Green Practices: (Pages 539- 558)
  - a. Tree Plantation
  - b. Vermicomposting
  - c. Apiculture
  - d. Sericulture
  - e. Mulberry Garden
  - f. Butterfly Garden
  - g. Medicinal Plant Garden
  - h. No Vehicle Day
  - i. Workshop on Climate Change





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PRINCIPAL

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Date :

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

Date: 12 / 06 / 2020

### MEETING NOTICE

All the members of Internal Quality Assurance Cell (IQAC) are here by informed that a meeting of IQAC is convened on 15/06/2020 at 11.00 am. All the respected members are requested to join the meeting to discuss the following agenda.

### AGENDA OF THE MEETING

1. Review of minutes of the previous IQAC Meeting
2. Discussion on organization of online awareness programs on COVID 19 pandemic
3. Discussion on organization of online awareness programs on various day celebrations.
4. Discussion on organization of Webinars on different themes.
5. Discussion on construction of Sericulture farming.
6. Discussion and Preparation of Academic Calendar for academic year 2020-21.
7. To audit the gender status of the college.
8. Discussion and Planning for preparation of calendar for CIE system and implementation.
9. Review of feedback from all stakeholders- student, parent, alumni and employer.

## IQAC COMMITTEE

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Dr. Alka P. Inamdr	Director, IQAC	
3	Mr. P. V. Patil	Member	
4	Mr. J. A. Yadav	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. S. A. Khabade	Member	
7	Dr. T. K. Badame	Member	
8	Mr. V. H. Patil	Management Representative	
9	Mr. M. B. Kadam	Administrative Officer	
10	Mr. A. P. Chavan	Local Society	
11	Miss. Arti Rajendra Dalvi	Student Representative	
12	Adv. Krishna Patil	Member of Alumni	
13	Mr. Satish Mali	Industrialist	

**Dr. Alka P. Inamdr**  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.



**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantaoada Patil  
 Mahavidyalaya, Tasgaon, (Sangli)

### MINUTES OF IQAC MEETING

The meeting was started on a welcome note by IQAC Director, Dr. Alka Inamdr followed by her online presentation on agenda which included basic purposes, activities and functions of IQAC.

The Chairperson Dr. M. S. Hujare, then requested all the members for open house discussion on academic excellence.

#### 1. Review of minutes of the previous IQAC Meeting

The previous IQAC meeting was held by Dr. Alka Inamdr, Director, IQAC and were approved by the Council.



**2. Discussion on organization of online awareness programs on COVID 19 pandemic.**

Committee decided to prepare online awareness programs on COVID-19 pandemic spread throughout the world and to be communicated to all stakeholders and society.

**3. Discussion on organization of online awareness programs on various day celebrations.**

Issue regarding to celebration of various days was discussed and then we came to a decision to celebrate the days by organizing online awareness programs by respective departments.

**4. Discussion on organization of Webinars on different themes.**

Due to lockdown situation committee discussed and decided to organize webinars on various themes for students and faculty members.

**5. Discussion on starting of Sericulture farming.**

Issue regarding starting of Sericulture farming was discussed and decided to start Sericulture farming in the college campus.

**6. Discussion and Preparation of Academic Calendar for academic year 2020-21.**

To keep students, faculty, and staff reminded of key dates throughout the academic year, it is necessary to prepare academic calendar at the beginning of year. Therefore committee decided to prepare Academic Calendar for academic year 2020-21 and to publish it on the College website.

**7. To audit the gender status of the college.**

To access and analyze the strength, policies, programs, and organization process of the institution with the view to identify where key strategic initiatives could be initiated and implemented to strengthen our commitment to enhance capacities for gender mainstreaming at all levels in the institution. The Committee decided to audit the gender status of the institution and the responsibility is given to the Women Empowerment Cell of the College.

**8. Discussion and Planning for preparation of calendar for CIE system and implementation.**

The education process in any discipline of learning ends with an examination. The Committee decided to prepare calendar for CIE and to implement it from beginning of academic year, by conducting various activities such as bridge courses, aptitude tests, class tests, seminars, Home Assignments, field visits, study tours etc.

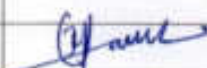
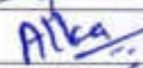


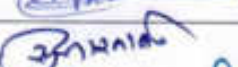




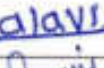



**9. Review of feedback from all stakeholders-student, parent, alumni and employer.**


Issues regarding feedback from all stakeholders were discussed and we concluded that the feedbacks should be taken online and analyzed by all the stakeholders of the institution.

Dr. Alka Inamdr, Director, IQAC, informed the date for the next meeting and it was unanimously decided to be held in the third week of September 2020. The meeting ended with a formal vote of thanks.


The meeting of IQAC was held at 11.30 a.m. on 15.06.2019 in IQAC meeting hall. The following members were present.

### ATTENDANCE REPORT

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Dr. Alka P. Inamdr	Director, IQAC	
3	Mr. P. V. Patil	Member	
4	Mr. J. A. Yadav	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. S. A. Khabade	Member	
7	Dr. T. K. Badame	Member	
8	Mr. V. H. Patil	Management Representative	
9	Mr. M. B. Kadam	Administrative Officer	
10	Mr. A. P. Chavan	Local Society	
11	Miss. Arti Rajendra Dalvi	Student Representative	
12	Adv. Krishna Patil	Member of Alumni	
13	Mr. Satish Mali	Industrialist	

  
Dr. Alka P. Inamdr  
IQAC Co-Ordinator,  
P.D.V.P Mahavidyalaya,  
Tasgaon.



  
Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)





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SECRETARY

Dr. Milind S. Hujare  
M.Sc. Ph. D.  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

Date:-15/ 09/ 2020

### MEETING NOTICE

All the members of Internal Quality Assurance Cell (IQAC) are here by informed that a meeting of IQAC is convened on 21/09/2020 at 11.30 am All the respected members are requested to join the meeting in IQAC meeting hall to discuss the following agenda.

### AGENDA OF THE MEETING

1. Review of minutes of the previous IQAC Meeting.
2. Discussion on organization of MOOC Course for students.
3. To audit the energy utilization of college.
4. Discussion on organization of Webinars on different themes.
5. To audit green incentive taken by college.
6. Organization of Orientation program for NSS Program Officer.
7. Discussion on Celebration of upcoming Various days
8. To Organize the Alumni meet.
9. Discussion on increasing percentage of students in student satisfaction survey.

## IQAC COMMITTEE

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13	Mr. Satish Mali	Industrialist	

**Dr. Alka P. Inamdr**  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.



**Prin. Dr. Milind S. Hujare**  
 Principal

**Padmabhushan Dr. Vasantrodada Patil**  
 Mahavidyalaya, Tasgaon, (Sangli)

### MINUTES OF IQAC MEETING

The Chairperson Prin. Dr. Milind S. Hujare welcomed the members for the second meeting of IQAC. The following points were discussed in the meeting:

#### 1. Review of minutes of 1<sup>st</sup> IQAC Meeting

The minutes of the meeting held on 15/06/2020 are approved by the Council.

#### 2. Discussion on organization of MOOC Course for students.

To provide an opportunity to study by such course to the students. Therefore, issue regarding organization of MOOC Course for students is discussed and decision has been taken to organize such course by respective departments.

#### 3. To audit the energy utilization of college.

The issue regarding to audit the energy utilization of college is raised by committee members. The Energy Audit defines ways to reduce energy consumption per unit of product output or to lower operating costs. The recommendations of the study will become a basis for future schemes of better energy consumption and preservation



throughout the organization. After discussion it is decided that, Energy utilization audit of college will be done by external agency.

**4. Discussion on organization of Webinars on different themes.**

Due to lockdown situation committee discussed and decided to organize webinars on various themes for students and faculty members.

**5. To audit green incentive taken by college.**

The Green Audit of the College is becoming a paramount important these days for self assessment of the institution, which reflects the role of the institution in mitigating the present environmental problems.

Therefore, the committee suggesting to complete the green audit of College campus to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

After discussion it is decided that, this responsibility is given to the external agency.

**6. Organization of Orientation program for NSS Program Officer**

Provide knowledge on NSS program, activities, financial management, reporting, planning, and organizing NSS camps and special camps. Impart comprehensive knowledge on youth development activities, Life Skills, Team Building, Leadership, Developmental issues, Youth counseling, Disaster management, village adoption, and gender sensitization in order to build the capacity of NSS officers to develop their skills. The issue discussed and decision has been taken to organize such program of NSS.

**7. Discussion on Celebration of upcoming Various days**

In most graduate level exams, the awareness section is often the deciding one. In this section, one of the important topics is the list of important days that occur in a calendar year. The important days have to be committed to the memory. So the issue discussed and decision has been taken to celebrate these important international, national days of their importance to acknowledge the students.

**8. To Organize the Alumni meet.**

The organization of Alumni meet aims to foster a sense of community among alumni, while supporting a sense of connectedness back to the institution feeling. Alumni meet will help new professionals or visit with people they have met before, to establish or renew friendships and acquaintances. Therefore issue regarding Alumni meet organization is discussed and decision has been taken to organize Alumni meet in the month of January.


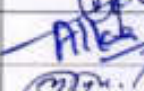


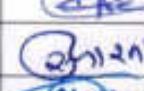








**9. Discussion on increasing percentage of students in student satisfaction survey.**


The objectives of the student satisfaction survey are to assess student satisfaction with respect to academic support, learning resources, organization and management, assessment and feedback, personal development of the students. Some committee members raised issue regarding less participation of students in student satisfaction survey. It has been decided that motivate the students to participate in student satisfaction survey to be conducted at the end of academic year. The responsibility is given to all Head of departments for counseling the students for participation in the survey.

Dr. Alka Inamdr, IQAC Director informed the date for the next meeting and it is unanimously decided in the first week of January 2021. The meeting ended with a formal vote of thanks.


The meeting of IQAC was held at 11.30 a.m. on 21/09/2020 in IQAC meeting hall. The following members were present.

#### ATTENDANCE REPORT

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Dr. Alka P. Inamdr	Director, IQAC	
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 Tasgaon.



  
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PRINCIPAL

Ref.No. : PDVPMT/

Date :

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

Date:-02/ 01/ 2021

### MEETING NOTICE


All the members of Internal Quality Assurance Cell (IQAC) here by informed that a meeting of IQAC is convened on 07/01/2021 at 11.30 am All the respected members are requested to join the meeting in IQAC meeting hall to discuss the following agenda.

### AGENDA OF THE MEETING


1. Review of minutes of the previous IQAC Meeting.
2. Discussion on organization of Student Development Course for students.
3. Discussion on organization of Webinars on different themes
4. To organize Health Checkup camp for teaching and non teaching faculty.
5. Organization of workshop on Entrepreneurship skill
6. Discussion on organization of soft skill development course.
7. To audit the Academic and Administrative status of college by internal committee.
8. To Organize a Workshop on Good Governance.
9. Discussion on preparation and Submission of AQAR 2019-20

## IQAC COMMITTEE

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**Prin. Dr. Milind S. Hujare**  
 Principal  
 Padmabhushan Dr. Vasantraodada Patil  
 Mahavidyalaya, Tasgaon, (Sangli)

### MINUTES OF IQAC MEETING

The Chairperson Prin. Dr. Milind S. Hujare welcomed the members for the third meeting of IQAC. The following points were discussed in the meeting:

#### 1. Review of minutes of 2<sup>nd</sup> IQAC Meeting

The minutes of the meeting held on 21/09/2020 are approved by the Council.

#### 2. Discussion on organization of Student Development Course for students.

This course covers various dimensions and importance of effective personality. It helps to understand personality traits and formation and vital contribution in the world of business. Also the course makes the student aware about the various dynamics of personality development. This issue discussed and decision has been taken to organize such course by respective departments.



**3. Discussion on organization of Webinars on different themes.**

Due to lockdown situation committee discussed and decided to organize webinars on various themes for students and faculty members.

**4. To organize Health Checkup camp for teaching and non teaching faculty.**

To bring awareness amongst the faculty of the college who have no access to basic healthcare services or knowledge about the diseases they are suffering from. So, medical camps provide free medical advice, medicine to the unfortunate people and refer for specialized treatment or surgery whenever it is required. Therefore it was decided that to organize free health check-up camp for teaching faculty, non-teaching staff and students.

**5. Organization of workshop on Entrepreneurship skill**

The objective of the program is to motivate youth representing different sections of the society including SC/ST/Women, differently-abled, and persons to consider self employment or entrepreneurship as one of the career options. The ultimate objective is to promote new enterprises, capacity building and inculcating entrepreneurial culture in the students. Therefore it was decided to organize such a workshop for students.

**6. Discussion on organization of soft skill development course**

This course aims to cause a basic awareness about the significance of soft skills in professional and interpersonal communications and facilitate an all round development of personality. Hard or technical skills help securing a basic position in one's life and career. This issue discussed and decision has been taken to organize such course.

**7. To audit the Academic and Administrative status of college by internal committee.**

The issue regarding Internal Academic and Administrative Audit is discussed and decision has been taken to appoint the committee for to conduct the Academic and Administrative Audit of the college.

**8. To Organize a Workshop on Good Governance.**

The Polity of India is the largest exercise in democracy in the world. This issue discussed and decision has been taken to organize such program.



**9. Discussion on preparation and Submission of AQAR 2019-20**


An issue of preparing and sending the AQAR of 2019-20 to NAAC Bangalore before the valid period has been raised in the meeting. The IQAC committee is suggesting the IQAC Coordinator and Principal of the College to prepare and send the AQAR of 2019-20 to NAAC Bangalore before valid period.

Dr. Alka Inamdr, Director, IQAC informed the date for the next meeting and it is unanimously decided in the second week of April 2021. The meeting ended with a formal vote of thanks.

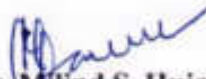
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**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

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• Affiliated to Shivaji University, Kolhapur •

ISO - 9001:2015

E-mail: san.pdvpm.tas@gmail.com Website : www.pdvprmtasgaon.edu.in

• Established Year : June 1962 • P. B. No. : 14 • Jr. College No. : 22-10-001 • Sr. College Code No. : <sup>SIACB</sup>X Jr. C-8

Shikshanmaharshi  
Dr. Babuji Salunkhe  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
SECRETARY

Dr. Milind S. Hujare  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

Date:-06/ 04/ 2021

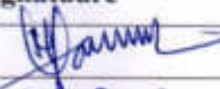


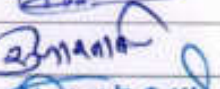
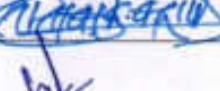


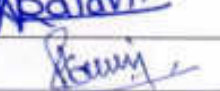
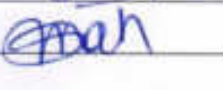


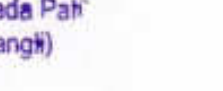

### MEETING NOTICE


All the members of Internal Quality Assurance Cell (IQAC) are here by informed that a meeting of IQAC is convened on 10/04/2021 at 11.30 am All the respected members are requested to join the meeting in IQAC meeting hall to discuss the following agenda.

### AGENDA OF THE MEETING


1. Review of minutes of the previous IQAC Meeting.
2. Discussion on organization of Placement Special Drive for PG Students.
3. Discussion on organization of COVID 19 vaccination Awareness Program
4. Discussion on organization of celebration of Biodiversity Conservation day and various upcoming days.
5. Discussion on establishment of Staff Academy.
6. Discussion on organization of teacher's training program.
7. Discussion on organization of Webinars for girl students.
8. To organize webinar on Women Violence.
9. Discussion on organization of Webinars on different themes
10. Organization of Webinar on COVID 19 Free Rural Communities.
11. Organization of workshop for higher student progression.
12. Organization of Course on Communication skill
13. To start the writing of draft SSR

## IQAC COMMITTEE

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Dr. Alka P. Inamdr	Director, IQAC	
3	Mr. P. V. Patil	Member	
4	Mr. J. A. Yadav	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. S. A. Khabade	Member	
7	Dr. T. K. Badame	Member	
8	Mr. V. H. Patil	Management Representative	
9	Mr. M. B. Kadam	Administrative Officer	
10	Mr. A. P. Chavan	Local Society	
11	Miss. Arti Rajendra Dalvi	Student Representative	
12	Adv. Krishna Patil	Member of Alumni	
13	Mr. Satish Mali	Industrialist	

  
**Dr. Alka P. Inamdr**  
**IQAC Co-Ordinator**  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.



  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantraodada Patil  
 Mahavidyalaya, Tasgaon, (Sangli)

### MINUTES OF IQAC MEETING

The Chairperson Prin. Dr. Milind S. Hujare welcomed the members for the third meeting of IQAC. The following points were discussed in the meeting:

**1. Review of minutes of 3<sup>rd</sup> IQAC Meeting**

The minutes of the meeting held on 07/01/2021 are approved by the Council.

**2. Discussion on organization of Placement Special Drive for PG Students**

To create promising career opportunities, to provide right job for the right person in right place at the right time, to ensure our students will start the career and move forward in the right direction for better quality living, To provide career guidance through counseling and one to one interactions with Average and below average students, To educate our first year students regarding the interview process through co ordination in



placement drive This issue discussed and decision has been taken to organize such programme by respective departments.

**3. Discussion on organization of COVID 19 vaccination Awareness Program**

While the development of COVID-19 vaccines has been an extraordinary success, vaccinating most of the global population is an enormous challenge, one for which gaining and maintaining public trust in COVID-19 vaccines and vaccination will be as essential as the effectiveness of the vaccines themselves. Moreover, the experience with COVID-19 will likely shapes confidence in other vaccines making it even more important to build confidence at this time. This issue discussed and decision has been taken to organize such programme by NSS.

**4. Discussion on organization of celebration of Biodiversity Conservation day and Various upcoming days.**

To increase the awareness of biodiversity issues. Biodiversity is the living fabric of our planet. It underpins human well-being in the present and in the future, and its rapid decline threatens nature. Human activities are driving biodiversity loss at an unprecedented rate. Issue regarding to celebration of Biodiversity Conservation Day and various days was discussed and decided that to celebrate these days by organizing online awareness programmes or Quiz by respective departments.

**5. Discussion on establishment of Staff Academy.**

To inspire and motivate teachers for participation in group discussion, paper presentation and development of research aptitude, it is useful to get information on any untouched area like music and biopic history of renowned socialists, freedom fighters in Maharashtra and India. Every individual staff members gave presentation on their scheduled date. The Committee decided to establish the Staff academy.

**6. Discussion on organization of teacher's training program.**

The objective of teacher education is to develop a good command of the subject matter, to develop a skill to stimulate experience in the taught, under an artificially created Environment. This issue discussed and decision has been taken to organize such program.

**7. Discussion on organization of Webinars for girl students.**

Women Empowerment and Gender Equality are the most important requirements for the upliftment and progress of our nation. In the effort to make a strong kernel of gender sensitization, Such events are necessary for the upliftment of women and spread the real importance of gender equality in the society through College students. This issue

discussed and decision has been taken to organize such webinars by Women Empowerment Cell.

**8. To organize webinar on Women Violence.**

Raising awareness of the different forms of violence against women and domestic violence is an important element in the prevention of violence against women, because heightened awareness is a first step in changing attitudes and behavior that perpetuate the various forms of violence against women. The purpose of this is to give more background to prevention through awareness-raising and to offer practical advice. This issue discussed and decision has been taken to organize such program.

**9. Discussion on organization of Webinars on different themes.**

Due to lockdown situation committee discussed and decided to organize webinars on various themes for students and faculty members.

**10. Organization of Webinar on COVID 19 Free Rural Communities.**

To inform the resources to help public health partners educate rural communities and promote COVID-19 vaccination. It provides messaging tips for communication that is clear, concise, and personalized to increase COVID-19 vaccine confidence in rural communities. This issue discussed and decision has been taken to organize such program by NSS.

**11. Organization of workshop for higher student progression.**

The workshops are regarded as the group of individuals, who are assembled together to achieve a common purpose. The instructors ensure that they are able to impart knowledge to the students in an appropriate manner and facilitate their learning. On the other hand, the students are able to understand the subjects and concepts better and upgrade their knowledge. Through attending workshops, the students are able to clarify their doubts and problems as well. The issue discussed and decision has been taken to organize such program.

**12. Organization of Course on Communication skill.**

The main goal of this course is to help you improve your spoken English skills to enable you to communicate more effectively in English for their future success. The issue discussed and decision has been taken to organize such program.

**13. To start the writing of draft SSR**

The self-study and writing the report should include information about objective and degree programs, general education, resources/materials, outcome assessment, prior report information, graduate degree programs, writing the report, first draft, organizing









the report, the writing process is necessary for the submission to NAAC. The issue is discussed and decision has been taken to draft the SSR as per format.

Dr. Alka Inamdr, Director, IQAC informed the date for the next meeting and it is unanimously decided in the first week of next academic year. The meeting ended with a formal vote of thanks.


The meeting of IQAC was held at 11.30 a.m. on 10/04/2021 in IQAC meeting hall. The following members were present.

#### ATTENDANCE REPORT

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Dr. Alka P. Inamdr	Director, IQAC	
3	Mr. P. V. Patil	Member	
4	Mr. J. A. Yadav	Member	
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Dr. Alka P. Inamdr  
IQAC Co-Ordinator,  
P.D.V.P. Mahavidyalaya,  
Tasgaon.



  
Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)



NAAC Accredited 'B' (2.76)

“ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार ” – शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

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B.A., B.T.D., L.H.  
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PRESIDENT  
B.Com.  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
M.A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M.Sc. B. Ed.  
SECRETARY

Dr. Milind S. Hujare  
M.Sc., Ph. D.  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## Action Taken Report

### 2020-21

Sr. No.	Plan of Action	Action Taken
<b>First Meeting on 15/06/2020</b>		
1	Review of minutes of the previous IQAC Meeting	The previous IQAC meeting was read by Dr. Alka Inamdr, Director, IQAC and are approved by the Council.
2	Discussion on organization of online awareness programmes on COVID 19 pandemic disease.	Online awareness programs on Cure and Precaution of COVID 19 pandemic disease was organized on 11/07/ 2020 and Post COVID 19 on 15/07/ 2020 and Online quiz on COVID-19: Economic Package for India
3	Discussion on organization of online awareness programmes on various day celebrations.	1. Celebrated Environment day on 05/06/2020 by online quiz and tree Plantation. 2. International tiger day 29/07/2020 by National Webinar. 3. International Day for the Preservation of the Ozone Layer 2020: Quiz awareness program by Dept. of Geography
4	Discussion on organization of Webinars on different themes	1. National webinar on Archeobotanical studies by Dept. of Botany on 02/07/2020. 2. National Webinar on Covid 19: Impact On Service Sector In India' on 19/08/2020 by Dept. of Economics 3. National Webinar on Advanced Materials for Multifunctional Applications on



		04/09/2020 by Dept. of Physics
5	Discussion on construction of Sericulture farming.	Sericulture Farm of Mulberry Plantation was done during June 2020.
6	Discussion and Preparation of Academic Calendar for academic year 2020-21.	Academic Calendar was prepared and uploaded on College website.
7	To audit the gender status of the college	Gender audit of the college was done by Women Empowerment Cell and report is submitted to Principal.
8	Discussion and Planning for preparation of calendar for CIE system and implementation.	CIE Calendar was prepared and implemented successfully during academic year.
9	Review of feedback from all stakeholders- student, parent, alumni and employer	Feedback of students, teachers, Alumni was collected online, analyzed and action taken.
<b>Second Meeting on 21/09/2020</b>		
10	Review of minutes of the previous IQAC Meeting.	The minutes of the meeting held on 15/06/2020 are approved by the Council.
11	Discussion on organization of MOOC Course for students.	MOOC Course on Electrochemistry was successfully completed by Dept. of Chemistry
12	To audit the energy utilization of college.	Energy utilization audit of college was done by external agency and submitted to Principal.
13	Discussion on organization of Webinars on different themes.	1. National Webinar on Beauty of World Natural Heritage: Kas Plateau on 07/11/2020 by Dept. of Botany 2. State level Webinar on Amhi Savitrichya Leki on 04/01/2021 by Women Empowerment Cell.
14	To audit green incentive taken by college.	Green audit of the College campus was done by external agency and submitted to Principal.
15	Organization of Orientation program for NSS Programme Officer.	Orientation program for NSS Program Officer was successfully done on 18/12/2020 by NSS
16	Discussion on Celebration of upcoming Various days	Successfully Celebrated Divyang day 03/12/2020 International Human Right day 10/12/2020 Consumer day on 05/03/2021
17	To Organize of Alumni meets.	Alumni meet was organized on 27/12/2020
18	Discussion on increasing percentage of students in student satisfaction survey.	Student Satisfaction Survey link was communicated to the students and collected online
<b>Third Meeting on 07/01/2021</b>		
19	Review of minutes of the previous IQAC Meeting.	The minutes of the meeting held on 21/09/2020 are approved by the Council.

20	Discussion on organization of Student Development Course for students.	SDP of Personality Development successfully organized on 01/01/2021 to 16/01/2021
21	Discussion on organization of Webinars on different themes	1. National Webinar on An impact of COVID -19 on Global Tourism on 21/01/2021 1. National Webinar on Women Leadership And Empowerment on 22/02/2021 2. State level Webinar on New Consumer Protection Act 2019 & Cyber Act Awareness on 05/03/2021
22	To organize Health Checkup camp for teaching and non teaching faculty.	Free Health Checkup camp was organized on 22/01/2021 by NSS Unit.
23	Organization of workshop on Entrepreneurship skill	Workshop on Entrepreneurship skill was conducted on 10/03/2021
24	Discussion on organization of soft skill development course.	Seven days Online Soft Skills in Chemistry Practical Course was successfully conducted by Dept. of Chemistry on 22/02/2021 to 01/03/2021
25	To audit the Academic and Administrative status of college by internal committee.	Academic and Administrative audit of College was done by Committee appointed and submitted to Principal
26	To Organize a Workshop on Good Governance.	Workshop on Democracy, Elections And Good Governance was organized on 17/03/2021
27	Discussion on preparation and Submission of AQAR 2019-20	AQAR 2019-20 was prepared and successfully submitted to NAAC on 27/02/2021
<b>Fourth Meeting on 15/04/2021</b>		
28	Review of minutes of the previous IQAC Meeting.	The minutes of the meeting held on 07/01/2021 are approved by the Council.
29	Discussion on organization of Placement Special Drive for PG Students.	Placement Special Drive for PG Students on 15/04/2021
30	Discussion on organization of COVID 19 vaccination Awareness Program	COVID 19 vaccination Awareness Programme was conducted on 11/04/2021 to 14/04/2021.
31	Discussion on organization of celebration of Biodiversity Conservation day and various upcoming days.	1. International Day for Biological Diversity 22/05/2021 2. Intellectual Property Day 29/04/2021 3. Zero Shadow Day 15/05/2021 4. Environment Day 05/06/2021 5. National statistics Day 29/06/2021 6. Plastic Bag Free Day 03/07/2021 7. World Population Day 11/07/2021
32	Discussion on establishment of Staff Academy.	Staff Academy was established and Conducted Programs successfully



33	Discussion on organization of teacher's training programme.	Teacher's training program on ITR was organized on 25/05/2021
34	Discussion on organization of Webinars for girl students.	1. Webinar on Expert talk and Demonstration on Stress Management on 21/06/2021 2. Webinar on Indian Women Who Glorified History on 22/06/2021 3. Webinar on Courage Building on 23/06/2021 4. Webinar on Gemology and Indian Attire on 24/06/2021
35	To organize webinar on Women Violence.	Webinar on Domestic Violence and Sexual harassment at workplace was organized on 17/07/2021.
36	Discussion on organization of Webinars on different themes	1. State level Webinar on Ground Water Awareness on 09/07/2021 2. National Webinar on 'Role of Human Resource in Development on 10/07/2021
37	Organization of Webinar on COVID 19 Free Rural Communities.	Webinar on Role of Volunteers in CORONA Free Rural Community was organized on 19/07/2021 by NSS
38	Organization of workshop for higher student progression.	Organized a Workshop on M. Sc. Entrance Guidance for B. Sc. III students by Department of Chemistry
39	Organization of Course on Communication skill	Two month Online Course on Communication Skill was successfully organized from 05/06/2021 to 05/08/2021
40	To start the writing of draft SSR	To draft the SSR is on progress...

*Alka Inamdar*  
**Alka Inamdar**  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.



*Milind S. Hujare*  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantraodada Patil  
 Mahavidyalaya, Tasgaon (Sangli).



NAAC Accredited (A) (7.76)

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SECRETARY

Dr. Milind S. Hujare  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## **INTERNAL QUALITY ASSURANCE CELL (IQAC)**

Date:-02 / 06/ 2019

### **MEETING NOTICE**







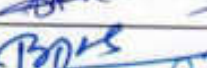

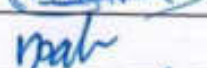


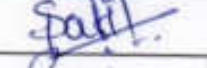
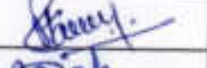
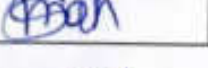

All the members of Internal Quality Assurance Cell (IQAC) here by informed that a meeting of IQAC is convened on 05/06/2019 at 11:30 in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.


#### **AGENDA OF THE MEETING**


1. Review of minutes of previous IQAC Meeting
2. To organize felicitation function for Mauritius students.
3. Discussion on preparation and Submission of AQAR 2018-19.
4. To audit the Academic and Administrative status of college by internal committee.
5. Discussion and Preparation of Academic Calendar for academic year 2019-20.
6. Discussion and Planning for preparation of calendar for CIE system and implementation.
7. To increase number of field projects.
8. To Strengthen MIS system
9. Discussion on up gradation of Website.
10. Discussion on incentive funding for research project.
11. Discussion on to increase collaboration/linkages with other institution.
12. Discussion on Financial support to the faculty to participate in seminar and conferences.
13. Discussion on planning for Rain water harvesting.
14. Discussion on to increase the number of certificate courses.



## IQAC COMMITTEE

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	IQAC, Director	
3	Dr. V. Y. Pawar	Member	
4	Mr. K. S. Patil	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. A. P. Inamdar	Member	
7	Dr. S. A. Khabade	Member	
8	Dr. B. T. Kanase	Member	
9	Dr. T. K. Badame	Member	
10	Mr. V. S. Patil	Management Representative	
11	Mr. M. B. Kadam	Administrative Officer	
12	Mr. A. P. Chavan	Local Society	
13	Miss. Sanyuja Suresh Patil	Student Representative	
14	Adv. Krishna Patil	Member of Alumni	
15	Mr. Satish Mali	Industrialist	

  
Dr. Suresh S. Patil  
IQAC, Director

  
Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantgadada Patil  
Mahavidyalaya, Tasgaon (Sangli).

### MINUTES OF IQAC MEETING

The meeting started on a welcome note by IQAC Director, Prof S. S. Patil followed by his Presentation on objectives which include basic purposes, activities, and function of IQAC.

The Chairperson Dr. M. S. Hujare requested all the members for open house discussion on academic excellence.

#### 1. Review of minutes of previous IQAC Meeting

The minutes of the previous meeting are approved by the Council.

#### 2. To organize felicitation function for mauritius students.

The students of the college are continuously excelled in various university examinations and other extension activities in the every year. Therefore, the IQAC



members have suggesting to organize felicitation function for merit holder students of the last academic year 2018-19.

**3. Discussion on preparation and Submission of AQAR 2018-19.**

An issue of preparing and sending the AQAR of 2018-19 to NACC Bangalore before the valid period has been raised in the meeting. The IQAC committee is suggesting the IQAC Coordinator and Principal of the College to prepare and send the AQAR of 2018-19 to NACC Bangalore before valid period.

**4. To audit the Academic and Administrative status of college by internal committee.**

The issue regarding Internal Academic and Administrative Audit is discussed and decision has been taken to appoint the committee for to conduct the Academic and Administrative Audit of the college.

**5. Discussion and Preparation of Academic Calendar for academic year 2019-20.**

To keep students, faculty, and staff reminded of key dates throughout the academic year it is necessary to prepare academic calendar at the beginning of year. Therefore committee decided to prepare Academic Calendar for academic year 2019-20 and to be publish on College website.

**6. Discussion and planning for preparation of calendar for CIE and implementation.**

One of the major components of the education system is evaluate students through examination. The education process in any discipline of learning ends with examinations. Committee decided to prepare calendar for CIE and to be implemented from beginning of academic year through conducting various activities such as bridge course and aptitude test, class tests, seminars, field visits, study tours etc.

**7. To increase number of field projects**

The issue regarding field projects to be conducted during the year is discussed and it is decided that each department should conduct field projects on various themes and submit their dissertations at the end of year.

**8. To Strengthen MIS system**

MIS is a system that manages the entire data/information of an organization which helps to covers the planning, control, and administration of the operations of a concern. It helps the management in planning, controlling and operations. The central objective of MIS is to provide information to every resource of a college so that they can take an instant decision without any delay. Therefore committee discussed and decided to strengthen MIS system in college.

**9. Discussion on up gradation of Website.**



Issue regarding to up gradation of College website is discussed and all committee members were agree to upgrade the College website time to time throughout the year.

**10. Discussion on incentive funding for research project.**

The prime objectives for incentive research projects are to create a positive research environment and ensure excellence in research with an enhanced focus on outcome based research. It has been decided after discussion to promote research activities by financial supports to innovative projects to be submitted by faculty and students.

**11. Discussion on to increase collaboration/linkages with other institution.**

The linkages promotes collaboration and partnership with other institutions of higher learning, corporate bodies and other relevant organizations. Therefore committee decided to encourage faculty and departments to sign collaborative linkages and conduct various activates for students and faculty.

**12. Discussion on Financial support to the faculty to participate in seminar and conferences.**

The issue regarding to financial support to the faculty to participate in seminar and conferences organized by various institutions was discussed. The decision has been taken to support all faculty of college those who will participate and present their research work in seminar and conferences organized by other institutions.

**13. Discussion on planning for Rain water harvesting.**

.Rain water harvesting (RWH) the collection and storage of rain, rather than allowing it to run off. Committee discussed on rain water harvesting system and decision has been taken to setup rain water harvesting system to all building in the college campus and water collected from a roof-like surface and redirected to a tank, bore wells aa reservoir with percolation.


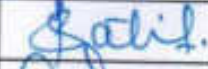







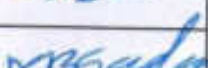



**14. Discussion on to increase the number of certificate courses.**


Issue regarding to conduct certificate courses is discussed and decision has been taken to conduct at least on certificate course by each department during in the current academic year.

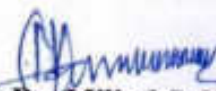
Prof. S. S. Patil, IQAC Director informed the date for the next meeting and it is unanimously decided in the fourth week of August 2019.The meeting ended with a formal vote of thanks.

The meeting of IQAC was held at 11.30 a.m. on 05.06.2019 in Principal Cabin. The following members were present.

### ATTENDANCE REPORT

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	Director, IQAC	
3	Dr. V. Y. Pawar	Member	
4	Mr. K. S. Patil	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. A. P. Inamdar	Member	
7	Dr. S. A. Khabade	Member	- AB -
8	Dr. B. T. Kanase	Member	
9	Dr. T. K. Badame	Member	
10	Mr. V. S. Patil	Management Representative	- Ab -
11	Mr. M. B. Kadam	Administrative Officer	
12	Mr. A. P. Chavan	Local Society	
13	Miss. Sanyuja Suresh Patil	Student Representative	
14	Adv. Krishna Patil	Member of Alumni	
15	Mr. Satish Mali	Industrialist	

  
Dr. Suresh S. Patil  
Director, IQAC

  
Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantaoada Patil  
Mahavidyalaya, Tasgaon (Sangli).







NAAC Accredited "A" (2.76)

" ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षणप्रसार " - शिक्षणमहर्षी डॉ. बापूजी साळुंके

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin 416 312 ☎ STD : 02346- 250 665, 250 575 FAX : 250575

• Affiliated to Shivaji University, Kolhapur •

ISO - 9001:2015

E-mail: san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

• Established Year : June 1962 • P. B. No. : 14 • Jr. College No. : J22-10-001 • Sr. College Code No. :  $\frac{SHACIA}{X}$  J.: C-8

Shikshanmaharshi  
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F. A. P. T. S. J. S.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
Member of Revenue, Public Works,  
Dept. of Maharashtra

Prin. Abhaykumar Salunkhe  
M. A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M. Sc. B. Ed.  
SECRETARY

Dr. Milind S. Hujare  
M. Sc. Ph. D.  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

Date: 21 / 08/ 2019

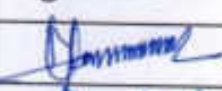

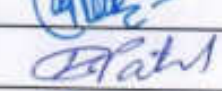
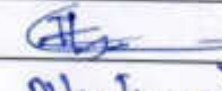
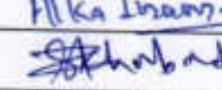
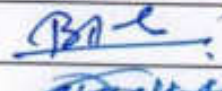



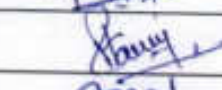
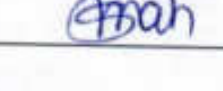
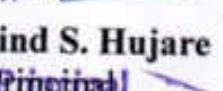
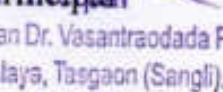

### MEETING NOTICE

All the members of Internal Quality Assurance Cell (IQAC) here by informed that a meeting of IQAC is convened on 24/08/2019 at 11:30 in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.


### AGENDA OF MEETING

1. Review of minutes of 1<sup>st</sup> IQAC Meeting
2. Organization of workshops on various themes.
3. To audit the energy utilization of college.
4. To audit green incentive taken by college.
5. To audit the gender status of the college.
6. Discussion and Organization on various community activities.
7. To organize Vasantavishkar Research Competition.
8. To construct the Botanical Garden.
9. Discussion on to implementation No vehicle day, plastic free campus, solid, liquid and E-waste management.
10. Discussion on preparation and publication of Green Book.
11. To construct Smart and Digital Classrooms.
12. Organization of Training program on E content development.
13. Organization of NAAC Expert Faculty exchange program.

## IQAC COMMITTEE

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	IQAC, Director	
3	Dr. V. Y. Pawar	Member	
4	Mr. K. S. Patil	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. A. P. Inamdar	Member	
7	Dr. S. A. Khabade	Member	
8	Dr. B. T. Kanase	Member	
9	Dr. T. K. Badame	Member	
10	Mr. V. S Patil	Management Representative	
11	Mr. M. B. Kadam	Administrative Officer	
12	Mr. A. P. Chavan	Local Society	
13	Miss. Sanyuja Suresh Patil	Student Representative	
14	Adv. Krishna Patil	Member of Alumni	
15	Mr. Satish Mali	Industrialist	

  
**Dr. Suresh S. Patil**  
 IQAC, Director

  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantnandada Patil  
 Mahavidyalaya, Tasgaon (Sangli).

### MINUTES OF IQAC MEETING

The Chairperson Prin. Dr. Milind S. Hujare welcomed the members for the second meeting of IQAC. The following points were discussed in the meeting:

**1. Review of minutes of 1st IQAC Meeting**

The minutes of the meeting held on 05/06/2019 are approved by the Council.

**2. Organization of workshops on various themes.**

Workshops are venues for teaching, instructing or facilitating group interaction between a relatively limited number of participation. They are traditionally interactive events on specifying areas that encourage participant involvement. There is fruitful discussion on organization of workshops and decided



that at least one workshop should be organized by each department on various themes during academic year.

**3. To audit the energy utilization of college.**

The issue regarding to audit the energy utilization of college is raised by committee members. The Energy Audit defines ways to reduce energy consumption per unit of product output or to lower operating costs. The recommendations of the study will become a basis for future schemes of better energy consumption and preservation throughout the organization. After discussion it is decided that, Energy utilization audit of college will be done by external agency.

**4. To audit green incentive taken by college.**

The Green Audit of an College is becoming a paramount important these days for self assessment of the institution, which reflects the role of the institution in mitigating the present environmental problems. Therefore, the committee suggesting to complete the green audit of College campus to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The responsibility is given to department of Botany.

**5. To audit the gender status of the college.**

To assess and analyze the strength, policies, programmes, and organization process of College with the view to identify where key strategic initiatives could be initiated and implemented to strengthen commitment to enhance capacities for gender mainstreaming at all levels in the College. Committee decided to audit gender status of the college and the responsibility is given to Women Empowerment Cell of the College.

**6. Discussion and organization on various community activities.**

Community service is unpaid work performed by a person or group of people for the benefit and betterment of their community without any form of compensation. Therefore IQAC committee suggesting to conduct at least one community activity by each department within the academic year.

**7. To organize Vasantavishkar Research Competition.**

Creating research atmosphere among the students is a key issue in higher educational institutes. An issue of organizing research competition has been raised by some committee members. It has been decided to organize research oriented 'Vasantavishkar' competition. A decision has also been taken to send more and more quality posters to the district level 'Avishkar' Research competition to be organized by Shivaji University, Kolhapur.



#### **8. To construct the Botanical Garden.**

Botanical gardens aim to promote the awareness, study, and conservation of plant species diversity. The old Botanical garden of the College was demolished during construction of new building. Therefore committee decided to construct new Botanical Garden in the campus and responsibility is given to department of Botany.

#### **9. Discussion on to implementation of No vehicle day, Plastic free campus.**

The 'No Vehicle Day' initiative aimed to helping reduce pollution caused due to the smoke emanating from vehicles and cutting down traffic congestion on the roads. It also aims to aware all stakeholders of college about environmental pollution. Therefore, committee decided to organize 'No Vehicle Day' on fourth Saturday of every month.

Plastic Free campus is a program that aims to measurably reduce plastic pollution on college campuses with a special focus on the reduction and ultimately the elimination of plastic bottles, plastic straws and utensils, and plastic food packaging. Participating college have identified plastic pollution as a key concern on their campuses, and are taking action to confront the problem. Therefore, it is decided to aware all the stakeholders of college about no use of plastic in college campus by counseling, displaying hoardings in campus etc .

#### **10. Discussion on preparation and publication of Green Data Book.**

Green data book is a book with list of all plants growing in college campus. As college have number of plants in the campus, committee discussed on the issue regarding publication of Green data Book of College campus. The responsibility of preparation of Green Data Book was given to Department of Botany.

#### **11. To construct Smart and Digital Classrooms.**

To embed digital learning objectives within future education policy and curriculum reform initiatives, to adapt the ICT competency framework for Teachers, to aid the integration of ICT into teaching, learning and assessment in college, and to provide opportunities for students to pursue in-depth ICT study of students, construction of Digital Classroom in the College is very essential. All committee members suggested to construct at least one Digital Classroom for each faculty.

#### **12. Organization of Training program on E-content development.**

Information technology and the Internet are major drivers of research, innovation, growth and social change. The growth in Internet has brought changes in all walks of life including the education. E-content requires huge amounts of creativity both at 'information' level as well as the 'technology' level. The issue regarding e-content




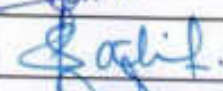

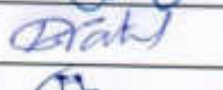

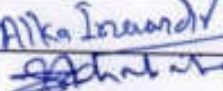
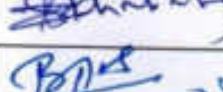






development is discussed and suggested to organize one/two workshop for all faculty members.


### 13. Organization of NAAC Expert-Faculty exchange program.

To aware faculty about new accreditation process, committee decided to organize NAAC Expert-Faculty exchange program in the first term of academic year.

The meeting of IQAC was held at 11.30 a.m. on 24.08.2019 in Principal Cabin. The following members were present.

### ATTENDANCE REPORT

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	IQAC, Director	
3	Dr. V. Y. Pawar	Member	
4	Mr. K. S. Patil	Member	
5	Dr. J. S. Ghodake	Member	
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13	Miss. Sanyuja Suresh Patil	Student Representative	
14	Adv. Krishna Patil	Member of Alumni	- Ab -
15	Mr. Satish Mali	Industrialist	- Ab -

  
**Dr. Suresh S. Patil**  
 IQAC, Director



  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Tasaon (Sangli).



NAAC Accredited (2.76)

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Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

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E-mail: san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

• Established Year : June 1962 • P. B. No. : 14 • Jr. College No. : 22-15-001 • Sr. College Code No. :  $\frac{22-15-001}{X}$  J. C-6

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Dr. Bapuji Salunkhe  
F. A. S. T. D. S. K.  
FOUNDER

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PRESIDENT  
F. C. M.  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
M. A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M. S. K. S.  
SECRETARY

Dr. Milind S. Hujare  
M. S. K. S.  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

Date: 05 / 12 / 2019

### MEETING NOTICE


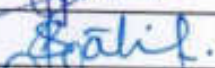



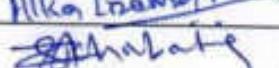






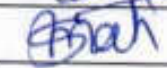


All the members of Internal Quality Assurance Cell (IQAC) here by informed that a meeting of IQAC is convened on 10/12/2019 at 11:30 in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.


### AGENDA OF MEETING


1. Review of minutes of 2<sup>nd</sup> IQAC Meeting
2. Discussion on celebration of Vivekananda saptah.
3. To organize of Alumni meets.
4. To organize of Marathon competition.
5. To organize Annual sports competition.
6. To organize the Cultural Activity Competition.
7. To organize Competitive Exam Carnival.
8. To organize Job Fair.
9. To organize Sahitya Sammelan.
10. Workshop on climate change.
11. To organize Health Checkup camp for teaching and non teaching faculty.
12. Discussion on organization of Study /Industrial Tours.
13. Organization of workshop on IPRs.
14. Organization of Parent -Teacher meet.



### IQAC COMMITTEE

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	IQAC, Director	
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12	Mr. A. P. Chavan	Local Society	
13	Miss. Sanyuja Suresh Patil	Student Representative	
14	ADV. Krishna Patil	Member of Alumni	
15	Mr. Satish Mali	Industrialist	

  
**Dr. Suresh S. Patil**  
 IQAC, Director

  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Tasgaon (Sangli).

### MINUTES OF IQAC MEETING

**1. Review of minutes of 2<sup>nd</sup> IQAC Meeting**

The minutes of the meeting held on 24/08/2019 are approved by the Council.

**2. Discussion on celebration of Vivekananda Saptah.**

Every year College celebrate Vivekananda saptah during 12-19 January by organizing various activities. It is decided that in this year seven days different programme such as marathon competition, Cultural events competition, Chemistry Carnival, Job fare etc. will be organized to provide different platforms to students.



**3. To organize of Alumni meets.**

The organization of Alumni meet aims to foster a sense of community among alumni, while supporting a sense of connectedness back to the institution feeling. Alumni meet will help new professionals or visit with people they have met before, to establish or renew friendships and acquaintances. Therefore issue regarding Alumni meet organization is discussed and decision has been taken to organize Alumni meet in the month of January.

**4. To organize of Marathon competition.**

Marathon encourages, inspire and motivate students and faculty to improve their mental and physical health through running and exercise. It improves the public awareness of diabetes and depression, with particular emphasis on exercise and fitness as a component of managing these diseases. Therefore committee decided to organize marathon competition limited for college students and faculty members.

**5. To organize Annual sports competition.**

To provide an environment for physical development, to showcase their talent in sports field of the students and to promote sportsmanship among students, IQAC committee discussed issue regarding organization of Annual sports competition. It is decided that both outdoor and indoor sports competitions may organized in the last month of January. The responsibility of organization of sports competition was given to Gymkhana Committee.

**6. To organize the Cultural Activity Competition.**

Cultural Activity Competition bring out the various talents of the students and provide a platform for budding artists and musicians. It inculcate team spirit and to account for overall personality development of students. The issue regarding organization of Cultural Activity Competition is raised by committee members and discussed. It has been decided to organize competition of various Cultural events during celebration of Vivekanand Saptah.

**7. To organize Competitive Exam Carnival.**

Assisting students to attain their educational goals, are the institutes offering competitive exam carvinal. These establishments have been in the educational sectors for a fair span of time. Each of the establishments is known to offer a certain set of coaching classes that are specific to different types of entrance exams in various sectors. Therefore, issue regarding organization of competitive exam Carnival has been discussed and decision has been taken to organize this carnival during celebration of Vivekanand Saptah.



**8. To organize Job Fair.**

Getting a job is not as easy. It requires more hard work and patience to find the right entry. Therefore it is decided by IQAC committee to organize Job Fair in collaboration with any government agency and the responsibility of organization is given to College Placement Cell.

**9. To organize Sahitya Sammelan.**

Sahitya Sammelan helps to cultivate, promote and develop writers culture by organizing discussion, conducting research on the Marathi literature. Therefore, it is decided to organize Marathi Sahitya Sammelan in January may be in Vivekanand saptah. The responsibility to organize this event is given to Marathi department.

**10. Workshop on climate change.**

With rapidly expanding scientific information on climate change and its impacts, it is increasingly important for WHO to work directly with vulnerable nations, to raise awareness of human health implications, and to plan effective responses. Therefore issue regarding organization of workshop is discussed and decision has been taken to organize workshops on Climate Change in second term in collaboration with The Climate Reality Programme, India.

**11. To organize Health Checkup camp for teaching and non teaching faculty.**

Free medical camps are set up with a aim to bring awareness amongst the faculty of the college who have no access to basic healthcare services or knowledge about the diseases they are suffering from. So, medical camps provide free medical advice, medicine to the unfortunate people and refer for specialized treatment or surgery whenever it is required. Therefore it was decided that to organize free health check-up camp for teaching faculty, non-teaching staff and students.

**12. Discussion on organization of Study Tours/Industrial visits.**

To provide an opportunity to study the social cultural changes, values, social practice and phenomena in different parts of the country to the students. Therefore, issue regarding organization of Industrial/study tour is discussed and decision has been taken to organize the study tours by respective departments to different places, institutions and fields and the travelling should be carried out through RTO permitted vehicles.

**13. Organization of workshop on IPRs.**

IPRs are legal rights that protect creations and/or inventions resulting from intellectual activity in the industrial, scientific, literary or artistic fields. The most common IPRs include patents, copyrights, marks and trade secrets. Therefore to




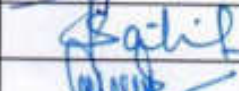
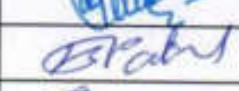

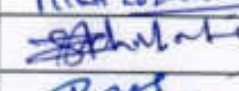

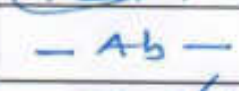

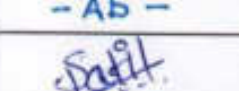
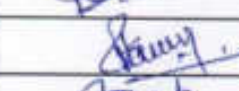
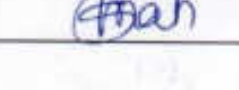


aware the students and faculty about IPRs, IQAC committee discussed and decided to organize one workshop/seminar on IPRs.


#### 14. Organization of Parent-Teacher Meet.

Parent-Teacher Meet provide an opportunity to identify their child's current strengths and weaknesses, to open two ways communication for the welfare of kid, platform for parent and teacher to share insights and information for the holistic development of a child. Therefore IQAC Committee decided to organize Parent-Teacher Meet to provide common plant two teacher and parents.


The meeting of IQAC was held at 11.30 a.m. on 16.12.2019 in IQAC meeting hall. The following members were present.

#### ATTENDANCE REPORT

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	IQAC, Director	
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7	Dr. S. A. Khabade	Member	
8	Dr. B. T. Kanase	Member	
9	Dr. T. K. Badame	Member	
10	Mr. V. S. Patil	Management Representative	- Ab -
11	Mr. M. B. Kadam	Administrative Officer	
12	Mr. A. P. Chavan	Local Society	- Ab -
13	Miss. Sanyuja Suresh Patil	Student Representative	
14	ADV. Krishna Patil	Member of Alumni	
15	Mr. Satish Mali	Industrialist	

  
**Dr. Suresh S. Patil**  
 IQAC, Director



  
**Prin. Dr. Milind S. Hujare**  
 Principal  
 Padmabhusan Dr. Vasantrodada Patil  
 Mahavidyalaya, Targaoy (Sangli)





NAAC Accredited (A) (2.70)

'' ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षणप्रकार'' – शिक्षणमहर्षी डॉ. बापूजी साळुंके

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAOBADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin 416 312 ☎ STD : 02346- 250 665, 250 575 FAX : 250575

• Affiliated to Shivaji University, Kolhapur •

ISO - 9001:2015

E-mail: san pdvpmt.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

• Established Year : June 1962 • P. B. No. : 14 • Jr. College No. : 225-10-001 • Sr. College Code No. :  $\frac{SHACN}{X}$  अ. : C-6

Shikshanmaharshi  
Dr. Bapuji Salunkhe  
F. A. S. T. S. U. S. R.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
Minister of Revenue, Public Works  
Dept. of Maharashtra

Prin. Abhaykumar Salunkhe  
M. A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M. A. S. T. S.  
SECRETARY

Dr. Milind S. Hujare  
M. A. S. T. S.  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

Date: 17 / 01 / 2020



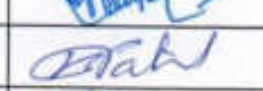
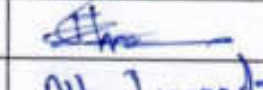
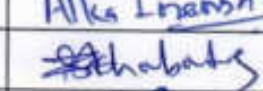
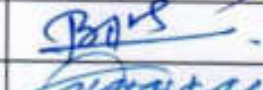
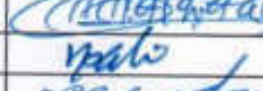


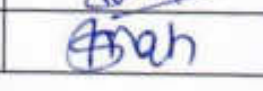

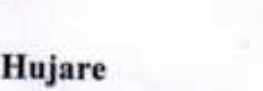


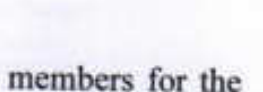
### MEETING NOTICE

All the members of Internal Quality Assurance Cell (IQAC) here by informed that a meeting of IQAC is convened on 24/01/2020 at 11:30 in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

### AGENDA OF MEETING

1. Review of minutes of 3<sup>rd</sup> IQAC Meeting
2. Discussion on to organize annual prize distribution.
3. Discussion on organization of Graduation Day
4. Discussion on increasing percentage of students in student satisfaction survey.
5. Discussion on feedbacks taken from all stakeholders.

## IQAC COMMITTEE

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	IQAC, Director	
3	Dr. V. Y. Pawar	Member	
4	Mr. K. S. Patil	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. A. P. Inamdar	Member	
7	Dr. S. A. Khabade	Member	
8	Dr. B. T. Kanase	Member	
9	Dr. T. K. Badame	Member	
10	Mr. V. S. Patil	Management Representative	
11	Mr. M. B. Kadam	Administrative Officer	
12	Mr. A. P. Chavan	Local Society	
13	Miss. Sanyuja Suresh Patil	Student Representative	
14	Adv. Krishna Patil	Member of Alumni	
15	Mr. Satish Mali	Industrialist	

  
**Dr. Suresh S. Patil**  
 IQAC, Director

  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantnradada Patil  
 Mahavidyalaya, Tasgaon (Sangli).

### MINUTES OF IQAC MEETING

The Director, IQAC Prof. Suresh Patil welcomed the members for the second meeting of IQAC. The following points were discussed in the meeting:

**1. Review of minutes of 3<sup>rd</sup> IQAC Meeting**

The minutes of the meeting held on 15/11/2019 are approved by the Council.

**2. Discussion on to organize annual prize distribution.**

Prize distribution marks the culmination of literary and extra-curricular activities in a college. Prizes are awarded to inspire a healthy sense of competition among the students. Students are kept busy round the year in



studies, games and sports and other literary activities like debates, essay writing, elocution and stage shows. It encourages them to aspire for excellence. Therefore an issue regarding the organizing of the annual prize distribution for the academic year 2019-20 has been discussed. A decision has been taken to call auspicious guest for the function who has known for the social work. The decision has also been taken to invite the honorable Secretary of the Management to felicitate all award winning students..

**2. Discussion on organization of Graduation Day**

As per University guidelines every year College organizes Graduation Day and felicitates rankers of each subjects. Committee decided to organize Graduation Day in the month of March and responsibility has been given to College function committee..

**3. Discussion on preparation and submission of Departmental and Faculty profiles.**

Issue regarding preparation of Departmental and Faculty profiles is discussed and it is decided that all department should prepare their departmental profiles along with faculty profiles and submit before 30 April 2020 to IQAC. .

**4. Discussion on increasing percentage of students in student satisfaction survey.**




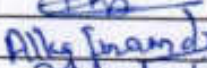
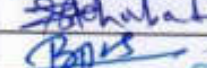



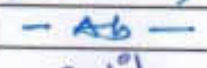

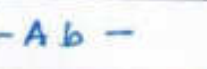
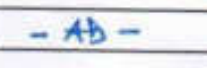
The objectives of the student satisfaction survey are to assess student satisfaction with respect to academic support, learning resources, organization and management, assessment and feedback, personal development of the students. Some committee members raised issue regarding less participation of students in student satisfaction survey. It has been decided that motivate the students to participate in student satisfaction survey to be conducted at the end of academic year. The responsibility is given to all Head of departments for counseling the students for participation in the survey.

**5. Discussion on feedbacks taken from all stakeholders.**


Issue regarding online feedbacks from Students, Faculty, Alumni and Parents is discussed and it has been decided to motivate all stakeholders by

respective departments to fill the online feedback forms from College website before University examination started.

The meeting of IQAC was held at 11.30 a.m. on 24.01.2020 in IQAC meeting hall. The following members were present.

Sr. No.	Name of the IQAC Member	Designation	Signature
1	Prin. Dr. Milind S. Hujare	Chairperson	
2	Prof. Dr. Suresh S. Patil	IQAC, Director	
3	Dr. V. Y. Pawar	Member	
4	Mr. K. S. Patil	Member	
5	Dr. J. S. Ghodake	Member	
6	Dr. A. P. Inamdar	Member	
7	Dr. S. A. Khabade	Member	
8	Dr. B. T. Kanase	Member	
9	Dr. T. K. Badame	Member	
10	Mr. V. S Patil	Management Representative	
11	Mr. M. B. Kadam	Administrative Officer	
12	Mr. A. P. Chavan	Local Society	- AB -
13	Miss. Sanyuja Suresh Patil	Student Representative	
14	Adv. Krishna Patil	Member of Alumni	- AB -
15	Mr. Satish Mali	Industrialist	- AB -

  
**Dr. Suresh S. Patil**  
 IQAC, Director

  
**Prin. Dr. Milind S. Hujare**  
 Principal  
 Padmabhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Tasgaon (Sangli).







NAAC Accredited 'B' (2.75)

'' ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षणप्रसार'' - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin 416 312 STD : 02346- 250 665, 250 575 FAX : 250575

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E-mail:san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

Established Year : June 1962 P. B. No. : 14 Jr. College No. : J22-10-001 Sr. College Code No. :  $\frac{SHACIA}{X}$  Jr. : C-8

Shikshanmaharshi  
Dr. Bapuji Salunkhe  
F.A., B.T. D. Lit.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
M.A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M.Sc. B. Ed.  
SECRETARY

Dr. Milind S. Hujare  
M.Sc., Ph. D.  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## ACTION TAKEN REPORT (IQAC) 2019-20

Sr. No.	Plan of Action	Action Taken
<b>First Meeting on 05/06/2019</b>		
1	Review of minutes of previous IQAC Meeting	The minutes of the previous meeting are approved by the Council.
2	To organize felicitation function for Mauritius students.	Felicitation function was successfully organized.
3	Discussion on preparation and Submission of AQAR 2018-19.	AQAR 2018-2019 was prepared and successfully submitted to NAAC on December 2019
4	To audit the Academic and Administrative status of college by internal committee.	Academic and Administrative audit of College was done by Committee appointed and submitted to Principal.
5	Discussion and Preparation of Academic Calendar for academic year 2019-20.	Academic Calendar was prepared and uploaded on College website.
6	Discussion and Planning for preparation of calendar for CIE system and implementation.	CIE Calendar was prepared and implemented successfully during academic year.
7	To increase number of field projects.	Incredible number of field projects increased during the academic year conducted by various departments.
8	To Strengthen MIS system	MIS system of the office is strengthened.
9	Discussion on up gradation of Website.	College website is upgraded.

10	Discussion on incentive funding for research project.	Vasantavishkar Research Project competition is organized in the institute
11	Discussion on to organize discussion on to increase collaboration/linkages with other institution.	Departmental MOUs are increased throughout the year.
12	Discussion on Financial support to the faculty to participate in seminar and conferences.	Dr. Ambhore has given the financial support for participation.
13	Discussion on planning for Rain water harvesting.	Rain water from the roof of the College building is collected to recharge the bore well as well as for gardening purpose and rain water harvesting system is active in the institute.
14	To organize Health Checkup camp for teaching and non teaching faculty.	Free Check up camp was organized on 23/07/2019
15	Discussion on to increase the number of certificate courses.	Number of Certificate courses are enormously increased
<b>Second Meeting on 24/08/2019</b>		
16	Review of minutes of 1 <sup>st</sup> IQAC Meeting	The minutes of the meeting held on 05/06/2019 were approved by the Council.
17	Organization of workshops on various themes.	<ol style="list-style-type: none"> <li>1. One Day Workshop On Gardening</li> <li>2. One Day Workshop On Insurance Agent</li> <li>3. Workshop on revised CBCS SYLLABUS for B.Sc.II BOTANY</li> <li>4. One Day Workshop On Research Methodology</li> <li>5. Workshop On Jewellery Designing, Salad Preparation</li> <li>6. One Day Workshop On Intellectual Property And Patenting System</li> </ol> These Workshops were organized on



		various themes.
18	To audit the energy utilization of college.	Energy utilization audit of college was done by external agency and submitted to Principal.
19	To audit green incentive taken by college.	Green audit of the College campus was done by external agency and submitted to Principal .
20	To Audit the gender status of the college.	Gender audit of the college was done by Women Empowerment Cell and report is submitted to Principal.
21	Discussion and organization on various community activities.	Two community activities were conducted by Chemistry and Botany departments.
22	To organize Vasantavishkar Research Competition.	Vasantavishkar Research Competition was successful on 30/12/2019. In all 78 Students participated and presented their research work during this unit.
23	To construct the Botanical Garden.	New Botanical Garden is constructed
24	Discussion on to implementation of No vehicle day, Plastic free campus.	Fourth Saturday of every month No vehicle day is strictly implemented in the institute campus and awareness of Plastic free campus among the students is also strictly implemented
25	Discussion on Preparation and Publication of green book.	Green Book on e-flora of standing plants in College campus was prepared and published on college website.
26	To construct Smart and Digital Classrooms.	Three digital classrooms one for each faculty (Arts, Com., and Science) were constructed regularly used by faculty members and students.
27	Organization of Training program on E-content development.	Workshop on creation and operation of Google Classroom for students and faculty was organized on 25th July 2019 Training Programme on operation of Digital Classroom for faculty members and students was organized on 23/12/2019.
28	Organization of NAAC Expert Faculty	NAAC Expert-Faculty interaction program

	exchange program	was organized on 11/12/2019
<b>Third Meeting on 10/12/2019</b>		
29	Review of minutes of 2 <sup>nd</sup> IQAC Meeting	The minutes of the meeting held on 24/08/2019 are approved by the Council.
30	Discussion on Celebration of Vivekananda saptah.	Celebration of Vivekananda Saptah is tradition of our mother institution. In this academic year our IQAC planed and successfully organized various activities and competitions during 12 January 2020 to 19 January 2020.
31	To organize of Alumni meets.	Alumni meet was organized on 18th January 2020.
32	To organize of Marathon competition.	On 16 January 2020 Marathon competition was organized and 192 students were actively participated in this event.
33	To organize Annual sports competition.	Annual sports competitions on various sports events were organized during 12 <sup>th</sup> January to 19 <sup>th</sup> January 2020
34	To organize the Cultural Activity Competition.	Cultural Activity Competitions on various events were organized during Celebration of Vivekanand Saptah 12-19 January 2020.
35	To organize Competitive exam Carnival.	To aware students about competitive examinations we successfully organized Competitive Exam Carnival on 16/01/2020 TO 17/01/2020.
36	To organize Job Fair.	To provide opportunity college organized Job Fair in collaboration with Tasgaon Muncipal corporation and Zilla Udyog Kendra on 25/02/2020
37	To organize Sahitya sammelan.	Sahitya Sammelan was successfully organized on 13/01/2020
38	To organize workshop on Climate change.	Teacher Training workshop on climate change, sustainable development goals and green campus was organized on 14th Feb



		2020 in collaboration with Climate Reality Project India.
39	Discussion on organization of Study Tours/Industrial.	Study Tours/Industrial tours were organized by various departments at different places.
40	Organization of workshop on IPR.	One Day Workshop on Intellectual Property and Patenting System in India was organized on 24 <sup>th</sup> January 2020.
41	Organization of Parent–Teacher Meet	Parent–Teacher Meet was successfully organized on 18/01/2020.
<b>Fourth Meeting on 24/01/2020</b>		
42	Review of minutes of 3 <sup>rd</sup> IQAC Meeting	The minutes of the meeting held on 10/12/2019 are approved by the Council.
43	Discussion on to organize annual prize distribution.	Annual Prize distribution function was organized on 13/01/2020.
44	Discussion on organization of Graduation Day	Due to COVID pendamic situation Institute was unable to organize such programme
45	Discussion on preparation and submission of Departmental and Faculty profiles.	Due to COVID pendamic situation Institute was unable to organize such programe, it is too late.
46	Discussion on increasing percentage of students in student satisfaction survey.	Link of SSS was shared on Whatsapp group to increase the
47	Discussion on feedbacks taken from all stakeholders.	Link of SSS was shared on Whatsapp group to increase the

*Alka Inamdar*  
**IQAC Co-Ordinator,**  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.



*Milind S. Hujare*  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantaoada Patil  
 Mahavidyalaya, Tasgaon (Sangli).

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Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's  
Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon  
Dist- Sangli









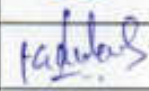
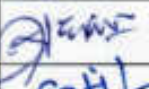

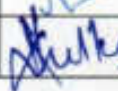

Date:-07/07/2018


**IQAC Meeting Notice**

All the IQAC members are here by informed that a meeting is convened on 13/07/2018 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.


**Agenda:**

1. Felicitation of meritorious students.
2. Sports activities.
3. Preparation of AQAR of 2017-18.
4. Placements of the students.
5. Competitive examinations.
6. Participation of students in cultural activities and women empowerment program.
7. Internal Exams and Lead College Programs.
8. Purchase of computers and higher equipments.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr.S.Y.Hongekar	Management Representative	
8	Mr. M.B.Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	
12	Miss. Sanyuja Suresh Patil	Student	
13	Mr. A.B.Kamble	Alumni	
14	Dr.N.A.Kulkarni	Coordinator	

  
(Dr. N. A. Kulkarni)  
IQAC Co-Ordinator,  
P D V P Mahavidyalaya,  
Tasgaon.



  
(Dr. R. R. Kumbhar)  
Principal  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)



## Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The students of the college are continuously excelled in various university exams and other activities in the preceding year. It is necessary to motivate them by felicitating them publically. The IQAC members have suggesting organizing a separate felicitation function of these merit holder students of the last semester.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Shri.A. B. Kamble

Outcome – A separate felicitation function of merit holder students of the last semester was successfully organized.

2. The issue regarding the participation of students in various sports activities has been discussed. It has been decided to suggest motivating the students for the participation in various sports activities.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Dr.Mansing Jadhav

Outcome – Many of the students have participated in various sports activities and performed satisfactorily.

3. An issue of preparing and sending the AQAR of 2017-18 to NAAC Bangalore before the valid period has been raised in the meeting. The IQAC committee is suggesting the IQAC Coordinator and Principal of the College to prepare and send theAQAR of 2017-18 to NAAC Bangalore before valid period.

The issue has been raised by Prin. Dr. S Y .Hongekar

The issue has been supported by Shri. Avinash Kaka Patil

Outcome – The AQAR of 2017-18 has been prepared and sent to NAAC Bangalore before due period.

4. An issue of on campus and off campus placements of the students has been raised in the meeting. The IQAC committee has been suggesting to the placement cell of the college to contact more companies and invite

them in the college for the placements of more and more students of the college.

The issue has been raised by Dr. Mansing Jadhav

The issue has been supported by Shri. M. B. Kadam

Outcome – Number of students have got the placements in on campus and off campus placement camps. The report is with placement cell department

5. An issue regarding the students' performance and coaching for competitive examinations has been raised in the meeting. The IQAC has suggested to conduct the guest lectures of experienced persons in the field should be arranged and some workshops should be organized for the students. The IQAC committee has suggested conducting some mock competitive tests for the students.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. K. S. Patil

Outcome – The guest lecturers of experienced persons were arranged.

6. The IQAC committee has discussed an issue of participation of students in various cultural, essays, elocution and debating competition has been discussed in the meeting. The IQAC committee has suggested to motivate the students for participation in various cultural, essay, elocution and debating competition.

The issue has been raised by Shri. A. B. Kamble

The issue has been supported by Dr. J. S. Ghodake

Outcome – Number of students were participated in various cultural, essay, elocution and debating competition.

7. An issue of internal complaints and women empowerment programs for the girl students of the college has been raised in the meeting. The IQAC has suggested to organize the supportive programs on internal complaints and women empowerment for girl students

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Dr. N. A. Kulkarni



Outcome – Various programs of internal complaints and women empowerment programs for the girl students has been organized.

8. An issue of Continuous Internal Evaluation (CIE) with respect to NAAC guidelines has been discussed in the meeting. The committee members have suggested for conducting various tests like class tests, open book tests, surprise tests, seminars and group discussions for the improvement of the students' performance in the university examinations.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Dr. Mansing Jadhav

Outcome – Various tests like class tests, open book tests, surprise tests, seminars and group discussions for the improvement of the students' performance in the university examinations were conducted during the period.

9. The IQAC members have suggested arranging some guest lectures of some eminent speakers in the upcoming academic year.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Shri. Dilip Joglekar

Outcome – Some guest lecturers of eminent speakers' were arranged.

10. Functioning of Lead College Scheme in the college has been discussed in the meeting. The IQAC members have decided to suggest the lead college committee to undertake maximum student central activities under this scheme.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Number of student central activities under Lead College scheme were arranged.

11. An issue of role of media and film making in the society has been considerably increasing day by day. The committee thinks that the students of the college should know the techniques in media and film making. Keeping in mind the committee has decided to suggest to conduct some special workshops on media and film making.

The issue has been raised by Shri. Avinash Kaka Patil

The issue has been supported by Shri. A. B. Kamble

Outcome –A special workshop on media and film making under the guidance of famous Marathi film director and producer Shri. Yashvant Bhalkar has been arranged on 18/09/1018.

12. An issue of organizing departmental alumni meet has been raised by some members. The committee thinks that the alumni students of the college should invited and motivate them to participate in various college activities. Keeping in mind the committee has decided to suggest Chemistry department to conduct the alumni meet of their department.

The issue has been raised by Prin. Dr. R. R. Kumbhar

The issue has been supported by Shri. M. B. Kadam

Outcome – Chemistry department has conducted the alumni meet of their department on 10/11/2018.

13. An issue of Purchase of computers and higher equipments has been raised

In meeting and decision has been made to purchase the above material by prescribed format .

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Purchase of computers and higher equipments has been made by prescribed format.



Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	<i>R.R. Kumbhar</i>
2	Dr. V. Y. Pawar	Teacher	<i>V.Y. Pawar</i>
3	Mr. K. S. Patil	Teacher	<i>K.S. Patil</i>
4	Mr. M. D. Patil	Teacher	<i>M.D. Patil</i>
5	Dr. J. S. Ghodake	Teacher	<i>J.S. Ghodake</i>
6	Dr. B. T. Kanase	Teacher	<i>B.T. Kanase</i>
7	Dr. S. Y. Hongekar	Management Representative	<i>S.Y. Hongekar</i>
8	Mr. M. B. Kadam	Administrative Officer	<i>M.B. Kadam</i>
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	-
10	Mr. Dilip Joglekar	Industrialist	<i>Dilip Joglekar</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>Mansing Jadhav</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>Sanyuja Suresh Patil</i>
13	Mr. A. B. Kamble	Alumni	<i>A.B. Kamble</i>
14	Dr. N. A. Kulkarni	Coordinator	<i>N.A. Kulkarni</i>

*N.A. Kulkarni*  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P. D. V. P. Mahavidyalaya,  
 Tasgaon.



*R.R. Kumbhar*  
 (Dr. R. R. Kumbhar)  
 Principal  
 Padmabhushan Dr. Vasantnandada Patil  
 Mahavidyalaya, Tasgaon, (Sangli) (O.S.)

“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार,” -शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon

Dist- Sangli















Date:-07/10/2018


### IQAC Meeting Notice

All the IQAC members are here by informed that a meeting is convened on 13/10/2018 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.


#### Agenda:

1. Conduct of study tours.
2. Organization of 'VASANTAVISHKAR' and 'AVISHKAR.' Poster competition.
3. Celebration of 'VIVEKANAND SAPTAH.'
4. Analysis of university results.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	
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10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	
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13	Mr. A. B. Kamble	Alumni	
14	Dr. N. A. Kulkarni	Coordinator	

  
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Tasgaon.



  
(Dr. R. R. Kumbhar)  
Principal  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)



## Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The issue of felicitation of merit holder students has risen by some members to motivate the other students. A decision has been taken to arrange a lecture of an eminent speaker on the occasion.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble

Outcome – A program of felicitation of merit holder students has been arranged.

2. An issue of organizing study tours by various departments has been raised by some members. A decision has been taken to organize the study tours to the places of educational interest and the travelling should be carried out through RTO permitted vehicles.

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Shri. K. S. Patil

Outcome – Various departments have organized study tours at various places of their subject interest.

3. Creating research atmosphere among the students is a key issue in higher educational institutes. An issue of organizing research oriented poster competition has been raised by some members. It has been decided to organize an annual research oriented 'Vasantavishkar' poster competition in the last week of December. A decision has also been taken to send more and more quality posters to the district level 'Avishkar' poster competition organized by Shivaji University, Kolhapur.

The issue has been raised by Dr. J. S. Ghodke

The issue has been supported by Dr. B. T. Kanase

Outcome – An annual research oriented 'Vasantavishkar' poster competition has been arranged in the last week of December.

4. An issue of organizing research oriented poster competition at district level has been raised by some members. It has been decided to send the proposal to organize an annual research oriented district level 'Avishkar'

poster competition sponsored by Shivaji University, Kolhapur for Sangli District.

The issue has been raised by Dr. Mansing Jadhav

The issue has been supported by DilipJoglekar

Outcome - The Sangli district level 'Avishkar' poster competition sponsored by Shivaji University, Kolhapur has been organized on 24/12/2018.

5. An issue of celebration of annual 'Vivekananda Saptah' has been raised by some members. A decision has been taken to organize this week in a systematic manner. The decision has been taken to organize various competitions during the week to give the students a chance to show their art and skills. Suggestion has been given to organize rangoli, essay, and elocution competition for the students.

The issue has been raised by Avinash Kaka Patil

The issue has been supported by Prin. Dr. R. R. Kumbhar

Outcome – An annual 'Vivekananda Saptah' has been arranged in a systematic manner. Various competitions like rangoli, essay, elocution competition has been organized during the week to give the students a chance to show their art and skills.

6. An issue of performance of the students in the first semester in university examinations has been discussed in the meeting. Discussion has been made to analyze the results and take the steps to improve the results.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble

Outcome – Performance of the students in the first semester in university examinations has been discussed in the meeting.



Sr. No.	Name	Designation	Signature
1	Dr.R.R.Kumbhar	Chairman	<i>R.R.K.</i>
2	Dr. V. Y. Pawar	Teacher	<i>V.Y.P.</i>
3	Mr. K. S. Patil	Teacher	<i>K.S.P.</i>
4	Mr. M. D. Patil	Teacher	<i>M.D.P.</i>
5	Dr. J. S. Ghodake	Teacher	<i>J.S.G.</i>
6	Dr. B. T. Kanase	Teacher	<i>B.T.K.</i>
7	Dr.S.Y.Hongekar	Management Representative	
8	Mr. M.B.Kadam	Administrative Officer	<i>M.B.K.</i>
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	<i>A.D.P.</i>
10	Mr. Dilip Joglekar	Industrialist	<i>D.J.</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>M.J.</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>S.S.P.</i>
13	Mr. A.B.Kamble	Alumni	<i>A.B.K.</i>
14	Dr.N.A.Kulkarni	Coordinator	<i>N.A.K.</i>

*N.A.K.*  
 (Dr. N. A. Kulkarni)  
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*R.R.K.*  
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Dist- Sangli

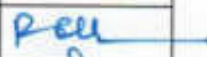









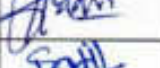


Date:-07/01/2019

**IQAC Meeting Notice**

All the IQAC members are here by informed that a meeting is convened on 13/01/2019 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

**Agenda:**

1. Organization of annual sports day.
2. Organization of 'ANTI TOBACCO CAMPAIGN.'
3. Workshops on various aspects.
4. Program for Voter Awareness and EVM, VVPAT machine.
5. Organization of Self funded conferences.
6. Organization of first convocation program.
7. Distribution of Government Scholarships.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	
8	Mr. M.B.Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	—
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	
12	Miss. Sanyuja Suresh Patil	Student	
13	Mr. A. B. Kamble	Alumni	
14	Dr. N. A. Kulkarni	Coordinator	

  
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Tasgaon.



  
(Dr. R. R. Kumbhar)  
Principal

Padmabhushan Dr. Vasantraodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)



## Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The issue regarding the organizing of the annual sports day for the academic year 2018-19 has been discussed. A decision has been taken to call auspicious guest for the function who has known for the social work. The decision has also been taken to invite the honorable Secretary of the Management.

The issue has been raised by Dr. Mansing Jadhav

The issue has been supported by Shri. Avinash Dinkarrao Patil

Outcome –Invited Mrs. Rani Patil (YASHDA, Pune) and Secretary of the management Mrs. Shubhangi Gavde.

2. The student strength of the college is day by day increasing. There is a possibility of increase in the student strength in the Upcoming year also. The increased student strength needs additional care regarding the bad habits of the students. The attraction towards the tobacco and allied chewing is increasing day by day. Some members of the committee are worried about these bad habits in the college campus. Suggestions are made to arrange some functions for “Anti Tobacco Campaign.” The IQAC committee is suggesting the NSS unit to conduct this activity as early as possible.

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Shri. Dilip Joglekar

Outcome –Anti Tobacco Campaign Poster Competition has been organized on 24/01/2019.

3. Some members of the committee have raised the issue of organizing some subject related workshops in the remaining time of January and February months. The suggestions are made to organize some workshops regarding Competitive Exams, Industrial Training, Mathematics, Scientific Terminologies, and Climate Change.

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Shri. Dilip Joglekar

Outcome –The programs were arranged by Economics, Chemistry, Mathematics, Zoology departments.

4. The IQAC committee has been suggesting conducting some awareness program among the new voters and the new EVM machine among the students and common people.

The issue has been raised by Shri. M. B. Kadam

The issue has been supported by Dr. N. A. Kulkarni

Outcome – An awareness program among the new voters and the new EVM machine among the students and common people has been arranged on 25/01/2019 by sociology department.

5. An issue of some field surveys has been discussed in the meeting. The committee has decided to suggest a social survey of the selected village.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble

Outcome – The Geography department has conducted a village survey of Chikhalgothane on 02/02/2019.

6. The IQAC committee has discussed an issue of organization of the seminar and conferences. Now a day the funding agencies are not happy to give the funds for organization of the seminar and conferences. The IQAC committee has suggested organizing self-funded National and International conferences on the occasion of the birth centenary year of Dr. Bapuji Salunkhe.

The issue has been raised by Prin. R. R. Kumbhar

The issue has been supported by Shri. Dilip Joglekar

Outcome – An International Conference has been arranged at Pachagani

7. An issue of performance of the students in university examinations has been discussed in the meeting. Discussion has been made to develop educational atmosphere in the college campus. IQAC has suggested developing a healthy and favorable academic atmosphere by providing



maximum facilities for the students to achieve the positions in university merit list in upcoming academic year 2018-19.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Consecutive second time the college has got the award of “Highest merit scholarships in rural category.”

8. An issue of undertaking various extension activities through NCC and NSS has been discussed in the meeting. The members have suggested to NSS and NCC to undertake the activities which will be helpful to the society.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Shri. K. S. Patil

Outcome – Various extension activities through NCC and NSS has been arranged.

9. An issue of organizing upcoming ‘International Yoga Day’ in the college has been discussed in the meeting. The members have suggested arranging the yoga for the faculty and to the students. It is suggested that the NSS and NCC students to undertake the yoga publically.

The issue has been raised by Shri. M. B. Kadam

The issue has been supported by Dr. N. A. Kulkarni

Outcome – The day has been celebrated widely.

10. An issue of organizing first convocation ceremony in the college has been discussed in the meeting.

The issue has been raised by Shri. M. B. Kadam

The issue has been supported by Dr. N. A. Kulkarni

Outcome – The convocation ceremony has been celebrated widely.

11. An issue of distribution of government scholarships of the students has been discussed in the meeting.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – The distribution of government scholarships of the students has been has been successfully completed.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	<i>R.R. Kumbhar</i>
2	Dr. V. Y. Pawar	Teacher	<i>V.Y. Pawar</i>
3	Mr. K. S. Patil	Teacher	<i>K.S. Patil</i>
4	Mr. M. D. Patil	Teacher	<i>M.D. Patil</i>
5	Dr. J. S. Ghodake	Teacher	<i>J.S. Ghodake</i>
6	Dr. B. T. Kanase	Teacher	<i>B.T. Kanase</i>
7	Dr. S. Y. Hongekar	Management Representative	<i>S.Y. Hongekar</i>
8	Mr. M. B. Kadam	Administrative Officer	<i>M.B. Kadam</i>
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	<i>Avinash Patil</i>
10	Mr. Dilip Joglekar	Industrialist	<i>Dilip Joglekar</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>Mansing Jadhav</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>Sanyuja Patil</i>
13	Mr. A. B. Kamble	Alumni	<i>A.B. Kamble</i>
14	Dr. N. A. Kulkarni	Coordinator	<i>N.A. Kulkarni</i>

*N.A. Kulkarni*  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.



*R.R. Kumbhar*  
 (Dr. R. R. Kumbhar)  
 Principal  
 Padmabhushan Dr. Vasantraodada Patil  
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Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon  
Dist- Sangli











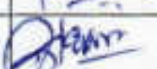



Date:-07/04/2019

**IQAC Meeting Notice**

All the IQAC members are here by informed that a meeting is convened on 13/04/2019 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

**Agenda:**

1. Development of Entrepreneurial and Skill Development Center.
2. Purchase of quality books.
3. Development of additional infrastructure.
4. Preparation of Departmental Profile.
5. Quality publications by faculty.
6. Organization of seminar and conferences.
7. Performance of students in university examinations.
8. NSS, NCC and YOGA activities.
9. Celebration of birth centenary year of Dr. Bapuji Salunkhe.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
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(Dr. N. A. Kulkarni)  
IQAC Co-Ordinator,  
P.D.V.P. Mahavidyalaya,  
Tasgaon.



  
(Dr. R. R. Kumbhar)  
Principal

Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)



## Minutes of IQAC Meeting

The minutes of the meeting are given below.

1. The issue regarding the starting of new add-on courses for the skill development among the students has been discussed in the meeting. Few add-on courses are suggested by the honorable members. A decision has been taken to suggest developing an "Entrepreneurial Skill Center." A decision has also been taken to name this center as "Sansthamata Sushiladevi Salunkhe Entrepreneurial and Skill Development Center." A decision has been taken to suggest subject wise add-on courses for the academic year 2018-19.

The issue has been raised by Shri. Avinash Dinkarrao Patil

The issue has been supported by Dr. Mansing Jadhav

Outcome – Few Courses have started successfully.

2. The issue regarding the purchase of new subject wise quality books for the library has been discussed. It has been decided to suggest purchasing new quality reference, text books and journals required for the upcoming academic year. The IQAC members have suggested purchasing the books of around Rs. 1, 00,000/- under library budget.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Shri. K. S. Patil

Outcome – Quality books of prescribed budget were purchased.

3. The student strength of the college is day by day increasing. There is a possibility of increase in the student strength in the upcoming year also. The increased student strength needs additional infrastructure. The IQAC committee is suggesting the college administration to complete the construction of new building as early as possible.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – The construction of building is on the way of construction.

4. The IQAC committee has been suggesting preparing the detail departmental profile from each department. The profile will consist all the details of the departmental activities. The IQAC has suggested a format of departmental profile.

The issue has been raised by Dr. N. A. Kulkarni

The issue has been supported by Shri. M. B. Kadam

Outcome – All the departments have successfully prepared the departmental profiles.

5. The faculty of the college is always publishing their quality research in reputed journals. The IQAC has suggested to publish the research papers in UGC listed ISSN and ISBN research journals.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble

Outcome – 39 papers were published in reputed journals.



6. The IQAC committee has discussed an issue of organization of the seminar and conferences. Now a day the funding agencies are not happy to give the funds for organization of the seminar and conferences. The IQAC committee has suggested organizing self-funded National and International conferences on the occasion of the birth centenary year of Dr. Bapuji Salunkhe.

The issue has been raised by Prin. R. R. Kumbhar

The issue has been supported by Shri. Dilip Joglekar

Outcome – An International Conference was successfully organized.

7. An issue of performance of the students in university examinations has been discussed in the meeting. Discussion has been made to develop educational atmosphere in the college campus. IQAC has suggested to develop a healthy and favorable academic atmosphere by providing maximum facilities for the students to achieve the positions in university merit list in upcoming academic year 2018-19.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Consecutive second time the college has got the award of “Highest merit scholarships in rural category.”

8. An issue of undertaking various extension activities through NCC and NSS has been discussed in the meeting. The members have suggested to NSS and NCC to undertake the activities which will be helpful to the society.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Shri. K. S. Patil

Outcome – Various extension activities were successfully conducted.

9. The IQAC members have suggested arranging some guest lectures on the occasion of the birth centenary year of Dr. Bapuji Salunkhe.

The issue has been raised by Shri. A. B. Kamble

The issue has been supported by Dr. J. S. Ghodake

Outcome – Various guest lecturers were arranged on the occasion of the birth centenary year of Dr. Bapuji Salunkhe.

10. An issue of organizing upcoming ‘International Yoga Day’ in the college has been discussed in the meeting. The members have suggested arranging the yoga for the faculty and to the students. It is suggested that the NSS and NCC students to undertake the yoga publically.

The issue has been raised by Shri. M. B. Kadam

The issue has been supported by Dr. N. A. Kulkarni

Outcome – The day has been celebrated widely.

Sr. No.	Name	Designation	Signature
1	Dr.R.R.Kumbhar	Chairman	<i>R.R.K.</i>
2	Dr. V. Y. Pawar	Teacher	<i>V.Y.P.</i>
3	Mr. K. S. Patil	Teacher	<i>K.S.P.</i>
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11	Dr. Mansing Jadhav	Stakeholder	<i>M.J.</i>
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13	Mr. A.B.Kamble	Alumni	<i>A.B.K.</i>
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-शिक्षणमहर्षी डॉ. बापूजी साळुंके

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur Sanchalit,

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

**TASGAON**, Dist. Sangli, Pin 416 312 ☎ **STD** : 02346-250 665, 250575 **FAX** : 02346-250575

**(AFFILIATED TO SHIVAJI UNIVERSITY)**

E-mail : san.pdvpm.tas@gmail.com Website : pdvpcollegeetasgaon.com

Established Year - June 1962 P. B. No. 14 Jr.College No. J22-10-001 Sr. College Code No.  $\frac{SVAC/4}{X}$  Jr.:C-8

AAC Reaccredited "B" Grade (2.75)

शिक्षणमहर्षी  
**Dr. Bapuji Salunkhe**  
B.A., B.L.  
Founder

Hon. Chandrakant (Dada) Patil  
B.Com.  
President  
Model Teacher Department, Maharashtra State

Prin. Abhaykumar Salunkhe  
M.A.  
Chairman

Prin. Mrs. Shubhangi M. Gawade  
M.Sc., B.Ed.  
Secretary

Dr. R. R. Kumbhar  
M.Sc., M.Phil, Ph.D.  
Principal

Ref. No.: PDVPM/

Date :

Sr. No.	Plan of Action	Action Taken
<b>First Meeting on 13/07/2018</b>		
1	Review of minutes of previous IQAC Meeting	The minutes of the previous meeting are approved by the Council.
2	Felicitation of meritorious students	Felicitation function was successfully organized on 06/09/2018
3	Motivation to students in sports activities	Students have participated in State, University and Local sports Competition and Annual Sports Competition
4	Discussion and Preparation of AQAR of 2017-18	The AQAR of 2017-18 has been prepared and sent to NAAC office in time.
5	Discussion on placement activities for students	Organized Campus interview of R-Tech Medicare Systems on 07/09/2018 Organized One Day Workshop on Next Step- Career Guidance Program on 25/01/2019
6	Discussion on competitive Examination Guidance for students	Organized One Day Workshop in Collaboration with Unique Academy, Pune
7	Participation of students in cultural activities	Students Participated in Shivaji University, Kolhapur Youth Festival activities in District level and Zonal level
8	To organize Women Empowerment and Internal Complain Committee programs.	Awareness Programs related to role and functions of these committees for Entry level students On day Workshop on role and function of

		Baby Girl
9	Planning for CIE	Class Test, Surprise test, open Book test, seminars and Group discussions were conducted throughout the year randomly.
10	Organization of Eminent Guest lectures	<ol style="list-style-type: none"> <li>1. Guest lecture on Surgical Strike by Col. PPS. Dhaliwal</li> <li>2. Business and Management Skill by Mrs. Vaishali Suryawanshi on 09/09/2018</li> <li>3. National Consumer day celebrated by Deepak Vajale, Tahasildar, Tasgon</li> <li>4. Career opportunities I Commerce by Dr. Avinash Shirsat and Shri Pardeshi A.S.</li> <li>5. Enterpreunrship skills by Dr. Uday Lokhande</li> <li>6. Role of NGOs in Biodiversity Conservation by Shri Raman Kulkarni, Wild Life Warden, Klhapur</li> </ol>
11	Organization of student centric activities under Lead College Scheme of Shivaji University	<p>Workshop on Film Creation by Dept. of Marathi on 18/09/2018</p> <p>Enterpreunrship development by Dept. of Commerce on 17/01/2019</p> <p>Vasantavishkar Compilation on 19 and 20/12/2018</p> <p>Workshop on Vermicomposting and Biotechnology by Dept. of Zoology on 27/12/2018</p> <p>Workshop on Competitive Exam Guidance on 23/01/2019</p> <p>Experimental skill in Physics on 30/01/2019</p> <p>Workshop on Soft Skills and Personality Development by Dept. of English on 06/02/2019</p>
12	Organization of workshop on media and film making	Workshop on media and film making was organized on 18/09/2018 by Department of



		Marathi
13	Discussion on to organize Alumni Meet	Alumni Meet was organized on 10/11/2018 by Department of Chemistry
14	To purchase computers and Equipments	Computers and Equipments were purchased on demand of the various departments
<b>Second Meeting on 13/10/2018</b>		
15	Review of minutes of 1 <sup>st</sup> IQAC Meeting	The minutes of the meeting held on 13/07/2018 were approved by the Council.
16	Organization of Study Tours	Study Tours were organized by Marathi, History Economics Commerce Physics, Chemistry, Botany and Zoology as per the syllabus.
17	Organization of Vasantavishkar Poster Competition .	Vasantavishkar Compilation on 19 and 20/12/2018 and 214 students have participated along with their poster.
18	Organization of Vivekanand Saptah (Week)	Celebration of Vivekananda Saptah is tradition of our mother institution. In this academic year our IQAC planed and successfully organized various activities and competitions during 12 <sup>th</sup> January to 19 <sup>th</sup> January to inculcate student's art and skills.
19	Analysis of University Result of First semester.	University Result of First semester was analyzed by each department and counseling of the students was done to achieve the rank in the next semester Exam.
<b>Third Meeting on 13/01/2019</b>		
20	Review of minutes of 2 <sup>nd</sup> IQAC Meeting	The minutes of the meeting held on 13/10/2018 are approved by the Council.
21	To organize Annual sports day and competition.	Annual sports competitions on various sports events were organized during 12 <sup>th</sup> January to 19 <sup>th</sup> January 2019.
22	To organize Addiction free student's mind	Anti Tobacco Campaign Poster Competition was organized on 24/01/2019


23	To organize workshops on various themes in remain time of the academic year.	1.Workshop on Competitive Exam Guidance on 23/01/2019 2.Experimental skill in Physics on 30/01/2019 3.Workshop on Soft Skills and Personality Development by Dept. of English on 06/02/2019
24	To organize awareness program among the new voters	An Awareness program, EVM machine function among the new voters was arranged by Dept. of Sociology on 25/01/2019
25	To organize Field survey	Department of Geography has organized Village survey at Chikhalgothan on 02/02/2019
26	Discussion on organization of self funded National and International conference on the occasion of Birth Centenary of Dr. Bapuji Salunkhe	1. International Conference on Integrative Approach in Environmental and Applied Sciences on 8 <sup>th</sup> and 9 <sup>th</sup> February 2019. 2. Two day National Conference on Scientific and Technical Terminology in Environmental science, Zoology and Biology on 7-8/03/2019
35	To organize extension activities through NCC and NSS	Blood Donation camp 12/06/2018 Cleaning City camp 15/09/2018 Workshop on Water Conservation 24/01/2019 Swachha Bharat Abhiyan 02/10/2018 Were organized by NSS
36	To organize Convocation Ceremony (Graduate Day)	As per the guideline of Shivaji University, Graduation day was celebrated on.....
37	Distribution of Government Scholarship to the student.	As per the Rules of Government, Scholarship is deposited to the respective student's bank account.
<b>Fourth Meeting on 13/04/2019</b>		
38	Review of minutes of 3 <sup>rd</sup> IQAC Meeting	The minutes of the meeting held on



		13/01/2019 are approved by the Council.
39	Discussion on to establish Entrepreneurial Skill Development Centre	Sansthamataa Sushiladevi Salunkhe Entrepreneurship and Skill Development Center has been established and courses have started through this centre.
40	To purchase quality and career guidance books	Quality and career guidance books of prescribed budget were purchased
41	To strengthen the research in Faculty members	39 research papers were published in reputed research journals.

  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P D V P Mahavidyalaya,  
 Tasgaon.



  
 ( Dr. R. R. Kumbhar )  
 Principal  
 Padmabhushan Dr. Vasantodada Patil  
 Mahavidyalaya, Tasgaon, (Sangli)

“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार,” -शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon

Dist- Sangli



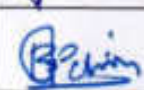



Date:- 08/07/2017

### IQAC Meeting Notice

All the IQAC members are here by informed that a meeting is convened on 09/07/2017 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

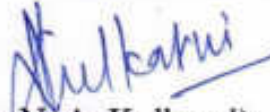
#### Agenda:


1. Purchase of quality books.
2. Development of additional infrastructure.
4. Preparation of Departmental Profile.
5. Quality publications by faculty.
6. Organization of seminar and conferences.
7. Performance of students in university examinations.
8. NSS, NCC and YOGA activities.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	



7	Dr.S.Y. Hongekar	Management Representative	Hongekar
8	Mr. M. B. Kadam	Administrative Officer	M.B. Kadam
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	-
10	Mr. Dilip Joglekar	Industrialist	Joglekar
11	Dr. Mansing Jadhav	Stakeholder	Jadhav
12	Miss. Sanyuja Suresh Patil	Student	Patil
13	Mr. A. B. Kamble	Alumni	Kamble
14	Dr.N. A. Kulkarni	Coordinator	Kulkarni

  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

  
 (Dr. R. R. Kumbhar)  
 For Principal  
 P.D.V.P. Mahavidyalaya, Tasgaon. (Sangli)

### Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The issue regarding the starting of new add-on courses for the skill development among the students has been discussed in the meeting. Few add-on courses are suggested by the honorable members.  
 The issue has been raised by Dr. Mansing Jadhav  
 The issue has been supported by Shri. Avinash Dinkarrao Patil  
 Outcome – Few Courses have started successfully.
2. The issue regarding the purchase of new subject wise quality books for the library has been discussed. It has been decided to suggest purchasing new

quality reference, text books and journals required for the upcoming academic year. The IQAC members have suggested purchasing the books of around Rs. 100, 000/- under library budget.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Prin. Dr. S. Y. Hongekar

Outcome – Quality books of prescribed budget were purchased.

3. The student strength of the college is day by day increasing. There is a possibility of increase in the student strength in the Upcoming year also. The increased student strength needs additional infrastructure. The IQAC committee is suggesting the college administration to complete the construction of new building as early as possible.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – The construction of building is on the way of construction.

4. The IQAC committee has been suggesting preparing the detail departmental profile from each department. The profile will consist all the details of the departmental activities. The IQAC has suggested a format of departmental profile.

The issue has been raised by Dr. N. A. Kulkarni

The issue has been supported by Shri. M. B. Kadam

Outcome – All the departments have successfully prepared the departmental profiles.

5. The faculty of the college is always publishing their quality research in reputed journals. The IQAC has suggested to publish the research papers in UGC listed ISSN and ISBN research journals.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble



Outcome – Many papers were published in reputed journals.

6. The IQAC committee has discussed an issue of organization of the seminar and conferences. Now a day the funding agencies are not happy to give the funds for organization of the seminar and conferences.

The issue has been raised by Prin. R. R. Kumbhar

The issue has been supported by Shri. Dilip Joglekar

Outcome – Some seminars are organized.

7. An issue of performance of the students in university examinations has been discussed in the meeting. Discussion has been made to develop educational atmosphere in the college campus. IQAC has suggested to develop a healthy and favorable academic atmosphere by providing maximum facilities for the students to achieve the positions in university merit list in upcoming academic year.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Fruitful Suggestions were made.

8. An issue of undertaking various extension activities through NCC and NSS has been discussed in the meeting. The members have suggested to NSS and NCC to undertake the activities which will be helpful to the society.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Shri. K. S. Patil

Outcome – Various extension activities were successfully conducted.

9. The IQAC members have suggested arranging some guest lectures.

The issue has been raised by Shri. A. B. Kamble

The issue has been supported by Dr. J. S. Ghodake

Outcome – Various guest lecturers were arranged.









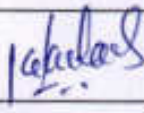
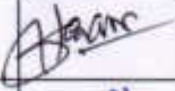


10. An issue of organizing upcoming 'International Yoga Day' in the college has been discussed in the meeting. The members have suggested arranging the

yoga for the faculty and to the students. It is suggested that the NSS and NCC students to undertake the yoga publically.


The issue has been raised by Shri. M. B. Kadam

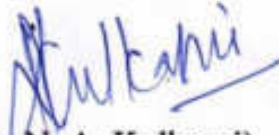
The issue has been supported by Dr. N. A. Kulkarni


Outcome – The day has been celebrated widely.

Sr. No.	Name	Designation	Signature
1	Dr.R.R.Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr.S.Y.Hongekar	Management Representative	
8	Mr. M.B.Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	-
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	
12	Miss. Sanyuja Suresh Patil	Student	
13	Mr. A.B.Kamble	Alumni	



14	Dr.N.A.Kulkarni	Coordinator	
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(Dr. N. A. Kulkarni)  
IQAC Co-Ordinator,  
P.D.V.P. Mahavidyalaya,  
Tasgaon.

  
(Dr. R. R. Kumbhar)  
For **Principal**  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)

“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार,” -शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon

Dist- Sangli







Date:-24/12/2017

### IQAC Meeting Notice

All the IQAC members are here by informed that a meeting is convened on 25/12/2017 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

#### Agenda:

1. Felicitation of meritorious students.
2. Sports activities.
3. Preparation of AQAR of 2017-18.
4. Placements of the students.
5. Competitive examinations.
6. Participation of students in cultural activities and women empowerment program.
7. Internal Exams and Lead College Programs.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	



7	Dr.S.Y.Hongekar	Management Representative	Hongekar
8	Mr. M.B.Kadam	Administrative Officer	M.B.Kadam
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	Joglekar
11	Dr. Mansing Jadhav	Stakeholder	Jadhav
12	Miss. Sanyuja Suresh Patil	Student	Patil
13	Mr. A.B.Kamble	Alumni	Kamble
14	Dr.N.A.Kulkarni	Coordinator	Kulkarni

(Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

(Dr. B. R. Kumbhar)  
 For Principal  
 Mahabhusan Dr. Vasantodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

### Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The students of the college are continuously excelled in various university exams and other activities in the preceding year. It is necessary to motivate them by felicitating them publically. The IQAC members have suggesting organizing a separate felicitation function of these merit holder students of the last semester.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Shri.A. B. Kamble

Outcome – A separate felicitation function of merit holder students of the last semester was successfully organized.

2. The issue regarding the participation of students in various sports activities has been discussed. It has been decided to suggest motivating the students for the participation in various sports activities.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Dr. Mansing Jadhav

Outcome – Many of the students have participated in various sports activities and performed satisfactorily.

3. An issue of preparing and sending the AQAR of 2017-18 to NAAC Bangalore before the valid period has been raised in the meeting. The IQAC committee is suggesting the IQAC Coordinator and Principal of the College to prepare and send the AQAR of 2017-18 to NAAC Bangalore before valid period.

The issue has been raised by Prin. Dr. S Y .Hongekar

The issue has been supported by Shri. Avinash Kaka Patil

Outcome – The AQAR of 2017-18 has been prepared and sent to NAAC Bangalore before due period.

4. An issue of on campus and off campus placements of the students has been raised in the meeting. The IQAC committee has been suggesting to the placement cell of the college to contact more companies and invite them in the college for the placements of more and more students of the college.

The issue has been raised by Dr. Mansing Jadhav

The issue has been supported by Shri. M. B. Kadam

Outcome – Number of students have got the placements in on campus and off campus placement camps. The report is with placement cell department

5. An issue regarding the students' performance and coaching for competitive examinations has been raised in the meeting. The IQAC has suggested to conduct the guest lectures of experienced persons in the field should be



arranged and some workshops should be organized for the students. The IQAC committee has suggested conducting some mock competitive tests for the students.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. K. S. Patil

Outcome – The guest lecturers of experienced persons were arranged.

6. The IQAC committee has discussed an issue of participation of students in various cultural, essays, elocution and debating competition has been discussed in the meeting. The IQAC committee has suggested to motivate the students for participation in various cultural, essay, elocution and debating competition.

The issue has been raised by Shri. A. B. Kamble

The issue has been supported by Dr. J. S. Ghodake

Outcome – Number of students were participated in various cultural, essay, elocution and debating competition.

7. An issue of internal complaints and women empowerment programs for the girl students of the college has been raised in the meeting. The IQAC has suggested to organize the supportive programs on internal complaints and women empowerment for girl students

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Dr. N. A. Kulkarni

Outcome – Various programs of internal complaints and women empowerment programs for the girl students has been organized.

8. An issue of Continuous Internal Evaluation (CIE) with respect to NAAC guidelines has been discussed in the meeting. The committee members have suggested for conducting various tests like class tests, open book tests,

surprise tests, seminars and group discussions for the improvement of the students' performance in the university examinations.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Dr. Mansing Jadhav

Outcome – Various tests like class tests, open book tests, surprise tests, seminars and group discussions for the improvement of the students' performance in the university examinations were conducted during the period.

9. The IQAC members have suggested arranging some guest lectures of some eminent speakers in the upcoming academic year.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Shri. Dilip Joglekar

Outcome – Some guest lecturers of eminent speakers' were arranged.

10. Functioning of Lead College Scheme in the college has been discussed in the meeting. The IQAC members have decided to suggest the lead college committee to undertake maximum student central activities under this scheme.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Number of student central activities under Lead College scheme were arranged.

11. An issue of role of media and film making in the society has been considerably increasing day by day. The committee thinks that the students of the college should know the techniques in media and film making. Keeping in mind the committee has decided to suggest to conduct some special workshops on media and film making.

The issue has been raised by Shri. Avinash Kaka Patil



The issue has been supported by Shri. A. B. Kamble




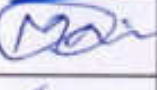

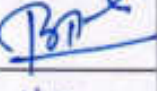

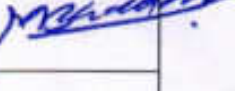
Outcome –A special workshop on media and film making has been arranged.

12. An issue of organizing departmental alumni meet has been raised by some members. The committee thinks that the alumni students of the college should invited and motivate them to participate in various college activities. Keeping in mind the committee has decided to suggest departments to conduct the alumni meet of their department.

The issue has been raised by Prin. Dr. R. R. Kumbhar

The issue has been supported by Shri. M. B. Kadam

Outcome – Some departments has conducted the alumni meet.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr.S.Y.Hongekar	Management Representative	
8	Mr. M.B.Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	—

10	Mr. Dilip Joglekar	Industrialist	<i>Joglekar</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>Jadhav</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>Patil</i>
13	Mr. A. B. Kamble	Alumni	<i>Kamble</i>
14	Dr. N. A. Kulkarni	Coordinator	<i>Kulkarni</i>

*Kulkarni*  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 PDVP Mahavidyalaya,  
 Tasgaon.

*K*  
 (Dr. R. R. Kumbhar)  
 For **Principal**  
 Padmabhushan Dr. Vasantodada Patil  
 Mahavidyalaya, Tasgaon, (Sangli)



“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार,” -शिक्षणमहर्षी डॉ. बापूजी साठुंखे

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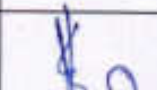






Date:-18/03/2018

### IQAC Meeting Notice

All the IQAC members are here by informed that a meeting is convened on 19/03/2018 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

#### Agenda:

1. Conduct of study tours.
2. Organization of 'VASANTAVISHKAR' Poster competition.
3. Analysis of university results.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	

8	Mr. M. B. Kadam	Administrative Officer	<i>M. B. Kadam</i>
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	—
10	Mr. Dilip Joglekar	Industrialist	<i>D. Joglekar</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>M. Jadhav</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>S. Patil</i>
13	Mr. A. B. Kamble	Alumni	<i>A. B. Kamble</i>
14	Dr. N. A. Kulkarni	Coordinator	<i>N. A. Kulkarni</i>

*N. A. Kulkarni*  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

### Minutes of IQAC Meeting

*R. R. Kumbhar*  
 (Dr. R. R. Kumbhar)  
 For Principal  
 Dr. Jambhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

The minutes of the meeting are given bellow.

1. The issue of felicitation of merit holder students has risen by some members to motivate the other students. A decision has been taken to arrange a lecture of an eminent speaker on the occasion.

The issue has been raised by Shri. A. B. Kamble

The issue has been supported by Dr. J. S. Ghodake

Outcome – A program of felicitation of merit holder students has been arranged.

2. An issue of organizing study tours by various departments has been raised by some members. A decision has been taken to organize the study tours to the places of educational interest and the travelling should be carried out through RTO permitted vehicles.

The issue has been raised by Shri. K. S. Patil



The issue has been supported by Shri. M. D. Patil

Outcome – Various departments have organized study tours at various places of their subject interest.

3. Creating research atmosphere among the students is a key issue in higher educational institutes. An issue of organizing research oriented poster competition has been raised by some members. It has been decided to organize an annual research oriented 'Vasantavishkar' poster competition in the December. A decision has also been taken to send more and more quality posters to the district level 'Avishkar' poster competition organized by Shivaji University, Kolhapur.

The issue has been raised by Dr. B. T. Kanase

The issue has been supported by Dr. J. S. Ghodke

Outcome – An annual research oriented 'Vasantavishkar' poster competition has been arranged in the last week of December.

4. An issue of organizing research oriented poster competition at district level has been raised by some members.

The issue has been raised by Dilip Joglekar

The issue has been supported by Dr. Mansing Jadhav

Outcome - The poster competition has been organized.

5. The decision has been taken to organize various competitions during the to give the students a chance to show their art and skills. Suggestion has been given to organize rangoli, essay, and elocution competition for the students.

The issue has been raised by Prin. Dr. R. R. Kumbhar

The issue has been supported by Avinash Kaka Patil

Outcome – An annual 'Vivekananda Saptah' has been arranged in a systematic manner. Various competitions like rangoli, essay, elocution







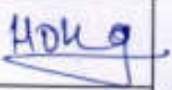
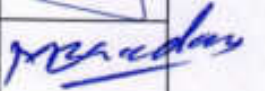



competition has been organized during the week to give the students a chance to show their art and skills.

6. An issue of performance of the students in the first semester in university examinations has been discussed in the meeting. Discussion has been made to analyze the results and take the steps to improve the results.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble

Outcome – Performance of the students in the first semester in university examinations has been discussed in the meeting.

Sr. No.	Name	Designation	Signature
1	Dr.R.R.Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr.S.Y.Hongekar	Management Representative	
8	Mr. M.B.Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	



12	Miss. Sanyuja Suresh Patil	Student	<i>Sertil</i>
13	Mr. A.B.Kamble	Alumni	<i>Kamble</i>
14	Dr.N.A.Kulkarni	Coordinator	<i>Kulkarni</i>

*Kulkarni*  
(Dr. N. A. Kulkarni)  
IQAC Co-Ordinator,  
P.D.V.P. Mahavidyalaya,  
Tasgaon.

*K*  
(Dr. R. R. Kumbhar)  
*for* **Principal**  
Mahashushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)



"ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षण प्रसार"

-शिक्षणमहर्षी डॉ. बापूजी साबुले

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur Sanchalit,

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

**TASGAON**, Dist. Sangli, Pin 416 312 ☎ STD : 02346-250 665, 250575 FAX : 02346-250575

**(AFFILIATED TO SHIVAJI UNIVERSITY)**

E-mail : san.pdvpm.tas@gmail.com Website : pdvpcollegeatasgaon.com

Established Year - June 1962 P B. No. 14 Jr.College No. J22-10-001 Sr. College Code No. <sup>SVAC/4</sup> Jr.:C-8  
X

AAC Reaccredited "B" Grade (2.75)

शिक्षणमहर्षी  
**Dr. Bapuji Salunkhe**  
B.A., B.L.  
Founder

Hon. Chandrakant (Dada) Patil  
B.Com.  
President  
Member, Reserve Department, Maharashtra State

Prin. Abhaykumar Salunkhe  
M.A.  
Chairman

Prin. Mrs. Shubhangi M. Gawade  
M.Sc., B.Ed.  
Secretary

**Dr. R. R. Kumbhar**  
M.Sc., M.Phil., Ph.D.  
Principal

Ref. No.: PDVPMT/

Date :

## ACTION TAKEN REPORT (IQAC) 2017-18)

Sr. No.	Plan of Action	Action Taken
<b>First Meeting on 09/07/2017</b>		
1	Review of minutes of previous IQAC Meeting	The minutes of the previous meeting are approved by the Council.
2	To Start new add on Courses	Few Courses were added successfully
3	Purchase of Quality Books in Library	Quality Books in prescribed Budget were purchased
4	Discussion on construction of new building to face the increasing student strength	The New building construction was on the way to complete.
5	Preparation of detailed Departmental Profile from each department.	All departments prepared detailed Departmental Profiles successfully.
6	Discussion to motivate faculty to publish quality research papers.	Many quality research papers were published successfully.
7	To develop healthy and academic atmosphere by providing maximum facilities to students to encourage merit based performance in University Examination	Fruitful suggestions were made to achieve the goal.
8	To conduct various extension activities through NCC, NSS and various departments.	Various extension activities through NCC, NSS were successfully conducted.




9	To conduct various Guest lectures and career counseling activities.	History, Physics, Chemistry and NCC and Placement Cell have organized Guest lectures and career counseling lectures and benefited to students by placement in defence services.
<b>Second Meeting on 25/12/2017</b>		
10	Review of minutes of 1 <sup>st</sup> IQAC Meeting	The minutes of the meeting held on 09/07/2017 were approved by the Council.
11	Organization of Felicitation program for meritorious students and motivation to remaining students	Felicitation program for meritorious students and motivation to remaining students was successfully organized in second term of academic year.
12	Discussion to motivate students' participation in sports activities.	Many of the students participated in sports activities and performed satisfactorily.
13	Discussion and Preparation of AQAR of 2016-17	The AQAR of 2016-17 prepared and sent to NAAC office in time.
14	Discussion to conduct On campus placement activities.	Numbers of students have got placement in on campus and off campus placement camps.
15	To conduct various Guest lecturers of experienced persons for competitive examination guidance.	Competitive Exam Cell has organized Guest lecturers of experienced persons for competitive examination guidance.
16	Discussion to motivate students' participation in cultural, essay, elocution, Debate activities.	Many of the students participated in in cultural, essay, elocution, Debate activities. and performed satisfactorily.
17	Review of CIE activities of each department to improve the student in University Exam.	Every department has conducted CIE activities to improve the student in University Exam.
18	Review of Function of Lead College Scheme of Shivaji University, Kolhapur	Number of Student Centric activities organized under Lead College Scheme of Shivaji University, Kolhapur

### Third Meeting on 19/03/2018

19	Review of minutes of 2 <sup>nd</sup> IQAC Meeting	The minutes of the meeting held on 25/12/2017 are approved by the Council.
20	To organize Annual sports day and competition.	Annual sports competitions on various sports events were organized during 12 <sup>th</sup> January to 19 <sup>th</sup> January 2019.
21	Organization of Vasantavishkar Poster Competition.	Vasantavishkar Compilation on 21/12/2017, 67 research posters and 201 students have participated along with their poster.
22	Organization of Vivekanand Saptah (Week)	Celebration of Vivekananda Saptah is tradition of our mother institution. In this academic year our IQAC planed and successfully organized various activities and competitions during 12 <sup>th</sup> January to 19 <sup>th</sup> January to inculcate student's art and skills.
23	Analysis of University Result of First semester.	University Result of First semester was analyzed by each department and counseling of the students was done to achieve the rank in the next semester Exam.

  
(Dr. N. A. Kulkarni)  
IQAC Co-Ordinator,  
PDVP Mahavidyalaya,  
Tasgaon.



  
( Dr. R. R. Kumbhar )  
**Principal**  
Padmabhushan Dr. Vasantaoadada Patil  
Mahavidyalaya, Tasgaon, (Sangli)



“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार,” -शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon

Dist- Sangli

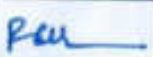





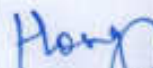

Date:- 06/07/2016


### IQAC Meeting Notice


All the IQAC members are here by informed that a meeting is convened on 07/07/2016 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

#### Agenda:


1. Development of Skill Development Center.
2. Purchase of quality books.
3. Development of additional infrastructure.
4. Preparation of Departmental Profile.
5. Quality publications by faculty.
6. Organization of seminar and conferences.
7. Performance of students in university examinations.
8. NSS, NCC and YOGA activities.
9. To present and approve “Institute Perspective Plan” for the Year 2016-17 to 2020-21.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	
8	Mr. M. B. Kadam	Administrative Officer	

9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	
12	Miss. Sanyuja Suresh Patil	Student	
13	Mr. A. B. Kamble	Alumni	
14	Dr. N. A. Kulkarni	Coordinator	

  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.



  
 (Dr. R. R. Kumbhar)  
 Principal  
 Padmabhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

### Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The issue regarding the starting of new add-on courses for the skill development among the students has been discussed in the meeting. Few add-on courses are suggested by the honorable members. A decision has been taken to suggest developing an "Entrepreneurial Skill Center." A decision has been taken to suggest subject wise add-on courses for the academic year 2016-17.

The issue has been raised by Dr. Mansing Jadhav

The issue has been supported by Shri. Avinash Dinkarrao Patil

Outcome – Few Courses have started successfully.

2. The issue regarding the purchase of new subject wise quality books for the library has been discussed. It has been decided to suggest purchasing new quality reference, text books and journals required for the upcoming academic year. The IQAC members have suggested purchasing the books of around Rs. 50, 000/- under library budget.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Prin. Dr. S. Y. Hongekar

Outcome – Quality books of prescribed budget were purchased.



3. The student strength of the college is day by day increasing. There is a possibility of increase in the student strength in the Upcoming year also. The increased student strength needs additional infrastructure. The IQAC committee is suggesting the college administration to complete the construction of new building as early as possible.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – The construction of building is on the way of construction.

4. The IQAC committee has been suggesting preparing the detail departmental profile from each department. The profile will consist all the details of the departmental activities. The IQAC has suggested a format of departmental profile.

The issue has been raised by Dr. N. A. Kulkarni

The issue has been supported by Shri. M. B. Kadam

Outcome – All the departments have successfully prepared the departmental profiles.

5. The faculty of the college is always publishing their quality research in reputed journals. The IQAC has suggested to publish the research papers in UGC listed ISSN and ISBN research journals.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble

Outcome – 39 papers were published in reputed journals.

6. The IQAC committee has discussed an issue of organization of the seminar and conferences. Now a day the funding agencies are not happy to give the funds for organization of the seminar and conferences.

The issue has been raised by Prin. R. R. Kumbhar

The issue has been supported by Shri. Dilip Joglekar

Outcome – Some seminars are organized.

An issue of performance of the students in university examinations has been discussed in the meeting. Discussion has been made to develop educational atmosphere in the college campus. IQAC has suggested to develop a healthy



and favorable academic atmosphere by providing maximum facilities for the students to achieve the positions in university merit list in upcoming academic year.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Fruitful Suggestions were made.

7. An issue of undertaking various extension activities through NCC and NSS has been discussed in the meeting. The members have suggested to NSS and NCC to undertake the activities which will be helpful to the society.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Shri. K. S. Patil

Outcome – Various extension activities were successfully conducted.

8. The IQAC members have suggested arranging some guest lectures.

The issue has been raised by Shri. A. B. Kamble

The issue has been supported by Dr. J. S. Ghodake

Outcome – Various guest lecturers were arranged.

9. An issue of organizing upcoming 'International Yoga Day' in the college has been discussed in the meeting. The members have suggested arranging the yoga for the faculty and to the students. It is suggested that the NSS and NCC students to undertake the yoga publically.

The issue has been raised by Shri. M. B. Kadam

The issue has been supported by Dr. N. A. Kulkarni

Outcome – The day has been celebrated widely.

10. The "Institute Perspective Plan" for the Year 2016-17 to 2020-21. Has been presented by the Principal and unanimously approved by all the IQAC members.

#### **PERSPECTIVE PLAN 2016-17 TO 2020-21**

The institution has a long-term planning for the growth and development that is reflected in its Perspective Plan. The Internal Quality Assurance Cell (IQAC) of the college takes initiatives in the preparation of the perspective plan. The Institutional head and IQAC considers the quality indicators of certain criteria determined by NAAC.



Also, the framework of plan is inclined towards the development of the institution that refers to the quality sustenance and quality enrichment. It intends to cover social, economic and spatial development. The following table focuses on the Institutional perspective plan for the next five years:

### **Curricular Aspects plan**

- To introduce B.Voc programs.
- To elevate more U.G.programs in P.G.Programs.
- To introduce certificate courses in
  - ❖ Sericulture
  - ❖ Maintenance and management of cold storage.
  - ❖ Cyber security
  - ❖ Artificial Intellegence

### **Teaching and Learning Plan :**

- Development of smart class rooms with state- of- art facilities.
- Use of more LCD and laptops in teaching and learning.
- Implementation of more experiential learning methods.
- Extensive use of online Teaching and Learning resources.
- More MoUs for faculty Exchange Programmes.

### **Research and Extension Plan :**

- Educational linkages in terms of more MoU with premier institutions and take up collaborative research projects
- Promote participation of staff members in FDPs like refreshers and orientation programmes
- Promote inter-disciplinary research
- Introduce Research promotion scheme at institute level.
- Promotion of publication in indexed research journals
- Promote faculty members to have at least one major/ minor project
- Conduct more National/ International Level seminars/ Conferences.
- Motivate faculty to apply for Patents.
- Promoteparticipation in International conferences/ seminars/workshops/symposium.
- To enhance research aptitude in students, organize a research fest" Vasant Avishkar"

### **Infrastructure and Learning resources augmentation Plan.**

- Demolition of old science building and construction of new building for academic and research activities.
- Construction of new Annex building for academic and recreation activities.
- Strengthening IT infrastructure.
- Complete automation of Library.
- Common Facility Centre (Common Instrumentation Centre.)

- Commerce Laboratory.
- Construction of disabled friendly washrooms.
- More facilities for women. (Additional common rooms and toilet blocks, Separate vehicle parking area, women's park.
- Interactive language Laboratory.
- Seminar hall
- Recreation hall.

#### **Community Engagement Plan:**

- Conduct for more community service activities.
- More tie-ups with NGOs
- Adoption of more Villages for community services.
- Assist government and local bodies in Community projects
- Organize extension activities for Highschool students in nearby high schools.
- Organize awareness and training programs for farmers.

#### **Human Resource planning and Development Plan:**

- Organize more faculty development programmes
- Motivate faculty members for research work.
- Motivate and depute teachers to Orientation Courses and Refresher Courses.
- Promote Faculty exchange Programmes.
- Organization of training programs for administrative staff.
- Gender Audit.

#### **Industry Interaction Plan:**

- Invite Industry experts for motivating students and provide practical knowledge
- Strengthen Campus placement and training facility.
- Promote student to work on real projects for industries

#### **Green initiatives**

- Implement Soil to Silk project, mulberry cultivation and silkworm rearing
- Butterfly Garden for rearing Butterflies.
- Vermicompost Unit for solid waste management.
- Apiculture practice in campus for Honey Bee keeping.
- Medicinal plant Garden.
- Plant Nursery.
- Humic acid production plant.
- Hazardous chemical water treatment plant.
- Installation of L.E.D. lights.
- Green and energy audit.

#### **Best practices plan**

The institute shall undertake following best practices



1) Celebration of CULTURAL ART AND LITERARY FEST WEEK ON THE OCCASION OF SWAMI VIVEKANAND JAYANTI "Know Your Self, Know Your Country and Know Your Culture".

2) Career guidance "CREATE YOUR PATH"

Sr. No.	Name	Designation	Signature
1	Dr.R.R.Kumbhar	Chairman	<i>R.R.K.</i>
2	Dr. V. Y. Pawar	Teacher	<i>V.Y.P.</i>
3	Mr. K. S. Patil	Teacher	<i>K.S.P.</i>
4	Mr. M. D. Patil	Teacher	<i>M.D.P.</i>
5	Dr. J. S. Ghodake	Teacher	<i>J.S.G.</i>
6	Dr. B. T. Kanase	Teacher	<i>B.T.K.</i>
7	Dr.S.Y.Hongekar	Management Representative	<i>S.Y.H.</i>
8	Mr. M.B.Kadam	Administrative Officer	<i>M.B.K.</i>
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	<i>A.D.P.</i>
10	Mr. Dilip Joglekar	Industrialist	<i>D.J.</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>M.J.</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>S.P.</i>
13	Mr. A.B.Kamble	Alumni	<i>A.B.K.</i>
14	Dr.N.A.Kulkarni	Coordinator	<i>N.A.K.</i>

*N.A.K.*  
(Dr. N. A. Kulkarni)  
IQAC Co-Ordinator,  
P.D.V.P. Mahavidyalaya,  
Tasgaon.



*R.R.K.*  
(Dr. R. R. Kumbhar)  
Principal  
Padmabhushan Dr. Vasantkradhe  
Mahavidyalaya, Tasgaon. (Sangli)

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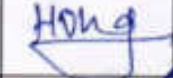

Date:-14/09/2016

### IQAC Meeting Notice

All the IQAC members are here by informed that a meeting is convened on 15/09/2016 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

#### Agenda:

1. Felicitation of meritorious students.
2. Sports activities.
3. Preparation of AQAR of 2016-17.
4. Placements of the students.
5. Competitive examinations.
6. Participation of students in cultural activities and women empowerment program.
7. Internal Exams and Lead College Programs.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	
8	Mr. M. B. Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	



10	Mr. Dilip Joglekar	Industrialist	<i>Joglekar</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>Jadhav</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>Patil</i>
13	Mr. A.B.Kamble	Alumni	<i>Kamble</i>
14	Dr.N.A.Kulkarni	Coordinator	<i>Kulkarni</i>

*Kulkarni*  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

*Kumbhar*  
 (Dr. R. R. Kumbhar)  
 For Principal  
 Padmabhushan Dr. Vasantaoada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

### Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The students of the college are continuously excelled in various university exams and other activities in the preceding year. It is necessary to motivate them by felicitating them publically. The IQAC members have suggesting organizing a separate felicitation function of these merit holder students of the last semester.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Shri.A. B. Kamble

Outcome – A separate felicitation function of merit holder students of the last semester was successfully organized.

2. The issue regarding the participation of students in various sports activities has been discussed. It has been decided to suggest motivating the students for the participation in various sports activities.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Dr.Mansing Jadhav

Outcome – Many of the students have participated in various sports activities and performed satisfactorily.

3. An issue of preparing and sending the AQAR of 2017-18 to NAAC Bangalore before the valid period has been raised in the meeting. The

IQAC committee is suggesting the IQAC Coordinator and Principal of the College to prepare and send the AQAR of 2017-18 to NAAC Bangalore before valid period.

The issue has been raised by Prin. Dr. S Y .Hongekar

The issue has been supported by Shri. Avinash Kaka Patil

Outcome – The AQAR of 2017-18 has been prepared and sent to NAAC Bangalore before due period.

4. An issue of on campus and off campus placements of the students has been raised in the meeting. The IQAC committee has been suggesting to the placement cell of the college to contact more companies and invite them in the college for the placements of more and more students of the college.

The issue has been raised by Dr. Mansing Jadhav

The issue has been supported by Shri. M. B. Kadam

Outcome – Number of students have got the placements in on campus and off campus placement camps. The report is with placement cell department

5. An issue regarding the students' performance and coaching for competitive examinations has been raised in the meeting. The IQAC has suggested to conduct the guest lectures of experienced persons in the field should be arranged and some workshops should be organized for the students. The IQAC committee has suggested conducting some mock competitive tests for the students.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. K. S. Patil

Outcome – The guest lecturers of experienced persons were arranged.

6. The IQAC committee has discussed an issue of participation of students in various cultural, essays, elocution and debating competition has been discussed in the meeting. The IQAC committee has suggested to motivate the students for participation in various cultural, essay, elocution and debating competition.

The issue has been raised by Shri. A. B. Kamble



The issue has been supported by Dr. J. S .Ghodake

Outcome – Number of students were participated in various cultural, essay, elocution and debating competition.

7. An issue of internal complaints and women empowerment programs for the girl students of the college has been raised in the meeting. The IQAC has suggested to organize the supportive programs on internal complaints and women empowerment for girl students

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Dr. N. A. Kulkarni

Outcome – Various programs of internal complaints and women empowerment programs for the girl students has been organized.

8. An issue of Continuous Internal Evaluation (CIE) with respect to NAAC guidelines has been discussed in the meeting. The committee members have suggested for conducting various tests like class tests, open book tests, surprise tests, seminars and group discussions for the improvement of the students' performance in the university examinations.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Dr. Mansing Jadhav

Outcome – Various tests like class tests, open book tests, surprise tests, seminars and group discussions for the improvement of the students' performance in the university examinations were conducted during the period.

9. The IQAC members have suggested arranging some guest lectures of some eminent speakers in the upcoming academic year.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Shri. Dilip Joglekar

Outcome – Some guest lecturers of eminent speakers' sere arranged.

10. Functioning of Lead College Scheme in the college has been discussed in the meeting. The IQAC members have decided to suggest the lead college committee to undertake maximum student central activities under this scheme.

The issue has been raised by Shri. Dilip Joglekar

The issue has been supported by Shri. M. D. Patil

Outcome – Number of student central activities under Lead College scheme were arranged.

11. An issue of role of media and film making in the society has been considerably increasing day by day. The committee thinks that the students of the college should know the techniques in media and film making. Keeping in mind the committee has decided to suggest to conduct some special workshops on media and film making.

The issue has been raised by Shri. Avinash Kaka Patil

The issue has been supported by Shri. A. B. Kamble







Outcome – A special workshop on media and film making has been arranged.

12. An issue of organizing departmental alumni meet has been raised by some members. The committee thinks that the alumni students of the college should be invited and motivated to participate in various college activities. Keeping in mind the committee has decided to suggest departments to conduct the alumni meet of their department.

The issue has been raised by Prin. Dr. R. R. Kumbhar

The issue has been supported by Shri. M. B. Kadam

Outcome – Some departments have conducted the alumni meet.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	



7	Dr.S.Y.Hongekar	Management Representative	<i>Hong</i>
8	Mr. M.B.Kadam	Administrative Officer	<i>M.B.Kadam</i>
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	<i>Joglekar</i>
11	Dr. Mansing Jadhav	Stakeholder	<i>Jadhav</i>
12	Miss. Sanyuja Suresh Patil	Student	<i>Patil</i>
13	Mr. A. B. Kamble	Alumni	<i>Kamble</i>
14	Dr. N. A. Kulkarni	Coordinator	<i>Kulkarni</i>

*Kulkarni*  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

*K*  
 (Dr. R. R. Kumbhar)  
 For **Principal**  
 Padmabhushan Dr. Vasantraodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार,” -शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon

Dist- Sangli


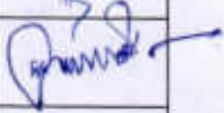




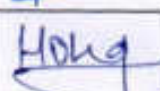
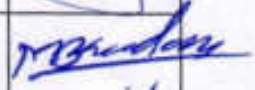

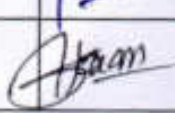
Date:-19/11/2016

### IQAC Meeting Notice




All the IQAC members are here by informed that a meeting is convened on 20/11/2016 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.


#### Agenda:

1. Conduct of study tours.
2. Organization of 'VASANTAVISHKAR' Poster competition.
3. Celebration of 'VIVEKANAND SAPTAH.'
4. Analysis of university results.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	
8	Mr. M. B. Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	



12	Miss. Sanyuja Suresh Patil	Student	
13	Mr. A. B. Kamble	Alumni	
14	Dr. N. A. Kulkarni	Coordinator	

  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

  
 (Dr. R. R. Kumbhar)  
 Principal  
 Padmabhushan Dr. Vasantodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

### Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The issue of felicitation of merit holder students has risen by some members to motivate the other students. A decision has been taken to arrange a lecture of an eminent speaker on the occasion.

The issue has been raised by Shri. A. B. Kamble

The issue has been supported by Dr. J. S. Ghodake

Outcome – A program of felicitation of merit holder students has been arranged.

2. An issue of organizing study tours by various departments has been raised by some members. A decision has been taken to organize the study tours to the places of educational interest and the travelling should be carried out through RTO permitted vehicles.

The issue has been raised by Shri. K. S. Patil

The issue has been supported by Shri. M. D. Patil

Outcome – Various departments have organized study tours at various places of their subject interest.

3. Creating research atmosphere among the students is a key issue in higher educational institutes. An issue of organizing research oriented poster competition has been raised by some members. It has been decided to organize an annual research oriented 'Vasantavishkar' poster competition in the December. A decision has also been taken to send more and more quality posters to the district level 'Avishkar' poster competition organized by Shivaji University, Kolhapur.

The issue has been raised by Dr. B. T. Kanase

The issue has been supported by Dr. J. S. Ghodke

Outcome – An annual research oriented ‘Vasantavishkar’ poster competition has been arranged in the last week of December.

4. An issue of organizing research oriented poster competition at district level has been raised by some members.

The issue has been raised by Dilip Joglekar

The issue has been supported by Dr. Mansing Jadhav

Outcome - The poster competition has been organized.

5. An issue of celebration of annual ‘Vivekananda Saptah’ has been raised by some members. A decision has been taken to organize this week in a systematic manner. The decision has been taken to organize various competitions during the week to give the students a chance to show their art and skills. Suggestion has been given to organize rangoli, essay, and elocution competition for the students.

The issue has been raised by Prin. Dr. R. R. Kumbhar

The issue has been supported by Avinash Kaka Patil

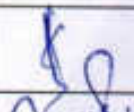

Outcome – An annual ‘Vivekananda Saptah’ has been arranged in a systematic manner. Various competitions like rangoli, essay, elocution competition has been organized during the week to give the students a chance to show their art and skills.

6. An issue of performance of the students in the first semester in university examinations has been discussed in the meeting. Discussion has been made to analyze the results and take the steps to improve the results.





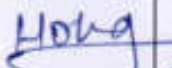
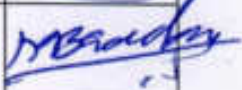




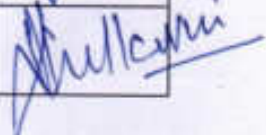
The issue has been raised by Dr. J. S. Ghodake

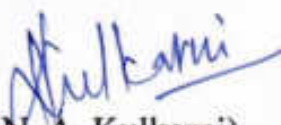
The issue has been supported by Shri. A. B. Kamble


Outcome – Performance of the students in the first semester in university examinations has been discussed in the meeting.

Sr. No.	Name	Designation	Signature
1	Dr.R.R.Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	



3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	
8	Mr. M. B. Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	
12	Miss. Sanyuja Suresh Patil	Student	
13	Mr. A. B. Kamble	Alumni	
14	Dr. N. A. Kulkarni	Coordinator	

  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P. D. V. P. Mahavidyalaya,  
 Tasgaon.

  
 (Dr. R. R. Kumbhar)  
 For **Principal**  
 Padmabhushan Dr. Vasantraodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार,” -शिक्षणमहर्षी डॉ. बापूजी साळुंखे  
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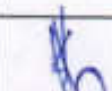
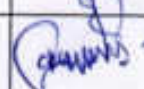



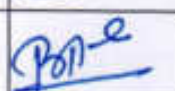





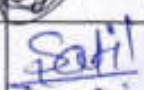
Date:-24/03/2017

**IQAC Meeting Notice**


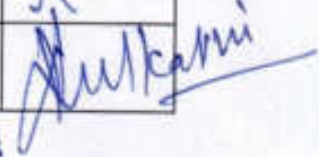
All the IQAC members are here by informed that a meeting is convened on 25/03/2017 at 11.30 am in the IQAC Room. All the respected members are requested to attend the meeting to discuss the following agenda.

**Agenda:**

1. Organization of annual sports day.
2. Workshops on various aspects.
3. Program for Voter Awareness.
4. Organization of Self funded conferences.
5. Distribution of Government Scholarships.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	
5	Dr. J. S. Ghodake	Teacher	
6	Dr. B. T. Kanase	Teacher	
7	Dr. S. Y. Hongekar	Management Representative	
8	Mr. M.B.Kadam	Administrative Officer	
9	Mr. Avinash Dinkarrao Patil	Member of Local Society	
10	Mr. Dilip Joglekar	Industrialist	
11	Dr. Mansing Jadhav	Stakeholder	 
12	Miss. Sanyuja Suresh Patil	Student	



13	Mr. A. B. Kamble	Alumni	
14	Dr. N. A. Kulkarni	Coordinator	

(Dr. N. A. Kulkarni)  
 IQAC Coordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

(Dr. R. R. Kumbhar)  
 Principal  
 Padmabhushan Dr. Vasanturadada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

### Minutes of IQAC Meeting

The minutes of the meeting are given bellow.

1. The issue regarding the organizing of the annual sports day for the academic year 2016-17 has been discussed. A decision has been taken to call auspicious guest for the function who has known for the social work.

The issue has been raised by Shri. Avinash Dinkarrao Patil

The issue has been supported by Dr. Mansing Jadhav

Outcome – The function has been successfully organized.

2. The student strength of the college is day by day increasing. There is a possibility of increase in the student strength in the upcoming year also. The increased student strength needs additional care regarding the bad habits of the students. The attraction towards the tobacco and allied chewing is increasing day by day. Some members of the committee are worried about these bad habits in the college campus. Suggestions are made to arrange some functions for “Anti Tobacco Campaign.” The IQAC committee is suggesting the NSS unit to conduct this activity as early as possible.

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Shri. Dilip Joglekar

Outcome –Anti Tobacco Campaign Poster Competition has been organized.

3. Some members of the committee have raised the issue of organizing some subject related workshops in the remaining time of January and February months. The suggestions are made to organize some workshops regarding Competitive Exams, Industrial Training, Mathematics, Scientific Terminologies, and Climate Change.

The issue has been raised by Shri. M. D. Patil

The issue has been supported by Shri. Dilip Joglekar

Outcome – The programs were arranged.

4. The IQAC committee has been suggesting conducting some awareness program among the new voters and the new EVM machine among the students and common people.

The issue has been raised by Shri. M. B. Kadam

The issue has been supported by Dr. N. A. Kulkarni

Outcome – An awareness program among the new voters and the new EVM machine among the students and common people has been arranged.

5. An issue of some field surveys has been discussed in the meeting. The committee has decided to suggest a social survey of the selected village.

The issue has been raised by Dr. J. S. Ghodake

The issue has been supported by Shri. A. B. Kamble

Outcome – The Geography department has conducted a village survey.

6. The IQAC committee has discussed an issue of organization of the seminar and conferences. Now a day the funding agencies are not happy to give the funds for organization of the seminar and conferences.

The issue has been raised by Prin. R. R. Kumbhar

The issue has been supported by Shri. Dilip Joglekar

Outcome – Some seminar and conferences were arranged.

7. An issue of performance of the students in university examinations has been discussed in the meeting. Discussion has been made to develop educational atmosphere in the college campus. IQAC has suggested developing a healthy and favorable academic atmosphere by providing maximum facilities for the students to achieve the positions in university merit list in upcoming academic year 2016-17.

The issue has been raised by Shri. Dilip Joglekar



The issue has been supported by Shri. M. D. Patil

Outcome – A function has been organized.

8. An issue of undertaking various extension activities through NCC and NSS has been discussed in the meeting. The members have suggested to NSS and NCC to undertake the activities which will be helpful to the society.

The issue has been raised by Prin. Dr. S. Y. Hongekar

The issue has been supported by Shri. K. S. Patil

Outcome – Various extension activities through NCC and NSS has been arranged.

9. An issue of organizing upcoming 'International Yoga Day' in the college has been discussed in the meeting. The members have suggested arranging the yoga for the faculty and to the students. It is suggested that the NSS and NCC students to undertake the yoga publically.

The issue has been raised by Shri. M. B. Kadam

The issue has been supported by Dr. N. A. Kulkarni





Outcome – The day has been celebrated widely.



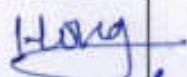

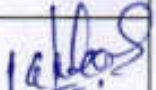
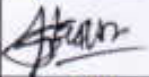


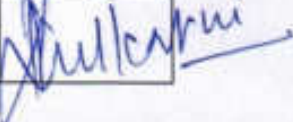
10. An issue of distribution of government scholarships of the students has been discussed in the meeting.


The issue has been raised by Shri. Dilip Joglekar


The issue has been supported by Shri. M. D. Patil

Outcome – The distribution of government scholarships of the students has been has been successfully completed.

Sr. No.	Name	Designation	Signature
1	Dr. R. R. Kumbhar	Chairman	
2	Dr. V. Y. Pawar	Teacher	
3	Mr. K. S. Patil	Teacher	
4	Mr. M. D. Patil	Teacher	

5	Dr. J. S. Ghodake	Teacher	
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14	Dr. N. A. Kulkarni	Coordinator	

  
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 Tasgaon.

  
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 For Principal  
 Padmabhushan Dr. Vasantraodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)





NAAC Accredited **B<sup>++</sup>** (2.76)

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Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin 416 312 ☎ STD : 02346- 250 665, 250 575 FAX : 250575

• Affiliated to Shivaji University, Kolhapur •

ISO - 9001:2015

E-mail:san.pdvpm.tas@gmail.com Website : www.pdvprmtasgaon.edu.in

Established Year : June 1962 P. B. No. : 14 Jr. College No. : J22-10-001 Sr. College Code No.: <sup>SVACH</sup>X Jr.: C-8

Shikshanmaharshi  
Dr. Bapuji Salunkhe  
B.A., B.T.D.L.M.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
B.Com.  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
M.A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M.Sc. B. Ed.  
SECRETARY

Dr. Milind S. Hujare  
M.Sc., Ph. D.  
PRINCIPAL

Ref.No. : PDVPMT/

Date :

## ACTION TAKEN REPORT (IQAC) 2016-17

Sr. No.	Plan of Action	Action Taken
<b>First Meeting on 07/07/2016</b>		
1	Review of minutes of previous IQAC Meeting	The minutes of the previous meeting are approved by the Council.
2	To Start new add on Courses for skill development of students	Few add on Courses for skill development of students Courses were added successfully
3	Purchase of Quality subject related Books in Library	Quality subject books of Rs. 50,000/- in prescribed Budget were purchased
4	Discussion on construction of new building to face the increasing student strength	The New building construction was on the way to complete.
5	Preparation of detailed Departmental Profile from each department.	All departments prepared detailed Departmental Profiles successfully.
6	Discussion to motivate faculty to publish quality research papers.	39 quality research papers were published successfully in reputed journals.
7	To organize seminars and conferences on various themes.	Some seminars and conferences were organized.
8	To develop healthy and academic atmosphere by providing maximum facilities to students to encourage merit based performance in University Examination.	Fruitful suggestions were made to achieve the goal.
9	To conduct various extension activities	Various extension activities through

	through NCC, NSS and various departments.	NCC, NSS were successfully conducted.
10	To present and approve Institute perspective plan for 2016-17 to 2020-21	Institute Perspective Plan for five years presented and approved.
<b>Second Meeting on 15/09/2016</b>		
11	Review of minutes of 1 <sup>st</sup> IQAC Meeting	The minutes of the meeting held on 07/07/2016 were approved by the Council.
12	Organization of Felicitation program for meritorious students and motivation to remaining students	Felicitations program for meritorious students and motivation to remaining students was successfully organized in second term of academic year.
13	Discussion to motivate students' participation in sports activities.	Many of the students participated in sports activities and performed satisfactorily.
14	Discussion and Preparation of AQAR of 2015-16	The AQAR of 2015-16 prepared and sent to NAAC office in time.
15	Discussion to conduct On campus placement activities.	Numbers of students have got placement in on campus and off campus placement camps.
16	To conduct various Guest lecturers of experienced persons for competitive examination guidance.	Competitive Exam Cell has organized Guest lecturers of experienced persons for competitive examination guidance.
17	Discussion to motivate students' participation in cultural, essay, elocution, Debate activities.	Many of the students participated in cultural, essay, elocution, Debate activities and performed satisfactorily.
18	To organize the supportive programs on Internal Complaints and Women Empowerment for girl students	Various programs on Internal Complaints and Women Empowerment for girl students were organized.
19	Review of CIE activities of each department to improve the student in University Exam.	Every department has conducted CIE activities to improve the student in University Exam.
20	Review of Function of Lead College	Number of Student Centric activities




	Scheme of Shivaji University, Kolhapur	organized under Lead College Scheme of Shivaji University, Kolhapur
21	To conduct special workshop on media and film making.	Special workshop on media and film making was organized by Department of Marathi
22	To organize Departmental Alumni Meet	Departmental Alumni Meet has been organized by each department.
<b>Third Meeting on 20/11/2016</b>		
23	Review of minutes of 2 <sup>nd</sup> IQAC Meeting	The minutes of the meeting held on 15/09/2016 are approved by the Council.
24	To organize Annual sports day and competition and Felicitation of sports students.	Annual sports competitions on various sports events were organized during 12 <sup>th</sup> January to 19 <sup>th</sup> January and Annual Prize distribution program was organized.
25	Organization of Study Tours	Study Tours were organized by Marathi, History Economics Commerce Physics, Chemistry, Botany and Zoology as per the syllabus.
26	Organization of Vasantavishkar Poster Competition.	Vasantavishkar Compilation on 21/12/2017, 67 research posters and 201 students have participated along with their poster.
27	Organization of Vivekanand Saptah (Week)	Celebration of Vivekananda Saptah is tradition of our mother institution. In this academic year our IQAC planed and successfully organized various activities and competitions during 12 <sup>th</sup> January to 19 <sup>th</sup> January to inculcate student's art and skills.
28	Analysis of University Result of First semester.	University Result of First semester was analyzed by each department and counseling of the students was done to

		achieve the rank in the next semester Exam.
<b>Fourth Meeting on 25/03/2017</b>		
29	Review of minutes of 3 <sup>rd</sup> IQAC Meeting	The minutes of the meeting held on 20/11/2016 are approved by the Council.
30	To organize Felicitation of sports students.	Annual Prize distribution program was organized.
31	Organization of Anti-Tobacco Campaign	Anti-Tbacco Poster Competition and Rangoli competition was organized by NSS.
32	To organize seminars, workshops, guest lectures, industrial visits on various themes in remain time of the academic year.	Seminars, workshops were organized successfully.
33	Organization of Awareness programs for voters and new system of EVM machine to voters.	Awareness programs for voters and new system of EVM machine to voters and common man was organized.
34	To develop healthy and academic atmosphere by providing maximum facilities to students to encourage merit based performance in University Examination	Fruitful suggestions were made to achieve the goal.
35	To conduct various extension activities through NCC, NSS and various departments.	Various extension activities through NCC, NSS were successfully conducted.
36	Planning to organize International Yoga Day	Successfully planned and celebrated International Yoga Day.
37	Review of students scholarship distribution from Govt.	Scholarships were successfully distributed and deposited on their bank account

  
 (Dr. N. A. Kulkarni)  
 IQAC Co-Ordinator,  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon



  
 (Dr. R. R. Kumbhar)  
 Principal  
 Padmabhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Tasgaon, (Sangli)





“Dissemination of Education for Knowledge, Science and Culture”  
-Shikshanmaharashi Dr. Bapuji Salunkhe

**Swami Vivekanand Shikshan Sanstha Kolhapur**

**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya,  
Tasgaon,  
Sangli-416412, (MS) India**

**Report on**

**VASANT AVISHKAR**

*Research Convention*

**30<sup>th</sup> December 2019**



**2019-20**

“Dissemination of Education for Knowledge, Science and Culture”  
-Shikshanmaharashi Dr. Bapuji Salunkhe

**Swami Vivekanand Shikshan Sanstha Kolhapur**

**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya,  
Tasgaon, Sangli-416412, (MS) India**

*Organize*

**VASANT AVISHKAR**

➤ <b>Event</b>	: <b>Research computation</b>
➤ <b>Date</b>	: <b>30<sup>th</sup> December 2019</b>
➤ <b>Organizer</b>	: <b>PDVP College Tasgaon</b>
➤ <b>venue</b>	: <b>College Campus</b>

**PARTICIPANT**

<b>Participant</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>Students</b>	31	47	78
<b>Faculty</b>	12	05	17
			95

Innovative research is a search for new business and strategic techniques and methods. They develop and optimize well-known methodologies, enabling the implementation of new and better solutions. Innovative research focuses on creating new ideas, analyzing problems, diagnosing them and identifying their causes.

Accordingly, our college initiating the organization of “Vasant Avishkar” every year to provide a platform to the students from the various groups and extending the helping hands to understand the research attitude and acquiring the scientific knowledge thus transforming



for the cause of development. This will also educate students and teachers to understand their responsibility towards societal development. In this year also, our college was organized the “Vasant Avishkar” research computation to initiate the scientific attitude in students and to express their research ideas.

In this year “Vasant Avishkar” research poster computation was organized on 30<sup>th</sup> December 2019 in college campus. For the inaugural function we invite as a chief guest to **Dr. P. M. Patil Sir**, A.S.C. College, Palus. Also we invite **Dr. Sunil Kamble** SMDBS College, Miraj and **Dr. Sajjan Kamble** ACS College, Palus as an examiner for the same computation. Principal **Dr. Milind Hujare** as a precedent of the program guided the student about the research and informs him how such activities auspice there features. Chief Guest of program Dr. P. M. Patill In his speech said that such event gives the right opportunity to the students at the ground level that leads to forming such a young researchers.

## INAUGURAL FUNCTION



Principal Dr. Milind Hujare sir delivered speech on Inaugural function



Chief Guest Dr. P. M. Patil sir delivered speech on inaugural function



Introductory speech by coordinator Dr. Ajay Ambhore



Felicitation of Chief Guest Dr. P. M. Patil



Felicitation of Guest Dr. Sunil Kamble



Felicitation of Guest Dr. Sunil Kamble



Inauguration of poster presentation



Invited guest with college staff

Introductory speech was delivered by the program coordinator **Dr. Ajay Ambhore**. Total 78 students are participated and present their research poster in this computation. All these research projects are evaluated by the examiners.



Chief Guest and Principal observing the project in the computation



Examiners examine the research projects





**Examiners examine the research projects**



**Vote of thanks by Dr. Amol Sonawale**

After the completion of evaluation process all the examiners handover the result towards our Principal and it was declared to students on the same day. From the result 12 students are selected to participate in district level "Avishkar" organized by Shivaji University, Kolhapur at Balvant College, Vita.

**Photo Gallery**





**REGISTRATION**

"Department of Education for Knowledge, Science & Culture"  
 Shikshanasanthe De. Jagadishwara  
 Sri Sri Sree Vidyapeetham (Kannada College)  
 Padmabhanke Dr. Vasantaramulu Patil Mahavidyalaya, Tasgaon, Dist. Sangli  
**Yashat Arishkar 2019-20** Date: 08/03/2019  
 1. CATEGORY: HUMANITIES, LANGUAGE, FINE ARTS, EDUCATION, ETC.

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Mobile No.	Sign
1.1	MAHARAJA VIKRAM	B.A. II	English	...	9321111111	[Signature]
1.2	...	B.A. II	English	...	9451111111	[Signature]
1.3	...	B.A. II	English	...	9876543210	[Signature]
1.4	...	B.A. II	English	...	9876543210	[Signature]
1.5	...	B.A. II	English	...	9876543210	[Signature]
1.6	...	B.A. II	English	...	9876543210	[Signature]

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**Yashat Arishkar 2019-20** Date: 08/03/2019  
 1. CATEGORY: HUMANITIES, LANGUAGE, FINE ARTS, EDUCATION, ETC.

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Mobile No.	Sign
1.1	...	B.A. II	English	...	9321111111	[Signature]
1.2	...	B.A. II	English	...	9451111111	[Signature]
1.3	...	B.A. II	English	...	9876543210	[Signature]
1.4	...	B.A. II	English	...	9876543210	[Signature]
1.5	...	B.A. II	English	...	9876543210	[Signature]
1.6	...	B.A. II	English	...	9876543210	[Signature]

"Department of Education for Knowledge, Science & Culture"  
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 Sri Sri Sree Vidyapeetham (Kannada College)  
 Padmabhanke Dr. Vasantaramulu Patil Mahavidyalaya, Tasgaon, Dist. Sangli  
**Yashat Arishkar 2019-20** Date: 08/03/2019  
 2. CATEGORY: COMMERCE, MANAGEMENT, LAW, ETC.

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Mobile No.	Sign
2.01	...	B.Com	Commerce	...	9321111111	[Signature]
2.02	...	B.Com	Commerce	...	9451111111	[Signature]
2.03	...	B.Com	Commerce	...	9876543210	[Signature]
2.04	...	B.Com	Commerce	...	9876543210	[Signature]

"Department of Education for Knowledge, Science & Culture"  
 Shikshanasanthe De. Jagadishwara  
 Sri Sri Sree Vidyapeetham (Kannada College)  
 Padmabhanke Dr. Vasantaramulu Patil Mahavidyalaya, Tasgaon, Dist. Sangli  
**Yashat Arishkar 2019-20** Date: 08/03/2019  
 3. CATEGORY: PRACTICE

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Mobile No.	Sign
3.01	...	B.A. II	English	...	9321111111	[Signature]
3.02	...	B.A. II	English	...	9451111111	[Signature]
3.03	...	B.A. II	English	...	9876543210	[Signature]
3.04	...	B.A. II	English	...	9876543210	[Signature]
3.05	...	B.A. II	English	...	9876543210	[Signature]
3.06	...	B.A. II	English	...	9876543210	[Signature]



"Determination of Students for Knowledge, Interest & Culture"  
 Bidhanmohini D. Jagadishchandra  
 Sri Sri Swami Vivekananda Bidhanmohini College  
 Patalipatna, Dr. Vasantnagar Palli Mahavidyalaya, Tasgaon, Dist. Durgah  
**Vasant Avishkar 2019-20** Date: 20/12/2019

3. CATEGORY: PAPER SCIENCE

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Marked No.	Rank
1	Pradyot, Das/Devi	B.II	Chemistry	Application of the use of green catalyst for synthesis of bioactive molecule	100/100	1st
2	Sohil Vidhan Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	95/100	2nd
3	Sanjay Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	90/100	3rd
4	Shikha Mishra	B.II	Chemistry	Comparative study of college students in different ways	85/100	4th
5	Kaushik Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	80/100	5th

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 Sri Sri Swami Vivekananda Bidhanmohini College  
 Patalipatna, Dr. Vasantnagar Palli Mahavidyalaya, Tasgaon, Dist. Durgah  
**Vasant Avishkar 2019-20** Date: 20/12/2019

6. CATEGORY: SCIENCE & ANIMAL HUSBANDRY

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Marked No.	Rank
1	Pradyot, Das/Devi	B.II	Chemistry	Application of the use of green catalyst for synthesis of bioactive molecule	100/100	1st
2	Sohil Vidhan Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	95/100	2nd
3	Sanjay Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	90/100	3rd
4	Shikha Mishra	B.II	Chemistry	Comparative study of college students in different ways	85/100	4th
5	Kaushik Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	80/100	5th

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 Sri Sri Swami Vivekananda Bidhanmohini College  
 Patalipatna, Dr. Vasantnagar Palli Mahavidyalaya, Tasgaon, Dist. Durgah  
**Vasant Avishkar 2019-20** Date: 20/12/2019

4. CATEGORY: AGRICULTURE & ANIMAL HUSBANDRY

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Marked No.	Rank
1	Pradyot, Das/Devi	B.II	Chemistry	Application of the use of green catalyst for synthesis of bioactive molecule	100/100	1st
2	Sohil Vidhan Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	95/100	2nd
3	Sanjay Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	90/100	3rd
4	Shikha Mishra	B.II	Chemistry	Comparative study of college students in different ways	85/100	4th
5	Kaushik Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	80/100	5th

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 Sri Sri Swami Vivekananda Bidhanmohini College  
 Patalipatna, Dr. Vasantnagar Palli Mahavidyalaya, Tasgaon, Dist. Durgah  
**Vasant Avishkar 2019-20** Date: 20/12/2019

5. CATEGORY: ENGINEERING & TECHNOLOGY

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Marked No.	Rank
1	Pradyot, Das/Devi	B.II	Chemistry	Application of the use of green catalyst for synthesis of bioactive molecule	100/100	1st
2	Sohil Vidhan Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	95/100	2nd
3	Sanjay Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	90/100	3rd
4	Shikha Mishra	B.II	Chemistry	Comparative study of college students in different ways	85/100	4th
5	Kaushik Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	80/100	5th

"Determination of Students for Knowledge, Interest & Culture"  
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 Sri Sri Swami Vivekananda Bidhanmohini College  
 Patalipatna, Dr. Vasantnagar Palli Mahavidyalaya, Tasgaon, Dist. Durgah  
**Vasant Avishkar 2019-20** Date: 20/12/2019

6. CATEGORY: MEDICINE & PHARMACY

Sr. No.	Name of Student	Class	Name of Department	Title of Project	Marked No.	Rank
1	Pradyot, Das/Devi	B.II	Chemistry	Application of the use of green catalyst for synthesis of bioactive molecule	100/100	1st
2	Sohil Vidhan Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	95/100	2nd
3	Sanjay Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	90/100	3rd
4	Shikha Mishra	B.II	Chemistry	Comparative study of college students in different ways	85/100	4th
5	Kaushik Kumar Singh	B.II	Chemistry	Study on the synthesis of bioactive molecule	80/100	5th



वसन्तविष्कार 2019-20  
 Bidhanmohini D. Jagadishchandra  
 Sri Sri Swami Vivekananda Bidhanmohini College  
 Patalipatna, Dr. Vasantnagar Palli Mahavidyalaya, Tasgaon, Dist. Durgah  
**Vasant Avishkar -2019-2020**

Category I : Humanities, language, fine arts, education etc.

Poster No.	Name of the Student	Class	Department	Title of the Project	Remark
1.18	Pradyot Das/Devi	B.A.III	Economics	Application of the use of green catalyst for synthesis of bioactive molecule	First
1.26	Sanjay Kumar Singh	B.Com.II	Geography	Study on the synthesis of bioactive molecule	Second
1.29	Shikha Mishra	B.A.II	Political Science	Comparative study of college students in different ways	Third

Category II : Commerce Management and law, etc.

Poster No.	Name of the Student	Class	Department	Title of the Project	Remark
2.03	Pradyot Das/Devi	B.Com.II	Commerce	Application of the use of green catalyst for synthesis of bioactive molecule	First
2.04	Sanjay Kumar Singh	B.Com.III	Commerce	Study on the synthesis of bioactive molecule	Second
2.02	Shikha Mishra	B.Com.II	Commerce	Comparative study of college students in different ways	Third

Category III : Pure Science

Poster No.	Name of the Student	Class	Department	Title of the Project	Remark
3.07	Pradyot Das/Devi	B.Sc.III	Chemistry	Application of the use of green catalyst for synthesis of bioactive molecule	First
3.04	Sanjay Kumar Singh	B.Sc.III	Zoology	Study on the synthesis of bioactive molecule	Second
3.01	Shikha Mishra	B.Sc.III	Botany	Comparative study of college students in different ways	Third

Category IV : Agriculture & Animal Husbandry

Poster No.	Name of the Student	Class	Department	Title of the Project	Remark
4.09	Pradyot Das/Devi	B.Sc.III	Zoology	Application of the use of green catalyst for synthesis of bioactive molecule	First
4.07	Sanjay Kumar Singh	B.A.II	Economics	Study on the synthesis of bioactive molecule	Second
4.06	Shikha Mishra	B.A.II	Geography	Comparative study of college students in different ways	Third

Category V : Engineering and Technology

Poster No.	Name of the Student	Class	Department	Title of the Project	Remark
5.01	Pradyot Das/Devi	B.Sc.III	Physics	Thin film solar cell	First
5.03	Sanjay Kumar Singh	B.Sc.III	Physics	Study on the synthesis of bioactive molecule	Second
5.02	Shikha Mishra	B.Sc.III	Physics	Comparative study of college students in different ways	Third

**Yashwantrao Chavan Pratishthan, Sangli**

**Padmabhushan Dr. Vasantgadada Patil Mahavidyalaya,  
Tasgaon, Dist. Sangli**

**Yashwantrao 2019-20**  
(Date - 30.11.2019)

➤ <b>Instructor</b>	<b>Dr. Ajay N. Ambhore</b> Program Coordinator
➤ <b>President</b>	<b>Prin. Dr. Milind S. Hujare</b>
➤ <b>Chief Guest</b>	<b>Dr. P. M. Patil</b> Art, Commerce and Science College, Pala, Dist. Sangli
➤ <b>Guest &amp; Examinee</b>	<b>Dr. Rajeev Kamble</b> Art, Commerce and Science College, Pala, Dist. Sangli
➤ <b>Guest &amp; Examinee</b>	<b>Dr. Smit Kamble</b> SHRDS College, Miraj, Dist. Sangli
➤ <b>Vote of Thanks</b>	<b>Dr. A. S. Wagh</b> Member, Research Committee
➤ <b>Anchorng</b>	<b>Dr. A. G. Sonawale</b> Member, Research Committee

**Yashwantrao Chavan Pratishthan, Sangli**

**Padmabhushan Dr. Vasantgadada Patil Mahavidyalaya,  
Tasgaon, Dist. Sangli**

**Yashwantrao 2019-20**  
(Date - 30.11.2019)

➤ <b>Registration</b>	<b>9:00 AM to 10:30 AM</b>
➤ <b>Prize Arrangement</b>	<b>10:30 AM to 11:30 AM</b>
➤ <b>Inaugural Function</b>	<b>11:30 AM to 12:30 AM</b>
➤ <b>Prize Examination</b>	<b>12:30 AM to 01:00 PM</b>
➤ <b>Lunch</b>	<b>1:00 PM to 1:45 PM</b>
➤ <b>Result</b>	<b>2:00 PM</b>

**Yashwantrao Chavan Pratishthan, Sangli**

**Padmabhushan Dr. Vasantgadada Patil Mahavidyalaya,  
Tasgaon, Dist. Sangli**

**Yashwantrao 2019-20**  
(Date - 30.11.2019)

**Program Committee**

➤ <b>Registration Committee</b>	➤ <b>Dr. A. G. Sonawale</b> ➤ <b>Dr. B. J. Lakshmi</b> ➤ <b>Dr. R. B. Sarda</b>
➤ <b>Inaugural Function Committee</b>	➤ <b>Dr. V. T. Sonar</b> ➤ <b>Dr. S. C. Sarda</b>
➤ <b>Result Analysis Committee</b>	➤ <b>Dr. A. S. Wagh</b> ➤ <b>Dr. A. S. Wagh</b>
➤ <b>Headery Committee</b>	➤ <b>Prin. Dr. Milind S. Hujare</b> ➤ <b>Dr. V. T. Sonar</b> ➤ <b>Dr. V. T. Sonar</b> ➤ <b>Dr. V. T. Sonar</b> ➤ <b>Dr. V. T. Sonar</b>

Research Committee Chairman: **Dr. Ajay N. Ambhore**      Principal: **Dr. Milind S. Hujare**

Activate Windows



**Dr. Ajay N. Ambhore  
(Coordinator)**

**Prin. Dr. Milind S. Hujare**  
**Principal**  
Padmabhushan Dr. Vasantgadada Patil  
Mahavidyalaya, Tasgaon (Sangli).





“Dissemination of Education for Knowledge, Science and Culture”  
-Shikshanmaharashi Dr. Bapuji Salunkhe

**Swami Vivekanand Shikshan Sanstha Kolhapur**

**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya,  
Tasgaon,  
Sangli-416412, (MS) India**

**Report on**

**VASANT AVISHKAR**

*Research Convention*

**19<sup>th</sup> & 20<sup>th</sup> December 2018**



**2018-19**

“Dissemination of Education for Knowledge, Science and Culture”  
-Shikshanmaharashi Dr. BapujiSalunkhe

**Swami Vivekanand Shikshan Sanstha Kolhapur**

**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya,  
Tasgaon, Sangli-416412, (MS) India**

*Organize*

**VASANT AVISHKAR**

➤ <i>Event</i>	: <i>Research computation</i>
➤ <i>Date</i>	: <i>19<sup>th</sup> &amp; 20<sup>th</sup> December 2018</i>
➤ <i>Organizer</i>	: <i>PDVP College Tasgaon</i>
➤ <i>venue</i>	: <i>College Campus</i>

**PARTICIPANT**

Participant	Male	Female	Total
<b>Students</b>	78	136	214
<b>Faculty</b>	42	06	48
			262

Research is an outcome basically of the innovative minds in the modern era with the support of well-equipped laboratories and such other infrastructure. If the same is made available by the educational institution at right ages, It will not only stimulate the activities



but will help to identify the student to be groomed further as acclaimed researchers in their respective field.

On this basis, every year our college was organizing the “Vasant Avishkar” research computation to initiate the scientific attitude in students and provide the space to student to express their research ideas.

In this year “Vasant Avishkar” research poster computation was organized on 19<sup>th</sup> and 20<sup>th</sup> December 2018 in college campus. For the inaugural function we invite as a chief guest to Dr. S. T. Salunkhe Sir, Principal, A.S.C. College, Ramanand Nagar. During his speech in said that, right opportunity when made available at the ground level leads to forming such a young research group which can be molded in desire direction by motivating them by their teachers.

## **INAUGURAL FUNCTION**



**Principal Dr. R. R. Kumbhar sir on Inaugural function**



**Chief Guest Dr. S. T. Salunkhe sir delivered speech on inaugural function**



**Introductory speech by co-ordinator Dr. Ajay N. Ambhore on Inaugural function**



**Students and staff on Inaugural function**

Principal Dr. R. R. Kumbhar sir is on precedential chair of the program. In his speech hi said that “Vasant Avishkar” is an interclass computation for the entry of Univerity organized “Avishkar” research computation. Research is not the limited quantity for the university level. But it can be start from college level. The introductory speech was delivered by the program co-ordinator Dr. Ajay N. Ambhore.



**Vote of thanks by Dr. T. K. Badame Sir**



**Inauguration of poster presentation**



**Registration desk**



**Examiners of ‘Vasant Avishkar’**

For this research poster presentation computation total 214 students of the college were participate and presented there invention in front of the examiner. College allotted total 18 examiners to examine the research invention for six categories in first day and 12 examiners for the second day.



**Chief Guest and Principal observing the project in the computation**



**Examiners examine the research projects**





**Examiners examine the research projects**

Finally at evening all the examiners handover the result towards our Principal and it was declared to students in the evening of the forest day. The selected students again represent their research project on second day from which final 12 students from each category were selected which then participate in district level “Avishkar” competition organized by Shivaji University, Kolhapur.

**REGISTRATION**

VANANTAVISHKAR 2019-20				
P.D.V.P. COLLEGE, TASGAON				
A. CATEGORY - ENGLISH LANGUAGE AND THE ARTS DEPARTMENT				
No.	Name of Student	Name of Department	Title of Paper	Mark
1.	...	...	...	...
2.	...	...	...	...
3.	...	...	...	...
4.	...	...	...	...
5.	...	...	...	...
6.	...	...	...	...
7.	...	...	...	...
8.	...	...	...	...
9.	...	...	...	...
10.	...	...	...	...
11.	...	...	...	...
12.	...	...	...	...

No.	Name of Student	Name of Department	Title of Paper	Roll No.	Year
17	...	...	...	...	...
18	...	...	...	...	...
19	...	...	...	...	...
20	...	...	...	...	...
21	...	...	...	...	...
22	...	...	...	...	...
23	...	...	...	...	...
24	...	...	...	...	...
25	...	...	...	...	...

No.	Name of Student	Name of Department	Title of Paper	Roll No.	Year
26	...	...	...	...	...
27	...	...	...	...	...
28	...	...	...	...	...
29	...	...	...	...	...

**VARANASIYAN JIYAN  
PUNYAKRISHN TANDAN  
A. CAUTION: CONSULT APPROVED COPY**

No.	Name of Student	Name of Department	Title of Paper	Roll No.	Year
1	...	...	...	...	...
2	...	...	...	...	...
3	...	...	...	...	...
4	...	...	...	...	...
5	...	...	...	...	...
6	...	...	...	...	...
7	...	...	...	...	...
8	...	...	...	...	...

No.	Name of Student	Name of Department	Title of Paper	Roll No.	Year
9	...	...	...	...	...
10	...	...	...	...	...
11	...	...	...	...	...
12	...	...	...	...	...
13	...	...	...	...	...
14	...	...	...	...	...
15	...	...	...	...	...
16	...	...	...	...	...
17	...	...	...	...	...
18	...	...	...	...	...
19	...	...	...	...	...
20	...	...	...	...	...

No.	Name of Student	Name of Department	Title of Paper	Roll No.	Year
21	...	...	...	...	...
22	...	...	...	...	...

**VARANASIYAN JIYAN  
PUNYAKRISHN TANDAN  
A. CAUTION: CONSULT APPROVED COPY**

No.	Name of Student	Name of Department	Title of Paper	Roll No.	Year
23	...	...	...	...	...
24	...	...	...	...	...
25	...	...	...	...	...
26	...	...	...	...	...
27	...	...	...	...	...
28	...	...	...	...	...
29	...	...	...	...	...
30	...	...	...	...	...





**YASANTRASHIKHA DADA  
PAVVALE COLLEGE, TARGAON**  
 D. KASTURBA MEDICAL COLLEGE

Sl. No.	Name of Candidate	Roll No.	Grade	Mark
1	Abhishek Kumar	1910101	B	75
2	Adarsh Kumar	1910102	B	75
3	Amit Kumar	1910103	B	75
4	Anshu Kumar	1910104	B	75
5	Arjun Kumar	1910105	B	75
6	Ashish Kumar	1910106	B	75
7	Ashish Kumar	1910107	B	75
8	Ashish Kumar	1910108	B	75
9	Ashish Kumar	1910109	B	75
10	Ashish Kumar	1910110	B	75



"Dissemination of Education For Knowledge, Science & Culture"  
 Yashwantrao Chavan Pratishthan  
 Shri Dadasaheb Kulkarni Shiksha Sanstha, Kolhapur

**Padmabhushan Dr. Yashwantraodada Patil Mahavidyalaya, Targaon.**  
**Vasant Avishkar 2018-19**

Date: 19/11/2018

- > Registration:-  
9:00 AM to 10:00 AM
- > Poster Arrangement:-  
10:00 AM to 10:30 AM
- > Inaugural Function:-  
10:30 AM to 11:00 AM
- > Poster Examination:  
11:00 AM to Onward
- > Lunch:  
1:00 PM to 2:30 PM
- > Result:  
4:00 PM

"Dissemination of Education For Knowledge, Science & Culture"  
 Yashwantrao Chavan Pratishthan  
 Shri Dadasaheb Kulkarni Shiksha Sanstha, Kolhapur

**Padmabhushan Dr. Yashwantraodada Patil Mahavidyalaya,**  
**Targaon.**  
**Vasant Avishkar 2018-19**

- > Registration Committee:  
1. Prof. V. D. Kulkarni  
2. Prof. G. H. Ghoshale  
3. Prof. V. T. Kulkarni
- > Inaugural Function Committee:  
1. Dr. V. V. Dadasaheb  
2. Prof. (Dr.) V. D. Dadasaheb  
3. Prof. (Dr.) N. A. Kulkarni
- > Result Analysis Committee:  
1. Prof. P. V. Dadasaheb  
2. Prof. S. D. Kulkarni
- > Lunch:  
1. Dr. R. T. Kulkarni  
2. Prof. R. S. Kulkarni  
3. Prof. V. T. Kulkarni
- > Standing Committee:  
1. Prof. Dr. R. K. Kulkarni  
2. Prof. R. S. Dadasaheb  
3. Dr. S. K. Kulkarni  
4. Dr. V. V. Dadasaheb  
5. Prof. (Dr.) N. D. Dadasaheb  
6. Prof. (Dr.) N. A. Kulkarni

(Dr. R. S. Kulkarni, J)

**Dr. Ajay N. Ambhore**  
(Coordinator)

**Prin. Dr. Milind S. Hujare**  
**Principal**  
Padmabhushan Dr. Yashwantraodada Patil  
Mahavidyalaya, Targaon (Sangli).





"ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार" - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

**Shri Swami Vivekanand Shikshanan Sansths Kolhapur**

**PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON DIST – SANGLI**  
(Affiliated to Shivaji University, Kolhapur)

**Research Committee**

**"VASANT AVISHKAR" 2017-18**



**Report  
2017-18**

## **“Vasant Avishkar”**

➤ <b>Event</b>	<b>“Vasant Avishkar”</b>
➤ <b>Date</b>	<b>21<sup>st</sup> Dec. 2017</b>
➤ <b>Organizer</b>	<b>Research Committee</b>
➤ <b>Venue</b>	<b>PDVP Mahavidyalaya, Tasgaon</b>

## **“Vasant Avishkar”**

Like the previous year, research committee organize “Vasant Avishkar” research computation as a strategy to participate in district level “Avishkar” research computation for win maximum prizes.

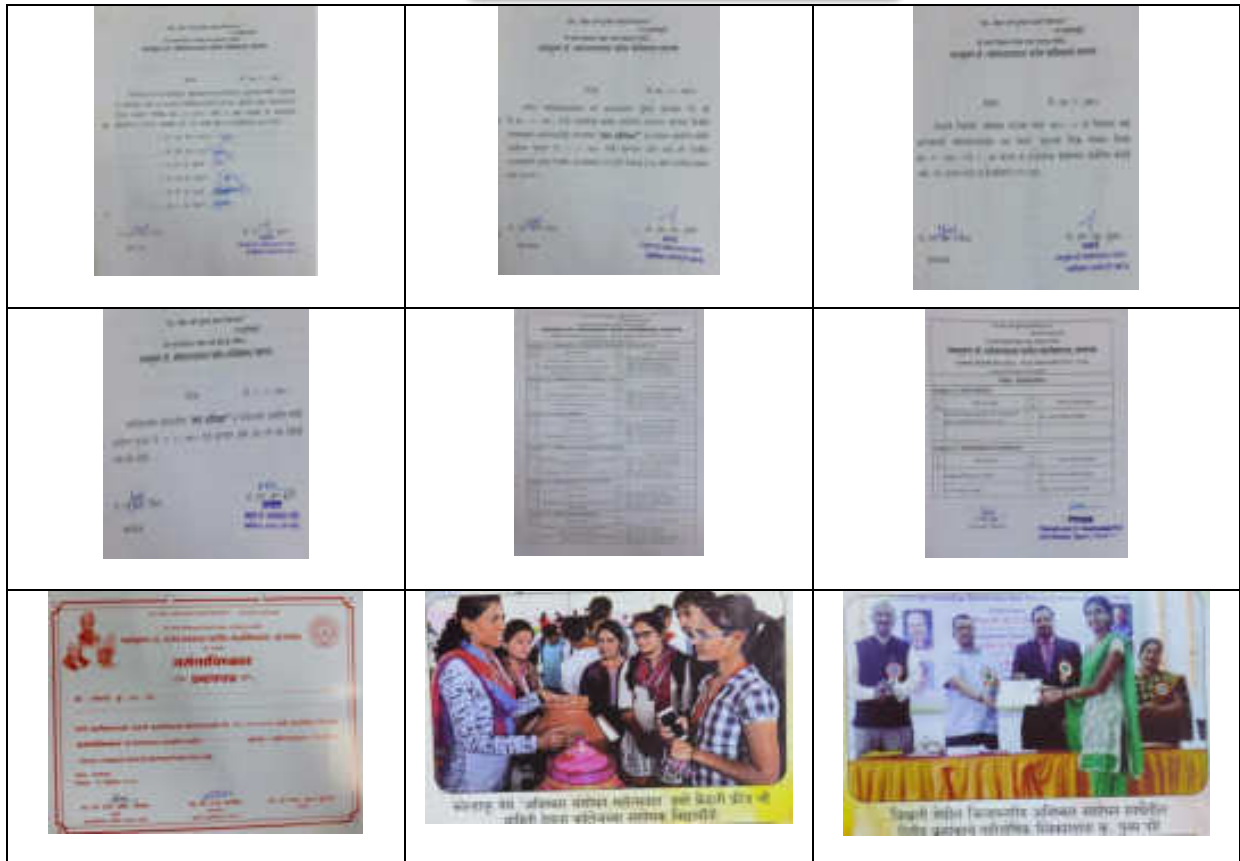
For that purpose research committee invite the research proposal from all departments. For six research categories, total 67 research posters are participated in this event from all departments. All these posters are examined by the college examiner team in first round. In this round total 24 research posters are selected by the committee and send them in the next round.

In second round experts from the other college are appointed to examination of the posters. Students selected for the first round again present their presentation there research idea in front of the expert of second round. In second round, experts select total 12 research posters (two from each category). All these selected research posters are approved to participate in district level “Avishkar” research computation organized by Shivaji University held at Deshbhakt Anadrao Balwantrao Naik Arts & Science College, Chikhali.



We are happy to write that one students of our college, Miss. Poonam Pore dot second prize in district level and selected for university level “Avishkar” research computation.

## Photo Gallery



**Dr. Ajay N. Ambhore**

**Prin. Dr. Milind S. Hujare**  
**Principal**  
Padmabhushan Dr. Vasankarode Patil  
Mahavidyalaya, Tarapur (Sangli).



"ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार" - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

**Shri Swami Vivekanand Shikshan Sansths Kolhapur**

**PADMABHUSHAN DR. VASANTRAODADA PATIL**

**MAHAVIDYALAYA, TASGAON DIST – SANGLI**

(Affiliated to Shivaji University, Kolhapur)

**Research Committee**

**“VASANT AVISHKAR” 2016-17**



**Report  
2016-17**



## ***“Vasant Avishkar”***

➤ <b>Event</b>	<b>“Vasant Avishkar” 2016-17</b>
➤ <b>Date</b>	<b>16<sup>st</sup> Oct. 2016</b>
➤ <b>Organizer</b>	<b>Research Committee</b>
➤ <b>Venue</b>	<b>PDVP Mahavidyalaya, Tasagaon.</b>

## **“Vasant Avishkar” 2016-17**

On occasion of Birth Centenary year of late Padmabhushan Dr. Vasantodada Patil, our college decided to start an activity to increase the research attitude in the rural area student and provided a platform to display their research imagination in front of all. on that basis “Vasant Avishkar” activity was created by the college research committee. The main objectives of this activity are to invite the research proposal from the entire department in specific subject and display that in this research program. All these research proposals are evaluated from college committee and then from the expert from other colleges. The best research proposals are then sanctioned to participate in district level “Avishkar: research computation organized by Shivaji University, Kolhapur.




Thus, in educational year 2016-17 in the guidance of Principal Dr. R. R.Kumbhar sir, college research committee organize the “Vasant Avishkar” research computation on 21<sup>st</sup> Oct. 2016 and invite the research proposal from all departments. Near about 108 research posters are participate in this event. all this poster are examined by college expert committee and selected posters are forward to the next round. In the next round examiners from the other colleges,

Dr. P. B. Kale, Dr. V. D. Suryawanshi, SMDBS College, Miraj, evaluate all the posters and select the best one which was approve to participate in

district level “Avishkar” research computation organize by Shivaji University, Kolhapur.

In district level, total 12 research posters was presented in six categories. From which, Mrs. Manisha Kishor Gujar (B.Sc. III, Stat.), and Mrs. Komal Maruti Chavan (B.Sc. III, Chem.) got the first prize and selected for the university level “Avishkar” research computation.

## Photo Gallery

																															
	<p><b>A. Humanities, Languages, Fine Arts, Education etc.</b></p> <p><b>अ. मानवशास्त्र, भाषा, अर्थशास्त्र, शिक्षण इत्यादी.</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sr.No.</th> <th>Title of the Poster</th> <th>Name of Student</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Statistical Analysis of Impact of Driving Vehicles on Health of Drivers</td> <td>Jadhav Umesh S. Nadaf Aslam G.</td> </tr> <tr> <td>2</td> <td>शारीरिक व चिकित्से परिसरामात लोकप्रचारातील कर्तवीर्य संश्लेषण व अर्थशास्त्र</td> <td>Patil Pooja Bahaso Jadhav Sonali Sanjay</td> </tr> <tr> <td>3</td> <td>Statistical Analysis of Health of New Born Babies &amp; Mother Delivery type</td> <td>Jangale Vaishali N. Waghmare Sweta R.</td> </tr> <tr> <td>4</td> <td>कच्चे पक्के पत्राचारामात शारीरिक व चिकित्से परिसरामात अर्थशास्त्र</td> <td>Sarde Vinata Vijay Sahuokbe Priyanka J.</td> </tr> </tbody> </table>	Sr.No.	Title of the Poster	Name of Student	1	Statistical Analysis of Impact of Driving Vehicles on Health of Drivers	Jadhav Umesh S. Nadaf Aslam G.	2	शारीरिक व चिकित्से परिसरामात लोकप्रचारातील कर्तवीर्य संश्लेषण व अर्थशास्त्र	Patil Pooja Bahaso Jadhav Sonali Sanjay	3	Statistical Analysis of Health of New Born Babies & Mother Delivery type	Jangale Vaishali N. Waghmare Sweta R.	4	कच्चे पक्के पत्राचारामात शारीरिक व चिकित्से परिसरामात अर्थशास्त्र	Sarde Vinata Vijay Sahuokbe Priyanka J.															
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**C. Pure Science****क. मूलभूत विज्ञान**

Sr.No.	Title of the Poster	Name of Student
1	Preparation of Rayon Thread from Filter paper	Hasbe Suraj A. Harale Ramchandra Pralhad
2	Use of Ornamental Plant leaves as acid-base indicator	Patil Komal S. Patil Hemlata B.
3	Carbon Sequestration in the Standing trees at P.D.V.P. Campus	Mane Nikita S. Patil Pratibha A.
4	Analysis of Coconut Water	Petkar Shridhar Someshwar Sadakale Tushar Jagannath

**D. Agriculture and Animal Husbandry****ड. शेती आणि पशुसंवर्धन**

Sr.No.	Title of the Poster	Name of Student
1	Effect of Plant Extract on germination of Brassica Seeds	Salunkhe Ashwini S. Patil Yogini R.
2	Flowers Life with Food and Water	Pawar Nikita K. Nalawade Anuradha M.
3	Statistical Analysis of Sugarcane Production	Jadhav Resham D. Babar Priya B.
4	Konkan-Marathwada Joint - River Plan...	Jagtap Dipali G. Patil Rutuja B.

**E. Engineering and Technology****ई. अभियांत्रिकी व तंत्रज्ञान**

Sr.No.	Title of the Poster	Name of Student
1	Synthesis of Nano Material by Auto combustion method	Bhosale Abhijit Vishnu Edake Akshay Ashok
2	Best from Waste	Shinde Madhuri A. Shinde Mayawati Sambhaji
3	Generation of Electricity with the help of Ar. principle	Mali Akshay Bhaskar Pandit Abhijeet Udaykumar
4	Use of Renewable Resource, Solar Energy	Korade Akshay A. Yadav Gajanan S.

**F. Medicine and Pharmacy****फ. वैद्यक व औषधशास्त्र**

Sr.No.	Title of the Poster	Name of Student
1	Analysis of iron content in vegetable and spices.	Chavan Komal Maruti Chavan Prajakta Mahudev
2	Analysis of Honey	Mali Rupali P. Mali Purnima M.

  
**Dr. Ajay N. Ambhore**

**(Coordinator)**

  
**Prin. Dr. Milind S. Hujare**  
**(Principal)**  
Padmabhushan Dr. Vasantkrishna Patil  
Mahavidyalaya, Tasgaon (Sangli).

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Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 04/07/2020

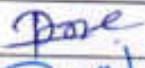

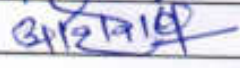
**College Research Committee  
(2020-21)**


**Notice**

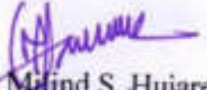
All members of research committee are here by informed that there meeting is arranged at 09/07/2020 on 11:00 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Planning for "VasantAvishkar" research computation
4. Planning Internal research grants
5. Any other relevant issues made by the IQAC members

Sr. No.	Members	Notice received
1	Dr. B. T. Kanse	
2	Dr. A. G. Sonawale	
3	Dr. A. S. Wagh	

  
Dr. Ajay N. Ambhore  
Chairman  
Research Committee

  
(Dr. Malind S. Hujare)  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)



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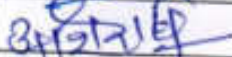
Date: 12/11/2020


**College Research Committee**  
**(2020-21)**  
**Notice**

All members of research committee are here by informed that there meeting is arranged at 18/11/2020 on 11:30 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Confirmation of minutes of earlier meeting
2. Approval of internal research grant

Sr. No.	Members	Notice received
1	Dr. B. T. Kanse	
2	Dr. A. G. Sonawale	
3	Dr. A. S. Wagh	

  
Dr. Ajay N. Ambhore  
Chairman  
Research Committee

  
(Dr. Milind S. Hujare)  
Principal  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)

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Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 02/09/2021




**Research and Innovation Committee  
(2020-21)**


**Notice**


All members of research committee are here by informed that there meeting is arranged on **Friday, 18/11/2020 at 11:30 am** in principles office for discussion about following agenda. All should attend the same and cooperate.

**Agenda:**

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Planning for "VasantAvishkar" research computation
4. Planning Internal Research promotion Scheme
6. Planing for new Research Sensitization Scheme of Shivaji University, Kolhapur
5. Any other relevant issues made by the IQAC members

Sr. No.	Members	Notice received
1	Dr. P. B. Teli	
2	Dr. S. K. Shinde	
3	Dr. H. D. Nadaf	

  
Dr. Ajay N. Ambhore  
Chairman  
Research Committee

  
(Dr. Milind S. Hujare)  
Principal  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)



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Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 10/07/2019

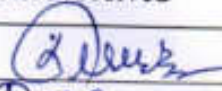

**College Research Committee  
(2019-20)**


**Notice**

All members of research committee are here by informed that there meeting is arranged at 15/07/2019 on 11:30 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Planning for "VasantAvishkar" research computation
4. Planning Internal research grants
5. Any other relevant issues made by the IQAC members

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
2	Dr. B. T. Kanse	
3	Dr. T. K. Badame	

  
Dr. Ajay N. Ambhore  
Chairman  
Research Committee

  
(Dr. Milind S. Hujare)  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)

"Dissemination of Education through Knowledge, Science and culture"  
-ShikashanmaharshiDrBapujisalunkhe

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416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 04/11/2019

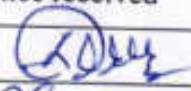
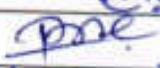

**College Research Committee  
(2019-20)**


**Notice**


All members of research committee are here by informed that there meeting is arranged at 08/11/2020 on 11:00 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Conformation of minutes of earlier meeting
2. Approval of internal research grant

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
2	Dr. B. T. Kanse	
3	Dr. A. G. Sonawale	

  
Dr. Ajay N. Ambhore  
Chairman  
Research Committee

  
(Dr. Mahind S. Hujare)  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)



"Dissemination of Education through Knowledge, Science and culture"  
-ShikashanmaharshiDrBapujisalunkhe

Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 12/07/2018

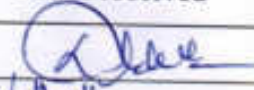



**College Research Committee  
(2018-19)**


**Notice**


All members of research committee are here by informed that there meeting is arranged at 16/07/2018 on 11:00 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Planning for "VasantAvishkar" research computation
4. Planning Internal research grants
5. Any other relevant issues made by the IQAC members

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
2	Dr. S. R. Jadhav	
3	Dr. B. T. Kanse	
4	Dr. T. K. Badame	

  
Dr. Ajay N. Ambhore  
Chairman  
Research Committee

  
(Dr. R. B. Kumbhar)  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)

"Dissemination of Education through Knowledge, Science and culture"  
-ShikashanmaharshiDrBapujisalunkhe

Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 06/11/2018

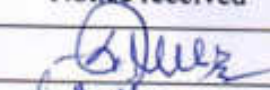

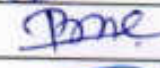

**College Research Committee  
(2018-19)**


**Notice**


All members of research committee are here by informed that there meeting is arranged at 12/11/2020 on 11:30 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Conformation of minutes of earlier meeting
2. Approval of internal research grant

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
1	Dr. S. R. Jadhav	
2	Dr. B. T. Kanse	
3	Dr. T. K. Badame	

  
Dr. Ajay N. Ambhore  
Chairman  
Research Committee

  
(Dr. R. P. Kumbhar)  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)



"Dissemination of Education through Knowledge, Science and culture"  
-ShikashanmaharshiDrBapujisalunkhe

Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya,**  
**Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 08/07/2017




**College Research Committee**  
**(2017-18)**

**Notice**


All members of research committee are here by informed that there meeting is arranged at 10/07/2017 on 11:00 am in principles office for discussion about following agenda. All should attend the same and cooperate.

**Agenda:**

1. Confirmation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Strategy revision for "VasantAvishkar" research computation
4. To send proposal for conference/workshop
5. Any other relevant issues made by the IQAC committee

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
2	Dr. B. T. Kanse	
3	Dr. T. K. Badame	
4	Mr. M. D. Patil	

  
Dr. S. R. Jadhav  
Chairman  
Research Committee

  
(Dr. R. R. Kumbhar)  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)

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Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 30/11/2017

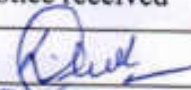



**College Research Committee  
(2017-18)**

**Notice**


All members of research committee are here by informed that there meeting is arranged at 04/12/2017 on 11:30 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Conformation of minutes of earlier meeting
2. Approval of internal research grant
3. Approval for VasantAvishkar research computation
4. Approval for IPR seminar
5. Approval for sending students for district level "Avishkar" research computation

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
2	Dr. B. T. Kanse	
3	Dr. T. K. Badame	
4	Dr. A. N. Ambhore	

  
Dr. S. R. Jadhav  
Chairman  
Research Committee

  
(Dr. R. R. Kumbhar)  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)



"Dissemination of Education through Knowledge, Science and culture"  
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Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasanttraodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

Date: 09/07/2016

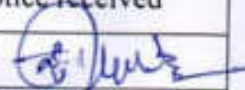
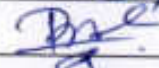


**College Research Committee  
(2016-17)**

**Notice**

All members of research committee are here by informed that there meeting is arranged at 13/07/2016 on 10:30 am in principles office for discussion about following agenda. All should attend the same and cooperate.

**Agenda:**

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Strategy revision for VasantAvishkar research computation
4. To send students for district level "Avishkar" research computation
5. To send proposal for conference/workshop
6. Any other relevant issues made by the IQAC committee

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
2	Dr. B. T. Kanse	
3	Dr. S S. Patil	
4	Dr. T. K. Badame	



Dr. C. G. Patil  
Chairman  
Research Committee

  
(Dr. R. R. Kumbhar)  
For **Principal**  
Padmabhushan Dr. Vasanttraodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)

"Dissemination of Education through Knowledge, Science and culture"  
-ShikashanmaharshiDrBapujisalunkhe

Shri Swami VivekanandShikashanSanstha Kolhapur's  
**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Dist. Sangli**  
416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

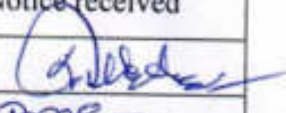
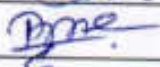


Date: 07/11/2016

**College Research Committee**  
**(2016-17)**  
**Notice**

All members of research committee are here by informed that there meeting is arranged at 10/11/2016 on 10:30 am in principles office for discussion about following agenda. All should attend the same and cooperate.

Agenda:

1. Conformation of minutes of earlier meeting
2. Strategy for "VasantAvishkar" research computation
3. To plan for the preparation of district level "Avishkar" computation
5. To plan for the arrangement of International conference

Sr. No.	Members	Notice received
1	Dr. V. Y. Pawar	
2	Dr. B. T. Kanse	
3	Dr. S. S. Patil	
4	Dr. T. K. Badame	



Dr. C. G. Patil  
Chairman  
Research Committee



Principal  
(Dr. R. R. Kumbhar)  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)





“Dissemination of Education through Knowledge, Science and culture”  
-Shikashanmaharshi Dr Bapuji salunkhe

**Shri Swami Vivekanand Shikashan Sanstha Kolhapur's**

**Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, Dist. Sangli**

416312 (Maharashtra) Phon No.: (02346 - 250665)  
(Affiliated to Shivaji University, Kolhapur)

**COLLEGE RESEARCH AND INNOVATION COMMITTEE**



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## Minutes of the Meeting of 2016-17 held on 13<sup>th</sup> July 2016

**Venue:** Principals cabin

**Date:** 13/07/2016

**Time:** 10:30 - 11:30

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Strategy revision for “Vasant Avishkar” research computation
4. To send students for district level “Avishkar” research computation
5. Any other relevant issues made by the IQAC committee

### Members Present:

1. Dr. R. R. Kumbhar, Principal
2. Dr. C. G. Patil, Chairman, College Research Committee
3. Dr. V. Y. Pawar, Member
4. Dr. S. S. Patil, Member
4. Dr. B. T. Kanse, Member
5. Dr. T. K. Badame, member

Chairman Dr. C. G. Patil welcomes all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman Dr. C. G. Patil reads the minutes and action taken report on it of earlier meeting.

**Resolution:** All members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Planning of research activities of the college and departments.

**Discussion:** Research committee discusses this agenda and concludes to increase the research publication as well as participation in conference and workshop to increase the research activity by all departments.

**Resolution:** all members gave conformation to increase the research activity

**Agenda 3:** Strategy revision for “Vasant Avishkar” research computation.

**Discussion:** Research committee discusses this agenda and concludes to increase the research project of students from all departments to participate in “Vasant Avishkar” research computation.

**Resolution:** All members gave conformation to increase the research projects of students.

**Agenda 4:** To send students for district level “Avishkar” research computation.


**Discussion:** Research committee decided to send students for district level “Avishkar” research computation.

**Resolution:** All members gave conformation and approved to send the proposal.

**Agenda 5:** Any other relevant issues made by the IQAC committee.

**Discussion:** Research committee discusses the issues made by IQAC committee to conduct various activities under research committee.

**Resolution:** All members gave conformation and approved to conduct different activities by all departments under research committee to increase the research view in students.



( Dr. R. R. Kumbhar )  
**Principal**  
Padmabhushan Dr. Vasantraodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)



## Minutes of the Meeting of 2016-17 held on 10<sup>th</sup> November 2016

**Venue:** Principals cabin

**Date:** 10/11/2016

**Time:** 10:30 - 11:30

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Strategy for “Vasant Avishkar” research computation
3. To plan for the preparation of district level “Avishkar” computation

### Members Present:

1. Dr. R. R. Kumbhar, Principal
2. Dr. C. G. Patil, Chairman, College Research Committee
3. Dr. V. Y. Pawar, Member
4. Dr. S. S. Patil, Member
4. Dr. B. T. Kanse, Member
5. Dr. T. K. Badame, member

Chairman Dr. C. G. Patil welcomes all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman Dr. C. G. Patil reads the minutes and action taken report on it of earlier meeting.

**Resolution:** All members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Strategy for “Vasant Avishkar” research computation.

**Discussion:** Research committee discusses this agenda to make a plan for successful arrangement of “Vasant Avishkar” research computation.

**Resolution:** All members gave conformation to for the committee made for the arrangements of “Vasant Avishkar” program.

**Agenda 3:** To plan for the preparation of district level “Avishkar” computation.

**Discussion:** Research committee discusses this agenda and decide plane for the preparation of students research projects for district level “Avishkar” computation.

**Resolution:** All members gave conformation of the formed committees for “Avishkar”.

## Minutes of the Meeting of 2017-18 held on 10<sup>th</sup> July 2017

**Venue:** Principals cabin

**Date:** 10/07/2017

**Time:** 11:00 - 12:00

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Strategy revision for “Vasant Avishkar” research computation
4. To send proposal for conference/workshop
5. Any other relevant issues made by the IQAC committee

### Members Present:

1. Dr. R. R. Kumbhar, Principal
2. Dr. S. R. Jadhav, Chairman, College Research Committee
3. Dr. V. Y. Pawar, Member
4. Dr. B. T. Kanse, Member
5. Dr. T. K. Badame, member
6. Mr. M. D. Patil

Chairman Dr. S. R. Jadhav welcomes all members and started discussions on agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman Dr. S. R. Jadhav reads the minutes and action taken report on it of earlier meeting.

**Resolution:** All members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Planning of research activities of the college and departments.

**Discussion:** Research committee discusses this agenda and concludes to increase the research publication as well as participation in conference and workshop to increase the research activity by all departments.

**Resolution:** All members gave conformation to increase the research activity



**Agenda 3:** Strategy revision for “Vasant Avishkar” research computation.

**Discussion:** Research committee discusses this agenda and concludes to increase the research project of students from all departments to participate in “Vasant Avishkar” research computation.

**Resolution:** All members gave conformation to increase the research projects of students.

**Agenda 4:** To send proposal for conference/workshop.


**Discussion:** Research committee decided to send proposal for conference/workshop.

**Resolution:** All members gave conformation and approved to send the proposal.

**Agenda 5:** Any other relevant issues made by the IQAC committee.

**Discussion:** Research committee discusses the issues made by IQAC committee to conduct various activities under research committee.

**Resolution:** All members gave conformation and approved to conduct different activities by all departments under research committee to increase the research view in students.



( Dr. R. R. Kumbhar )  
**Principal**  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)

## Minutes of the Meeting of 2017-18 held on 4<sup>th</sup> December 2017

**Venue:** Principals cabin

**Date:** 04/12/2017

**Time:** 11:30 - 12:30

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Strategy for “Vasant Avishkar” research computation
3. To send students for district level “Avishkar” research computation.

### Members Present:

1. Dr. R. R. Kumbhar, Principal
2. Dr. S. R. Jadhav, Chairman, College Research Committee
3. Dr. V. Y. Pawar, Member
4. Dr. B. T. Kanse, Member
5. Dr. T. K. Badame, member
6. Dr. A. N. Ambhore, Member

Chairman Dr. S. R. Jadhav welcomes all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman Dr. S. R. Jadhav reads the minutes and action taken report on it of earlier meeting.

**Resolution:** all members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Strategy for “Vasant Avishkar” research computation.


**Discussion:** Research committee discusses this agenda to make a plan for successful arrangement of “Vasant Avishkar” research computation.

**Resolution:** all members gave conformation to for the committee made for the arrangement of “Vasant Avishkar” program.

**Agenda 3:** To send students for district level “Avishkar” research computation.

**Discussion: Discussion:** Research committee discuss to send students for district level “Avishkar” research computation and decided that the students which gave the numbers in “Vasant avishkar” research computation are send for “Avishkar” computation.

**Resolution:** All members gave conformation to send students to “Avishkar” computation.



( Dr. R. R. Kumbhar )  
**Principal**  
Padmabhushan Dr. Vasandraodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)



## Minutes of the Meeting of 2018-19 held on 16<sup>th</sup> July 2018

**Venue:** Principals cabin

**Date:** 16/07/2018

**Time:** 11:00 - 12:00

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Strategy revision for Vasant Avishkar research computation
4. To send proposal for district level “Avishkar” research computation.
5. To send proposal for conference/workshop
6. Any other relevant issues made by the IQAC committee

### Members Present:

1. Dr. R. R. Kumbhar, Principal
2. Dr. A. N. Ambhore, Chairman, College Research Committee
3. Dr. V. Y. Pawar, Member
4. Dr. S. R. Jadhav, Member
5. Dr. B. T. Kanse, Member
6. Dr. T. K. Badame, member

Chairman, Dr. A. N. Ambhore welcomes all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman, Dr. A. N. Ambhore reads the minutes and action taken report on it of earlier meeting.

**Resolution:** all members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Planning of research activities of the college and departments.

**Discussion:** Research committee discusses this agenda and concludes to increase the research publication as well as participation in conference and workshop to increase the research activity by all departments.

**Resolution:** all members gave conformation to increase the research activity

**Agenda 3:** Strategy revision for “Vasant Avishkar” research computation.

**Discussion:** Research committee discusses this agenda and concludes to increase the research project of students from all departments to participate in “Vasant Avishkar” research computation.

**Resolution:** All members gave conformation to increase the research projects of students.

**Agenda 4:** To send proposal for district level “Avishkar” research computation.

**Discussion:** Research committee decided to send proposal to university for conducting district level “Avishkar” research computation in our college.

**Agenda 5:** To send proposal for conference/workshop.


**Discussion:** Research committee decided to send proposal for conference/workshop.

**Resolution:** All members gave conformation and approved to send the proposal.

**Agenda 6:** Any other relevant issues made by the IQAC committee.

**Discussion:** Research committee discusses the issues made by IQAC committee to conduct various activities under research committee.

**Resolution:** All members gave conformation and approved to conduct different activities by all departments under research committee to increase the research view in students.



( Dr. R. R. Kumbhar )  
**Principal**  
Padmabhushan Dr. Vasantraodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)

## Minutes of the Meeting of 2018-19 held on 12<sup>th</sup> November 2018

**Venue:** Principals cabin

**Date:** 27/09/2011

**Time:** 11:30 - 12:30

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Strategy for “Vasant Avishkar” research computation
3. To plan for the arrangement of district level “Avishkar” computation.
4. To plan for the arrangement of multidisciplinary International conference.

### Members Present:

1. Dr. R. R. Kumbhar, Principal
2. Dr. A. N. Ambhore, Chairman, College Research Committee
3. Dr. V. Y. Pawar, Member
3. Dr. S. R. Jadhav, Member
4. Dr. B. T. Kanse, Member
5. Dr. T. K. Badame, member

Chairman, Dr. A. N. Ambhore welcome all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman, Dr. A. N. Ambhore reads the minutes and action taken report on it of earlier meeting.

**Resolution:** all members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Strategy for “Vasant Avishkar” research computation.

**Discussion:** Research committee discusses this agenda to make a plan for successful arrangement of “Vasant Avishkar” research computation.

**Resolution:** all members gave conformation to for the committee made for the arrangement of “Vasant Avishkar” program.

**Agenda 3:** To plan for the arrangement of district level “Avishkar” computation.




**Discussion:** Research committee discusses this agenda and made different committees for the successful arrangement of district level “Avishkar” computation.

**Resolution:** All members gave conformation of the formed committees for “Avishkar”.

**Agenda 4:** To plan for the arrangement of multidisciplinary International conference.

**Discussion:** Research committee discusses this agenda and made different committees for the successful arrangement conference.

**Resolution:** All members gave conformation of the formed committees for conference.



( Dr. R. R. Kumbhar )  
**Principal**  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, (Sangli)

## Minutes of the Meeting of 2019-20 held on 15<sup>th</sup> July 2019

**Venue:** Principals cabin

**Date:** 15/07/2019

**Time:** 11:30 - 12:30

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Planning for Vasant Avishkar research computation
4. Strategy for district level “Avishkar” research computation
5. Planning Internal research grants
6. Make a proposal for IPR seminar
7. Any other relevant issues made by the IQAC members

### Members Present:

1. Dr. Milind S. Hujare, Principal
2. Dr. A. N. Ambhore, Chairman, College Research Innovation committee
3. Dr. V. Y. Pawar, Member
4. Dr. B. T. Kanse, Member
5. Dr. T. K. Badame, member

Chairman, Dr. A. N. Ambhore welcome all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman, Dr. A. N. Ambhore reads the minutes and action taken report on it of earlier meeting.

**Resolution:** all members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Planning of research activities of the college and departments.

**Discussion:** Research committee discusses this agenda and concludes to increase the research publication as well as participation in conference and workshop to increase the research activity by all departments.

**Resolution:** all members gave conformation to increase the research activity

**Agenda 3:** Strategy revision for “Vasant Avishkar” research computation.

**Discussion:** Research committee discusses this agenda and concludes to increase the research project of students from all departments to participate in “Vasant Avishkar” research computation.

**Resolution:** All members gave conformation to increase the research projects of students.

**Agenda 4:** Strategy for district level “Avishkar” research computation.

**Discussion:** Research committee decided to make a plan for the departments for the preparation of projects from students to participate in district level “Avishkar” computation.

**Resolution:** All members gave conformation to participate in district level “Avishkar” computation.

**Agenda 5:** Planning internal research grants

**Discussion:** Research committee decided to develop a “Research Promotion Scheme” for increasing and improving research view in teachers and students by generating internal research grant of Rs. 5000/- per project.

**Resolution:** All members gave conformation and approved for Research Promotion Scheme.

**Agenda 6:** Make a proposal for IPR seminar.


**Discussion:** Research committee discusses to conduct a seminar on IPR.

**Resolution:** All members gave conformation for making the proposal of IPR.

**Agenda 7:** Any other relevant issues made by the IQAC committee.

**Discussion:** Research committee discusses the issues made by IQAC committee to conduct various activities under research committee.

**Resolution:** All members gave conformation and approved to conduct different activities by all departments under research committee to increase the research view in students.



Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon (Sangli).



## Minutes of the Meeting of 2019-20 held on 8<sup>th</sup> November 2019

**Venue:** Principals cabin

**Date:** 08/11/2019

**Time:** 11:00 - 12:00

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Approval of internal research grant
3. Approval for “Vasant Avishkar” research computation
4. Approval for IPR seminar
5. Approval for sending students for district level “Avishkar” research computation

### Members Present:

1. Dr. Milind S. Hujare, Principal
2. Dr. A. N. Ambhore, Chairman, College Research Innovation committee
3. Dr. V. Y. Pawar, Member
4. Dr. B. T. Kanse, Member
5. Dr. A. G. Sonawale, member

Chairman, Dr. A. N. Ambhore welcome all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman, Dr. A. N. Ambhore reads the minutes and action taken report on it of earlier meeting.

**Resolution:** all members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Approval of internal research grant.

**Discussion:** Research committee discusses this agenda and approves to release grant for the research promotion scheme.

**Resolution:** all members gave conformation to release the reant for research promotion scheme.

**Agenda 3:** Approval for Vasant Avishkar research computation.

**Discussion:** Research committee discusses this agenda and made different committees for the successful arrangement “Vasant Avishkar” computation.

**Resolution:** All members gave conformation of the formed committees for “Vasant Avishkar”.

**Agenda 4:** Approval for IPR seminar.


**Discussion:** Research committee discusses this agenda to conduct the IPR seminar by chemistry department.

**Resolution:** All members gave conformation and approve for conducting IPR seminar.

**Agenda 5:** Approval for sending students for district level “Avishkar” research computation.

**Discussion: Discussion:** Research committee discuss to send students for district level “Avishkar” research computation and decided that the students which gave the numbers in “Vasant avishkar” research computation are send for “Avishkar” computation.

**Resolution:** All members gave conformation to send students to “Avishkar” computation.



Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon (Sangli).

## Minutes of the Meeting of 2020-21 held on 9<sup>th</sup> July 2020

**Venue:** Principals cabin

**Date:** 09/07/2020

**Time:** 11:00 - 12:00

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Planning of research activities of the college and departments
3. Planning for “Vasant Avishkar” research computation
4. Planning Internal research grants
5. Any other relevant issues made by the IQAC members

### Members Present:

1. Dr. Milind S. Hujare, Principal
2. Dr. A. N. Ambhore, Chairman, College Research Innovation committee
3. Dr. B. T. Kanse, Member
4. Dr. A. G. Sonawale, Member
5. Dr. A. S. Wagh, member

Chairman, Dr. A. N. Ambhore welcome all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman, Dr. A. N. Ambhore reads the minutes and action taken report on it of earlier meeting.

**Resolution:** all members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Planning of research activities of the college and departments.

**Discussion:** Research committee discusses this agenda and concludes to increase the research publication as well as participation in conference and workshop to increase the research activity by all departments.

**Resolution:** all members gave conformation to increase the research activity

**Agenda 3:** Strategy revision for “Vasant Avishkar” research computation.



**Discussion:** Research committee discusses this agenda and concludes to increase the research project of students from all departments to participate in “Vasant Avishkar” research computation.

**Resolution:** All members gave conformation to increase the research projects of students.

**Agenda 4:** Planning internal research grants


**Discussion:** Research committee decided to develop a “Research Promotion Scheme” for increasing and improving research view in teachers and students by generating internal research grant of Rs. 5000/- per project.

**Resolution:** All members gave conformation and approved for Research Promotion Scheme.

**Agenda 5:** Any other relevant issues made by the IQAC committee.

**Discussion:** Research committee discusses the issues made by IQAC committee to conduct various activities under research committee.

**Resolution:** All members gave conformation and approved to conduct different activities by all departments under research committee to increase the research view in students.



Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon (Sangli).

## Minutes of the Meeting of 2020-21 held on 18<sup>th</sup> November 2020

**Venue:** Principals cabin

**Date:** 18/11/2020

**Time:** 11:30 - 12:30

### Agenda of the Meeting:

1. Conformation of minutes of earlier meeting
2. Approval of internal research grant
3. Approval for “Vasant Avishkar” research computation

### Members Present:

1. Dr. Milind S. Hujare, Principal
2. Dr. A. N. Ambhore, Chairman, College Research Innovation committee
3. Dr. B. T. Kanse, Member
4. Dr. A. G. Sonavale, Member
5. Dr. A. S. Wagh, member

Chairman, Dr. A. N. Ambhore welcome all members and started discussions on Agenda points.

**Agenda 1:** Conformation of minutes of earlier meeting

**Discussion:** Chairman, Dr. A. N. Ambhore reads the minutes and action taken report on it of earlier meeting.

**Resolution:** all members gave conformation to minutes and expressed satisfaction on action taken report.

**Agenda 2:** Approval of internal research grant.

**Discussion:** Research committee discusses this agenda and approves to release grant for the research promotion scheme.

**Resolution:** all members gave conformation to release the reant for research promotion scheme.

**Agenda 3:** Approval for “Vasant Avishkar” research computation.

**Discussion:** Research committee discusses this agenda and made different committees for the successful arrangement “Vasant Avishkar” computation.

**Resolution:** All members gave conformation of the formed committees for “Vasant Avishkar”.



“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार” - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTODADA PATIL MAHAVIDYALAYA**

**TASGAON**, Dist. Sangli, Pin- 416 312 ☎ - STD : 02346-250665, 250575 FAX : 250575

● **Affiliated to Shivaji University, Kolhapur** ●

E-mail : san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

Established Year : June 1962 P. B. No. : 14 Jr. College No. : J22-10-001 Sr. College Code No. :  $\frac{SIACI4}{X}$  Jr.: C-8



NAAC Reaccredited 'B' (2.76)

ISO Certified : 9001:2015

**Shikshanmaharshi  
Dr. Babuji Salunkhe**  
B.A., B.T., D.Lit.  
FOUNDER

**Hon. Chandrakant (Dada) Patil**  
PRESIDENT  
B.Com.  
Ex- Minister of Revenue, Public Works  
Govt. of Maharashtra

**Prin. Abhaykumar Salunkhe**  
M.A.  
CHAIRMAN

**Prin. Mrs. Shubhangi Gawade**  
M.Sc. B.Ed.  
SECRETARY

**Dr. Milind S. Hujare**  
M.Sc., Ph.D.  
PRINCIPAL

Ref.No. : PDVPMT /

Date :

### RESEARCH PROMOTION SCHEME 2019-20

Sr. No.	Name of PI and Students	Title of Project	Seed money Rs.
1.	Dr. AmolGowardhanSonawale. 1. Miss SutarHarshada Suresh 2. Miss MulaniReshmaLalasaheb 3. Miss Zambare Swati Mansing 4. Miss PatilRutuja Ramesh	“Grape Crop Value Chain Analysis Of Marketing System In Tasgaon Taluka.”	5000
2.	Dr. BanduJayshingKadam. 1. Miss. SupriyaRavsahabPatil. 2. Miss. Poonam BalasoPatil. 3. Mr. Vinod JalindarSawant. 4. Mr. SushantSubhashChavan. 5. Mr. Rahul MurlidharShinde.	“तासगाव तालुक्यातील वंचित घटकांच्या मानवी विकास निर्देशांकांचा अभ्यास”	5000
3.	Dr. Haji DawalsahebNadaf. 1. Mr. Ashraf ayubmujawar. 2. Miss. Pooja JayramJadhav. 3. Miss. Nikita VasudevKoli. 4. Miss. Shubhangiashok Mail. 5. Miss. NamiraInaytullaMulani.	“A Study Of Local History And Synergetic Culture In Tasgaon Taluka.”	5000

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**Principal**  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)





“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार” - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

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FOUNDER

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PRESIDENT  
B.Com.  
Ex- Minister of Revenue, Public Works  
Govt. of Maharashtra

**Prin. Abhaykumar Salunkhe**  
M.A.  
CHAIRMAN

**Prin. Mrs. Shubhangi Gawade**  
M.Sc. B.Ed.  
SECRETARY

**Dr. Milind S. Hujare**  
M.Sc., Ph.D.  
PRINCIPAL

Ref.No. : PDVPMT /

Date :

### RESEARCH PROMOTION SCHEME 2020-21

Sr. No.	Name of PI and Students	Title of Project	Seed money Rs.
1.	Dr. BanduJayshingKadam. 1. Mr. Ritual Ramesh Shinde. 2. Mr. ChandrakantDhanji Mane. 3. Mr. OmkarJanardanPatil. 4. Mr. Prashant Vasant Patil. 5. Mr. SwapnilTukaramJamdade.	“तासगाव तालुक्यातील सर्वसमावेशक ग्रामीण विकास चा अभ्यास”	5000
2.	Dr. Pratiksha Suresh Bhandare. 1. Mr. JadhavSuhashShivaji. 2. Miss BodakeSakshi Shankar 3. Miss KamblePratikshaRavsahab 4. Miss TaurShradha Kailas	“Diversity Of Avifauna In Local And Peripheral Ecosystems Of TasgaonTashil Of Sangli District, Maharashtra, India.”	5000
3.	Dr. SachinkumarKisanShinde. 1. Mr. SohebShahitJamdar. 2. Mr.RushikeshrajendraKshirsagar. 3. Mr.AudumberDuryodhanKodag. 4. Mr. Vijay KrushnaSankpal.	“Study Of Raisin Production In Tasgaon Tehsil.”	5000

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*[Handwritten signature]*  
Principal  
Padmabhushan Dr. Vasanturadada Patil  
Mahavidyalaya, Tasgaon. (Sangli)

➤ **Grants received from Government and non-governmental agencies for research projects, Fellowships in the institution during 5 yrs.**

Sr. No.	Name of the Project/ Endowments, Chairs	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator	Year of Award	Amount Sanctioned	Duration of the project	Name of the Funding Agency	Type (Government/non-Government)
*	<b>Department of Science and Technology</b>							
1	Functionalized Transition Metal catalysts for cross coupling Reactions	Miss. Patil Seema Pandurang (Dr. Kumbhar Arjun S.)	Chemistry	2020-21	21.17	3 yrs	Department of Science and Technology KIRAN DIVISION Women Scientist Scheme A (WOS A)	Govt. of India
2	Design and applications of biopolymer supported palladium catalysts for organic synthesis	Dr. Kumbhar Arjun Shankar	Chemistry	2014-15	25	3 Years	DST	Government
3	Fist Program	Principal, P. D. V. P. Mahavidyalaya, Tasgaon	Chemistry	2016	50	5 Years	Department of Science and Technology	Government
*	<b>University Grants Commission</b>							
4	Liquid Phase Organic Synthesis (LPOS) Using Supported Catalysts	Dr. Kumbhar Arjun Shankar	Chemistry	2016-17	7.46	3 Years	UGC	Government
5	The theme of Oneness for Humanity and Culture in Alan Paton's Selected Novels	Prof. A. R. Patil	English	2015-16	1.65	2 Years	UGC	Government
6	A study of performance Evaluation of Tasgaon Urban Co-operative Bank in Tasgaon Tahashil	Prof. M. D. Patil	Commerece	2012-13	1	2 Years	UGC	Government


7	N. D. Mahanoranchya Ajintha Khandkavyavar Adharit Chitrapat	Dr. Badame T. K.	Marathi	2014-15	1	2 Years	UGC	Government
*	<b>CSIR</b>							
8	CSIR Senior Research Fellow	Mr. Sachinkumar Kisan Shinde	Chemistry	1/02/2018 to 31/01/2019	3.56	1 year	CSIR	Government
9	CSIR Senior Research Fellow	Mr. Sachinkumar Kisan Shinde	Chemistry	1/2/2017 to 31/01/2018	3.56	1 year	CSIR	Government
10	CSIR Senior Research Fellow	Mr. Sachinkumar Kisan Shinde	Chemistry	1/02/2016 to 31/01/2017	3.56	1 year	CSIR	Government
*	<b>An Autonomous Institute of Govt. of Maharashtra</b>							
11	Chatrapati Shahu Maharaj National Research Fellowship (CSMNRF- 2019)	Ashutosh Arjun Jagdale	Chemistry	09-11-2019	4.78	5 yrs	Chatrapati Shahu Maharaj Research Training and Human Development Institute (SARTHI) An Autonomous Institute of Govt. of Maharashtra (CSMNRF- 2019)	Government
12	Chatrapati Shahu Maharaj National Research Fellowship (CSMNRF- 2019)	Rupesh Chandrakant Patil	Chemistry	09-11-2019	4.78	5 yrs	Chatrapati Shahu Maharaj Research Training and Human Development Institute (SARTHI) An Autonomous Institute of Govt. of Maharashtra (CSMNRF- 2019)	Government



13	Chatrapati Shahu Maharaj National Research Fellowship (CSMNRF-2019)	Ashutosh Arjun Jagdale	Chemistry	09-11-2019	4.13	5 yrs	Chatrapati Shahu Maharaj Research Training and Human Development Institute (SARTHI) An Autonomous Institute of Govt. of Maharashtra (CSMNRF-2019)	Government
14	Chatrapati Shahu Maharaj National Research Fellowship (CSMNRF-2019)	Rupesh Chandrakant Patil	Chemistry	09-11-2019	4.13	5 yrs	Chatrapati Shahu Maharaj Research Training and Human Development Institute (SARTHI) An Autonomous Institute of Govt. of Maharashtra (CSMNRF-2019)	Government
15	Mahatma Jyotiba Phule Research Fellowship-2021 (MJRF-2021)	SHASHIKANT ASHOK DAMATE	Chemistry	18th October2019	0.68	5 yrs	Mahatma Jyotiba Phule Research and Training Institute (MAHAJYOTI), Nagpur Government of Maharashtra	Government
*	<b>Shivaji University, Kolhapur (Initiation Research Scheme)</b>							
16	To Assess the Extracts of Vitis Vinifera L., Leaves On Vasculogenesis & Angiogenesis by the Chick Chlorioallantoic Membrane Assay	Dr. P. B. Teli	Zoology	2019-20	1	2 Year	Shivaji University, Kolhapur (Initiation Research Scheme)	Shivaji University, Kolhapur (Initiation Research Scheme)
17	Utilization of Bio-based material for organic transformations	Dr. Megha U. Patil	Chemistry	2018-19	0.8	3 Years	Shivaji University, Kolhapur	University
18	A clinical study of the economic and social status of single women in Tasgaon taluka	Dr. Bandu Jaysing Kadam	Economics	2018-19	0.2	6 Month	Shivaji University, Kolhapur	Government

19	A progress of organic farming in Satara district (2005-2015)	Dr, Arjun Shivaji Wagh	Geography	2018-19	0.55	2 years	Shivaji University, Kolhapur	University
*	<b>Institutional Research Promotion Scheme</b>							
20	Diversity of Avifauna in Local and Peripheral Ecosystem of Tasgaon Tahashil	Dr. Bhandare P. S.	Zoolgy	2020-21	0.05	6 months	P. D. V. P. College, Tasgaon	Institutional
21	Study of rural developent of Tasgaon Tahashil	Dr. Kadam B. J	Economics	2020-21	0.05	6 Month	P. D. V. P. College, Tasgaon	Institutional
22	Study of Human Development Indicators of deprived sections in Tasgaon taluka	Dr. Bandu J. Kadam	Economics	2019-20	0.05	1 year	P. D. V. P. College, Tasgaon	Institutaional
23	A Study of Local History and Syncretic Culture in Tasgaon Taluka	Dr. Nadaf H. D.	History	2019-20	0.05	1 year	P. D. V. P. College, Tasgaon	Institutaional
24	Grape Crop Value Chain Analysis Of marketing System In Tasgaon Taluka	Dr. Sonawale A. G.	Commerce	2019-20	0.05	1 year	P. D. V. P. College, Tasgaon	Institutaional




  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantraodada Patil  
 Mahavidyalaya, Tasgaon (Sangli).

## Total Research Grants from 2016 to 20121

Total Grant in Lacks	Funding Agency
96.17	DST
11.11	UGC
10.68	CSIR
17.82	SARTHI
0.68	MAHAJYOTI
2.55	SUK
0.25	Institutional
139.26	Total



  
Prin. Dr. Milind S. Hujare  
Principal  
Padmrabhushan Dr. Vasantroodada Patil  
Mahavidyalaya, Tasgaon (Sangli).



**Research Projects Sanction Letters 2020-21**

No.SR/WOS-A/CS-85/2018 (G)  
Government of India  
Ministry of Science & Technology  
Department of Science & Technology  
KIRAN DIVISION

Technology Bhawan  
New Mehrauli Road  
New Delhi-110016  
Dated 18.11.2020

**ORDER**

**Sub:** Financial approval of the project under Women Scientist Scheme A (WOS-A) entitled "**Functionalized transition metal catalysts for cross coupling reactions.**"

**PI:** Ms Seema Pandurang, Department of Chemistry, Padmabhushan Dr Vasantodada Patil College, Tasgaon, Sangli-416 312, Maharashtra.

Sanction of the President is hereby accorded to the approval of the above mentioned project at a total cost of **Rs 21,17,808/-** (Rupees Twenty One Lakh Seventeen Thousand Eight Hundred Eight only) for a duration of 3 years. The detailed breakup of the grant for General (Rs. 18,17,808/-) as well as Capital (Rs 3,00,000/-) Components are given below:

Sl. No.	Heads	1 <sup>st</sup> Year		2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
		5 Months	6 Months			
<b>A.</b>	<b>Non-Recurring (Capital Items)</b>					
	Equipments: GC, HPLC, flow reactor, rotavapour, flash chromatography	3,00,000/-	0	-----		3,00,000/-
<b>B.</b>	<b>Recurring (General)</b>					
	Fellowship for MSc@ Rs 31,000pm+HRA@8%	2,00,880/-	2,00,880/-	4,01,760/-	4,01,760/-	12,05,280/-
	Consumables	1,00,000/-	0	1,00,000/-	1,00,000/-	3,00,000/-
	Contingencies	20,000/-	0	20,000/-	20,000/-	60,000/-
	Travel	0	20,000/-	20,000/-	20,000/-	60,000/-
<b>C.</b>	<b>Overhead@10%</b>	64,176/-	0	64,176/-	64,176/-	1,92,528/-
<b>D.</b>	<b>Total of Recurring Grant (B+C)</b>	<b>3,85,056/-</b>	<b>2,20,880/-</b>	<b>6,05,936/-</b>	<b>6,05,936/-</b>	<b>18,17,808/-</b>
<b>E.</b>	<b>GRAND TOTAL (A+D)</b>	<b>6,85,056/-</b>	<b>2,20,880/-</b>	<b>6,05,936/-</b>	<b>6,05,936/-</b>	<b>21,17,808/-</b>

2. Sanction of the grant is subject to the conditions as detailed in website [www.online-wosa.gov.in](http://www.online-wosa.gov.in)

3. The sanction of the President is also accorded to the release of **Rs 3,85,056/-** (Rupees Three Lac Eighty Five Thousand Fifty Six only) grant for a period of six months under "General Component" to Principal, Padmabhushan Dr. Vasantodada Patil College, Tasgaon, Sangli-416 312, Maharashtra being the first installment of the grant for the year 2020-2021 for implementation of the above mentioned project.

4. This sanction is subject to the condition that the grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure utilization certificate and project completion report within one year from the scheduled date of completion of the project.

5. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

*JGAC*  
*Annual*



6. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital head grant.
7. The grant-in-aid being released is subject to the condition that.
- (a) A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/ Organization under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.
- (b) While submitting Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grant under the project shall be considered only on receipt of the said documents.
8. The Grantee Institute (GI) will maintain separate audited as per GFR 2017 Rule 230 (8) account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F/Y 2020-2021 and onwards interest and other earnings, against released Grant shall be remitted to Consolidated Fund of India, (through Non-Tax Receipt Portal (NTRP), i.e. [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in)), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with statement of expenditure/utilization certificate for considering subsequent release of grant/closure of project accounts. GI should also follow Rule 230 (17) of GFR 2017 concerning to reservation of SC/ST/OBC, if applicable.
9. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.
10. The Principal Investigator under Women Scientist Scheme is not permitted to withdraw any emoluments/ salary/fellowship from any other project either supported by DST or by any other funding agency.
11. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.
12. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.
13. Failure to comply with the terms and conditions of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
14. The expenditure involved is debit to Demand No.87, Department of Science & Technology for the year 2020-21
- 3425 Other Scientific Research (Major Head)  
60 Others (Sub-Major Head)  
60.200 Assistance to other Scientific Bodies (Minor Head)  
68 Science and Technology Institutional and Human Capacity Building (Sub Head)  
01 Disha Programme for Women in Science  
68.01.31 Grants-in-aid General for the year 2020-2021(Voted)  
(Previous: Disha Programme for Women in Science 3425.60.200.55.01.31)
15. The amount of Rs 3,85,056/- (Rupees Three Lac Eighty Five Thousand Fifty Six only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed Principal, Padmabhushan Dr. Vasantraodada Patil College, Tasgaon, Sangli-416 312, Maharashtra. The bank details for electronic transfer of funds through RTGS are given below:-
- Institute name : Padmabhushan Dr Vasantraodada Patil College, Tasgaon, Sangli  
Bank Name : Bank of Maharashtra  
Account Number : 20123531807  
Branch : Tasgaon, Sangli, Maharashtra  
IFSC code : MAHB0000282

*King*




16. Goods (consumables/equipment) available in GeM portal are to be procured mandatorily online through GeM and PI will also follow DoE's guidelines for incurring expenditure under the different sub-head.

17. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. 614 in the register of grants maintained in the **KIRAN Division** for scheme (KIRAN: WOS-A)

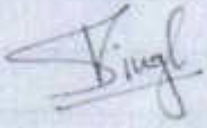
18. This issues with the concurrence of IFD Vide their Concurrence Dy No)/607/2020-21 dated 09.06.2020

18. The Grantee Institution is advised to start using EAT module and next release will be made only after mapping and following EAT modules by the grantee institution.

  
(Vandana Singh)  
Scientist-E

Copy for information and necessary action to:-

- 1 The Director of Audit (CW & M-II), AGCR Building, IP Estate, New Delhi-110 002
- 2 Copy with two spare copies of the sanction to the Drawing & Disbursing Officer, DST, Cash Section
- 3 The Principal, Padmabhushan Dr.Vasandraodada Patil College, Tasgaon, Sangli-416 312, Maharashtra
- 4 Dr Arjun ShankarKumbhar, Assistant Professor Department of Chemistry, PadmabhushanDr VasandraodadaPatil College, Tasgaon, Sangli-416 312, Maharashtra
- 5 MsSeemaPandurang, Department of Chemistry, PadmabhushanDr VasandraodadaPatil College Tasgaon Sangli-416 312, Maharashtra.
- 6 Pay & Accounts Officer, DST, New Delhi.
- 7 IFD, DST, New Delhi.
- 8 Sanction Folder

  
(Vandana Singh)  
Scientist-E





“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार” - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

## PADMABHUSHAN DR. VASANTODADA PATIL MAHAVIDYALAYA

TASGAON, Dist. Sangli, Pin- 416 312 ☎ - STD : 02346-250665, 250575 FAX : 250575

● Affiliated to Shivaji University, Kolhapur ●

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Prin. Abhaykumar Salunkhe  
CHAIRMAN M.A.

Prin. Mrs. Shubhangi Gawade  
SECRETARY M.Sc. B.Ed.

Dr. Milind S. Hujare  
PRINCIPAL M.Sc., Ph.D.

Ref.No. : PDVPMT / By hand / 2020-2021

Date : 23/02/2021

**Dr. Bhandare Pratiksha Suresh,**  
Dept. of Zoology,  
P.D.V.P. Mahavidyalaya, Tasgaon,  
Dist- Sangli-416312  
Dear Sir,

I am pleased to inform you that the College Research Committee has accepted your proposal for research project entitled “**Diversity of Avifauna in local and Peripheral ecosystem of Tasgaon Tahsil of Sangli District, Maharashtra, India**” under **Research Promotion Scheme**. You are further instructed that to give acceptance regarding the same and to complete the research project within six months from the sanction date.

**Sectioned amount of the given is Rs.5000/ (Five thousand Rs only)**

*Received  
Bhandare*

*(Dr. Milind S. Hujare)*  
**(Dr. Milind S. Hujare)**  
Principal

Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)



"ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार" - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

## PADMABHUSHAN DR. VASANTODADA PATIL MAHAVIDYALAYA

TASGAON, Dist. Sangli, Pin- 416 312 ☎ - STD : 02346-250665, 250575 FAX : 250575

• Affiliated to Shivaji University, Kolhapur •

E-mail : san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

► Established Year : June 1962 ► P. B. No. : 14 ► Jr. College No. : J22-10-001 ► Sr. College Code No. : <sup>SIACM</sup>X Jr.: C-8



NAAC Reaccredited 'B' (2.76)

ISO Certified : 9001:2015

Shikshanmaharshi  
Dr. Bapuji Salunkhe  
B.A., B.T., D.Lit.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT B.Com.  
Ex-Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
CHAIRMAN M.A.

Prin. Mrs. Shubhangi Gawade  
SECRETARY M.Sc. B.Ed.

Dr. Milind S. Hujare  
PRINCIPAL M.Sc., Ph.D.

Ref.No. : PDVPMT / B7 h9nd / 2020-2021

Date : 23/02/2021

To,  
Dr. Bandu J. Kadam  
Dept. of Economics,  
P.D.V.P. Mahavidyalaya, Tasgaon,  
Dist- Sangli-416312  
Dear Sir,

I am pleased to inform you that the College Research Committee has accepted your proposal for research project entitled "तासगांव तालुक्यातील सर्वसमावेशक ग्रामिण विकासाचा अभ्यास" under Research Promotion Scheme. You are further instructed that to give acceptance regarding the same and to complete the research project within six months from the sanction date.

Sectioned amount of the given is Rs.5000/ (Five thousand Rs only)

(Dr. Milind S. Hujare)  
Principal

Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon. (Sangli)

Principal  
B.S.





Government of Maharashtra  
Other Backward Bahujan Welfare Department, Maharashtra State, Mumbai.  
**Mahatma Jyotiba Phule Research and Training Institute  
(Mahajyoti), Nagpur**

Address: Dr.Babasaheb Ambedkar Samajik Nyay Bhavan, 3<sup>rd</sup> Floor, Shraddhanand Peth, Ambazari Road, Nagpur -440022  
दूरध्वनी क्र.0712- 2959381 CIN No. U85300PN2019NPL187405 ई-मेल: [mahajyotiskill@gmail.com](mailto:mahajyotiskill@gmail.com)

Outward No. MAHAJYOTI/Nag./Fellowship/2021-22/1042 (408)

Date : 17/01/2022

**Fellowship Award letter**

To,

SHASHIKANT ASHOK DAMATE

Subject: Mahatma Jyotiba Phule Research Fellowship-2021 for OBC, VJNT and  
SBC candidates to pursue Ph.D. degree.

Dear Candidate,

With reference to your application for Mahatma Jyotiba Phule Research Fellowship-2021 for OBC, VJNT and SBC candidates to pursue Ph.D. degree. I am happy to inform you that, Mahatma Jyotiba Phule Research and Training Institute (MAHAJYOTI), Nagpur has selected you for Mahatma Jyotiba Phule Research Fellowship-2021. (here in after referred to as MJRF-2021)

2. The financial assistance under the fellowship is awarded to you for the research subject mentioned in your registration letter submitted by you and your compliance to the terms & conditions of MAHAJYOTI.

3. You will eligible for financial assistance, relevant to you, as given below w.e.f. 18<sup>th</sup> October 2021 under MJRF-2021:

Sr. No.	Item	Financial Assistance
1.	Amount of Fellowship (For All subjects)	Rs.21,000/- per month.

4. Please note that this award letter is being issued on the basis of photocopies of the documents submitted through Management Information System (MIS) for Fellowship furnished by you to MAHAJYOTI.

5. Please note that, the fellowship amount as per your eligibility shall be disbursed by direct bank transfer (DBT) to your saving bank account provided in MIS.

6. You are required to submit progress report in stipulated time period otherwise fellowship amount will not disburse till completion. You are required to submit up-gradation certificate on time to time basis. You are required to submit copy of thesis, degree certificate, mark-sheet after Ph.D. award.

7. Any request or representation for any retrospective financial assistance will not be entertained.



8. Any other financial assistance other than fellowship amount will not be entertained.

Please note that this award letter is provisional and will be treated as valid, subject to the genuines of the documents submitted by you.

We hope that this fellowship will assist and help you financially and academically to conduct and complete the research on the subject you have selected and develop yourself over the years as an excellent researcher.

MAHAJYOTI wishes you all the best in this endeavor.

With regards,

A handwritten signature in blue ink, appearing to read 'Pradipkumar Dange', with a horizontal line underneath.

Pradipkumar Dange, IAS  
Managing Director,  
Mahatma Jyotiba Phule Research and  
Training Institute (MAHAJYOTI), Nagpur.

 <p>Estd: 1962 NAAC "A" Grade</p>	<p>SHIVAJI UNIVERSITY, KOLHAPUR-416 004 MAHARASHTRA Colleges and University Development Section PHONE :EPABX-2609000, 2609145 □ FAX :0091-231-2691533 &amp; 0091-231-2692333 Website : <a href="http://www.unishivaji.ac.in">www.unishivaji.ac.in</a> E-mail: <a href="mailto:stats@unishivaji.ac.in">stats@unishivaji.ac.in</a> शिवाजी विद्यापीठ, कोल्हापूर - ४१६००४ महाराष्ट्र (महाविद्यालये व विद्यापीठ विकास विभाग) दूरध्वनी: (ईपीएबीएक्स) २६०९०००, २६०९१४५ □ फॅक्स: ००९१-२३१-२६९१५३३, २६९२३३३, २६९३२९४</p>
	<p>Ref No. : SU/C&amp;U.D.Section/Prop. No.: 115/1935 Date: - 11 MAR 2021</p>

To,  
Dr. Parashuram Basappa Teli,  
Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya,  
Tasgaon, Dist. - Sangli.

Sub: Your project entitled, "*Influence of extract of dried fruit and terminal leaves of vitis vinifera L. on Cam Angiogenesis*"

Ref : Our Office Circular No : SU / C.&U.D. Section/ UGK/ 144, dt. 23/5/2019.

Sir / Madam,

With reference to your application for financial assistance for scheme under Research Initiation Scheme-2019-2020, I am directed to inform you that the research project entitled "*Influence of extract of dried fruit and terminal leaves of vitis vinifera L. on Cam Angiogenesis*" has been accepted for the financial support under the scheme for the period of two years. The total grant for the projects will be ₹.100000/- . The first installment (I.e.advance) of ₹.90000/-.

The Details of the funds sanctioned. :

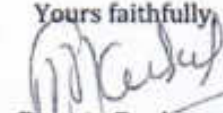
Sr. No	Item	Amount sanctioned in Rs.			Grant released as First installment
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total	
<b>A) Recurring</b>					
	1) Books and Journals	₹.0/-	₹.0/-	₹.0/-	₹.0/-
	2) Hiring Services	₹.0/-	₹.0/-	₹.0/-	₹.0/-
	3) Field Work and Travel	₹.2500/-	₹.2500/-	₹.5000/-	₹.2500/-
	4) Chemical and Glassware	₹.5000/-	₹.5000/-	₹.10000/-	₹.5000/-
	5) Contingency	₹.2500/-	₹.2500/-	₹.5000/-	₹.2500/-
<b>B) Non-recurring</b>					
	*Equipment	₹.80000/-	₹0./-	₹.80000/-	₹.80000/-
	<b>Total</b>	<b>₹.90000/-</b>	<b>₹.10000/-</b>	<b>₹.100000/-</b>	<b>₹.90000/-</b>

\* Name of the Equipment :Microphotography Unit, Cryostat.

**\*\*Once the Project grant is approved. No Chages can be made to the funding.\*\***

Thanking you,

Yours faithfully,

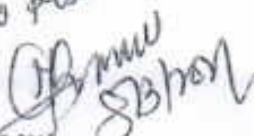
  
Deputy Registrar,  
Colleges and University  
Development Section  
Shivaji University, Kolhapur

P D. V. P Mahavidyalaya  
Tasgaon  
Inword No. 1031  
Date - 8 MAR 2021  
File No. -

Encl. :- As above

Copy to:

- Account (P.G. Bill) Section
- The Head/ Principal, Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon, Dist. - Sangli..

1 copy to  
IQAC  
1 copy to Research committee Dr. Ameha  




NAAC Accredited 'B' (2.76)

“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार” – शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin 416 312 ✆ STD : 02346- 250 665, 250 575 FAX : 250575

• Affiliated to Shivaji University, Kolhapur •

ISO - 9001:2015

E-mail: san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

• Established Year : June 1962 • P. B. No. : 14 • Jr. College No. : J22-10-001 • Sr. College Code No. :  $\frac{SIAC/4}{X}$  Jr.: C-8

Shikshanmaharshi  
Dr. Babuji Salunkhe  
B.A., B.T.D. Lit.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
B.Com.  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
M.A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M.Sc., B. Ed.  
SECRETARY

Dr. Milind S. Hujare  
M.Sc., Ph. D.  
PRINCIPAL

Ref.No. : PDVPMT/ 2019-20 / Bx H999

Date : 12/12/2019

To,  
Dr. B. J. Kadam  
Dept. of Economics  
P. D. V. P. Mahavidyalaya, Tasgaon.  
Dist. Sangli-416312

Dear sir,

I am pleased to inform you that, the College Research committee has accepted your proposal for research project entitled “तासगाव तालुक्यातील वंचित घटकांच्या मानवी विकास निर्देशकांचा अभ्यास” under Research Promotion Scheme. You are further instructed that to give acceptance regarding the same and to complete the project within six month from the sanction date.

Sectioned amount of the given project is Rs 5000/- (Five thousand Rs only)

(Dr. Milind S. Hujare)  
Principal

Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)





NAAC Accredited 'B' (2.76)

“ ज्ञान, विज्ञान आणि सुरांस्कार यांसाठी शिक्षणप्रसार ” - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin 416 312 STD : 02346- 250 665, 250 575 FAX : 250575

• Affiliated to Shivaji University, Kolhapur •

ISO - 9001:2015

E-mail: san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

Established Year : June 1962 • P. B. No. : 14 • Jr. College No. : J22-10-001 • Sr. College Code No. :  $\frac{SVAC14}{X}$  Jr. C-8

Shikshanmaharshi  
Dr. Bapuji Salunkhe  
B.A., B.T.D. Lit.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
B.Com.  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
M.A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M.Sc. B. Ed.  
SECRETARY

Dr. Milind S. Hujare  
M.Sc., Ph. D.  
PRINCIPAL

Ref.No. : PDVPMT/ 2019-20/ By Hand

Date : 12/12/2019

To,  
Dr. H. D. Nadaf  
Dept. of History  
P. D. V. P. Mahavidyalaya, Tasgaon.  
Dist. Sangli-416312

Dear sir,

I am pleased to inform you that, the College Research committee has accepted your proposal for research project entitled “A Study of Local History and Synergetic Culture in Tasgaon Taluka” under Research Promotion Scheme. You are further instructed that to give acceptance regarding the same and to complete the project within six month from the sanction date.

Sectioned amount of the given project is Rs 5000/- (Five thousand Rs only)

  
(Dr. Milind S. Hujare)  
Principal

Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)



NAAC Accredited 'B' (2.76)

“ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार ” - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin 416 312 ☎ STD : 02346- 250 665, 250 575 FAX : 250575

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Established Year : June 1962 P. B. No. : 14 Jr. College No. : J22-10-001 Sr. College Code No. :  $\frac{SMAC/4}{X}$  Jr.: C-8

Shikshanmaharshi  
Dr. Bapuji Salunkhe  
B.A., B.T.D. Lit.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT B.Com.  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
M.A.  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M.Sc. B. Ed.  
SECRETARY

Dr. Milind S. Hujare  
M.Sc., Ph. D  
PRINCIPAL

Ref.No. : PDVPMT/ 2019-20/ By Hand

Date : 12/12/2019

To,

Dr. A. G. Sonawale

Dept. of Commerce

P. D. V. P. Mahavidyalaya, Tasgaon.

Dist. Sangli-416312

Dear sir,

I am pleased to inform you that, the College Research committee has accepted your proposal for research project entitled “GRAPE CROP VALUE CHAIN ANALYSIS OF MARKETING SYSTEM IN TASGAON TALUKA” under Research Promotion Scheme. You are further instructed that to give acceptance regarding the same and to complete the project within six month from the sanction date.

Sectioned amount of the given project is Rs 5000/- (Five thousand Rs only)

(Dr. Milind S. Hujare)  
Principal

Padmabhushan Dr Vasanttraodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)





SHIVAJI UNIVERSITY, KOLHAPUR-416 004 MAHARASHTRA  
Colleges and University Development Section  
PHONE :EPABX-2609000, 2609145  
□ FAX :0091-231-2691533 & 0091-231-2692333  
Website : [www.unishivaji.ac.in](http://www.unishivaji.ac.in) E-mail: [stats@unishivaji.ac.in](mailto:stats@unishivaji.ac.in)  
शिवाजी विद्यापीठ, कोल्हापूर - ४१६००४ महाराष्ट्र (महाविद्यालये व विद्यापीठ विकास विभाग)  
दुरध्वनी: (इंपीएथीएक्स) २६०९०००, २६०९१४५  
□ फॅक्स: ००९१-२३१-२६९१५३३, २६९२३३३, २६९३२९४

Ref No. : SU/C&U.D.Section/36/ 183

Date: **5 MAY 2018**  
5/5/2018

To,  
Ms. Patil Megha Uday  
Padmabhushan Dr. Vasanttraodada Patil College,  
Tasgaon, Sangli.

Sub: Your project entitled, "*Utilization of Bio-Based material for Organic Transformations*"  
Ref : Our Office Circular No : SU / C.&U.D. Section/ UGK/ 347, dt. 11/07/2017.

Sir / Madam,

With reference to your application for financial assistance for scheme under Research Initiation Scheme-2017-2018, I am directed to inform you that the research project entitled "*Utilization of Bio-Based material for Organic Transformations*" has been accepted for the financial support under the scheme for the period of two years (2018-2019 to 2019-2020). The total grant for the projects will be ₹.80000/- (₹. Eighty Thousand Only). The first installment (i.e.advance) of ₹.65000/- (₹. Sixty Five Thousand Only) will be released after receiving the following documents i.e. *University approval letter (Change in Staff), appointment letter, Confirmation Order, Undertaking duly signed by the P.I and Principal in the prescribed format, Acceptance letter (Annex. B), Aadhar Card Zerox, Pan Card Zerox, Passbook zerox (Joint passbook), Advance Stamp Receipt etc.,*

The Details of the funds sanctioned. :

Sr. No	Item	Amount sanctioned in Rs.			Grant released as First installment
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total	
A)	<b>Recurring</b>				
	1) Books and Journals	₹.2500/-	₹.2500/-	₹.5000/-	₹.2500/-
	2) Hiring Services	₹.0/-	₹.0/-	₹.0/-	₹.0/-
	3) Field Work and Travel	₹.0/-	₹.0/-	₹.0/-	₹.0/-
	4) Chemical and Glassware	₹.10000/-	₹.10000/-	₹.20000/-	10000/-
	5) Contingency	₹.2500/-	₹.2500/-	₹.5000/-	₹.2500/-
B)	<b>Non-recurring</b>				
	*Equipment	₹.50000/-	₹.0/-	₹.50000/-	₹.50000/-
	<b>Total</b>	₹.65000/-	₹.15000/-	₹.80000/-	₹.65000/-

\* Name of the Equipment Equipment : **Magnetic Stirrer with Hoty plate 2 no.**

Kindly submit the above documents with duly signed in prescribed format to Registrar, Shivaji University, Kolhapur, at the earliest so as to release the grant.  
Thanking you,

Yours faithfully,

**Deputy Registrar,**  
Colleges and University Development Section  
Shivaji University, Kolhapur

Encl. :- As above  
Copy to:

- Account (P.G. Bill) Section
- The Principal/Head, Padmabhushan Dr. Vasanttraodada Patil Mahavidyalaya, Tasgaon satara
- Dr. P. V. Anbhule, Co-ordinator, Department of Chemistry, Shivaji University, Kolhapur.





कै. श्रीमती शारदाबाई गोविंदराव पवार अध्यासन

शिवाजी विद्यापीठ, कोल्हापूर - ४१६००४

समन्वयक फोन : ९८५०६१४०१६ ऑफिस फोन : (०२३१) २६०९३४४, २६०९२३४

फॅक्स : ९१-०२३१२६९२३३३

ई मेल : [bharatipatil\\_suk@rediffmail.com](mailto:bharatipatil_suk@rediffmail.com) / [bpt\\_ps@unishivaji.ac.in](mailto:bpt_ps@unishivaji.ac.in)

Estd : 1962

NAAC 'A' Grade

प्रा. डॉ. भारती पाटील  
समन्वयक

संदर्भ : शि.वि./कै.श्री.शा.गो.प.अ./NO 3574 -

दि. 26 JUL 2018

27 JUL 2018

प्रति,  
डॉ. बंडू कदम,  
पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय,  
तासगाव.

विषय : - संशोधन प्रकल्पाबाबत.

महोदय/महोदया,

कै. श्रीमती शारदाबाई गोविंदराव पवार अध्यासन केंद्राच्या वतीने आपल्या 'तासगाव तालुक्यातील एकल स्त्रियांचा आर्थिक आणि सामाजिक स्थितीचा एक चिकित्सक अभ्यास' या प्रकल्पास अध्यासनाच्या वतीने मान्यता देण्यात आली आहे. तसेच सदर प्रकल्पास विद्यापीठातील कै. श्रीमती शारदाबाई गोविंदराव पवार अध्यासनाच्या वतीने रु. २०,०००/- ची तरतूद करण्यात आली आहे. तरी सदर संशोधन प्रकल्प ६ महिन्यांच्या कालावधीत पूर्ण करण्यात यावा. तसेच आपण कोणत्या तारखेपासून प्रकल्प सुरू करणार आहात ते पत्राने कळवावे. ही विनंती धन्यवाद!

कळावे.

आपली विश्वासू,

प्रा. डॉ. भारती पाटील  
२३/७/१८

कै. श्रीमती. शारदाबाई गोविंदराव पवार अध्यासन,  
शिवाजी विद्यापीठ, कोल्हापूर.

ऑ. कदम  
पत्र - नॅक सोड करी देणे.  
२३  
20/8/2018



Estd: 1962  
NAAC "A" Grade

SHIVAJI UNIVERSITY, KOLHAPUR-416 004 MAHARASHITRA

Colleges and University Development Section

PHONE :EPABX-2609000, 2609145

□ FAX :0091-231-2691533 & 0091-231-2692333

Website : www.unishivaji.ac.in E-mail: stats@unishivaji.ac.in

शिवाजी विद्यापीठ, कोल्हापूर - ४१६००४ महाराष्ट्र (महाविद्यालये व विद्यापीठ विकास विभाग)

दुरध्वनी: (ईपीएबीएक्स) २६०९०००, २६०९१४५

□ फॅक्स: ००९१-२३१-२६९१५३३, २६९२३३३, २६९३२९४

Ref No. : SU/C&U.D.Section/67/ 764

Date: 27 SEP 2018

To,

**Dr. Arjun Shivaji Wagh,**

**Padmabhushan Dr. Vasantraodaea Patil Mahavidyalaya,  
Tasgaon Satara .**

Sub. :- Grants Release order under **Research Initiation Scheme 2017-2018.**

Sir/Madam,

With reference to above mentioned subject, I am directed to inform you that, the University authorities have approved your research proposal entitled "*A Progress of Organic Farming in Satara District (2005-2015)*" under **Research Initiation Scheme 2017-2018.**

- As per project guidelines, total grants of ₹. **55000/-** has been sanctioned to your research project and out of grant ₹. **47500/-** sending herewith as a first installment vide cheque bearing number **331295** dt. **19-09-2018.**
- The second installment of remaining grants will be released in second year of the project, provided annual progress report is submitted by you on or before the end of the first year of the project.
- The effective date of start of the project should be the date on which grant is credited to you. The total period of the project will be for two years and under no circumstances it will be extended further.

Thanking you,

Yours faithfully,

  
**Deputy Registrar,**  
Shivaji University, Kolhapur.

Encl. : As above.

Copy to;

The Principal/Head of the Department,

Padmabhushan Dr. Vasantraodaea Patil Mahavidyalaya, Tasgaon Satara

P D V P Mahavidyalaya  
Tasgaon  
Inword No - 1072  
Date - 3/10/2018  
File No -





UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110002

3 - FEB 2016

F. No. - 43-182/2014(SR)

Dated :- Jan, 2016

MRP-MAJOR-CHEM-2013-14023  
(OBC)

The Under Secretary (FDIII),  
University Grants Commission,  
Bahadur Shah Zafar Marg,  
New Delhi-110002.

Sub.-: Release of Grants-in-aid to **Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon Dist. (Sangli) – 416 312 Maharashtra, India** for the year **2015-16** under Plan in respect of Major Research Project entitled "**Liquid Phase Organic Synthesis (LPOS) Using Supported Catalysts**" awarded to **Dr. Arjun Shankar Kumbhar**, Department of **CHEMISTRY**, Tenure of project for **3 year(s)** w.e.f. **01/07/2015**.

Sir/Madam,

I am directed to convey the approval sanction of the University Grants Commission for payment of grant of **Rs. 5,74,000/-** (Rupees: **FIVE LAKHS SEVENTY FOUR THOUSAND ONLY**) as **1st instalment** for the years **2015-16** towards Major Research Project to the **PRINCIPAL**, **Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon Dist. (Sangli) – 416 312 Maharashtra, India** for the Plan expenditure to be incurred during **2015-16**.

S. No.	Items	Head of Account	Amount Approved(Rs.)	Grant being Released as 1st Installment(Rs.)	Grant Already Released(Rs.)	Total Grant(Rs.)
A.	<b>Non-Recurring</b>					
1.	Books & Journals	3(A).49(a).35	Rs. 20,000/-	Rs. 20,000/-	-	Rs. 20,000/-
2.	Equipment		Rs. 3,50,000/-	Rs. 3,50,000/-	-	Rs. 3,50,000/-
B.	<b>Recurring</b>					
1.	Honorium to Retd. Teacher @ Rs. 18,000/- p.m.		Rs. 0/-	Rs. 0/-	-	Rs. 0/-
2.	a. Project Fellow (Non-Gate/Non NET) @ Rs. 14,000/- p.m. b. Project Fellow (Gate/NET/GPAT) @ Rs. 16,000/- p.m. Tenure - 3 year(s)		Rs. 0/-	Rs. 0/-	-	Rs. 0/-
3.	Chemical/Glassware/Consumable (Raw Material & Packaging Material etc.)	3(A).49(a).31	Rs. 1,50,000/-	Rs. 75,000/-		Rs. 75,000/-
4.	Contingency		Rs. 90,000/-	Rs. 45,000/-	-	Rs. 45,000/-
5.	Hiring Services		Rs. 75,000/-	Rs. 37,500/-	-	Rs. 37,500/-
6.	Travel / Field Work		Rs. 30,000/-	Rs. 15,000/-	-	Rs. 15,000/-
7.	Any Other		Rs. 0/-	Rs. 0/-		Rs. 0/-
8.	Overhead Charges 10% of approved recurring Grant (Except Travel & Field Work)		Rs. 31,500/-	Rs. 31,500/-		Rs. 31,500/-
	<b>Total (A + B)</b>		<b>Rs. 7,46,500/-</b>	<b>Rs. 5,74,000/-</b>		<b>Rs. 5,74,000/-</b>



1. The sanctioned amount is debit to the Major Head 3(A).49(a).31 Rs. 2,04,000/- & Head 3(A).49(a).35 Rs. 3,70,000/- and is valid for payment during financial year 2015-16 .
2. The amount of the Grant shall be drawn by the Under Secretary (Drawing and Distributing Officer), University Grants Commission on the Grants-in-aid Bill and shall be disbursed to and credited to the **PRINCIPAL , Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon Dist. (Sangli) – 416 312 Maharashtra, India** through Electronic mode as per the following details.

Payment Details		
(a)	Bank Name & Address of Branch	<b>Bank of Maharashtra, Mali Galli, Gurivar Peth, Tasgaon</b>
(b)	Account No.	<b>00000020123531807</b>
(c)	Type of Account (SB/Current/Cash Credit)	<b>Saving</b>
(d)	IFSC Code	<b>MAHB0000282</b>
(e)	MICR Code of Branch	<b>416014302</b>
(f)	Whether Bank Branch is RTGS or NEFT enabled? :	<b>Yes (RTGS/NEFT/Both)</b>
(g)	Name & Address of Account Holder	<b>The Principal, Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon, Dist.Sangli-416312</b>

3. The Grant is subject to the adjustment of the basis of Utilization Certificate in the prescribed performa submitted by the University/Colleges/Institution.
4. The University/College/Institution shall maintain proper accounts of the expenditure out of the grants which shall be utilized only on approved items of expenditure.
5. The University/Institution may follow the General Financial Rules, 2005 and take Urgent necessary action to amend their manuals of financial procedures to bring them in conformity with GFRs, 2005 and those don't have their own approved manuals on financial procedures may adopt the provisions of GFR's 2005 and instructions/guideline there under from time to time.
6. The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to the University Grants Commission as early as possible after the close of the current financial year.
7. The assets acquired wholly or substantially out of University Grant Commission's grant shall not be disposed or encumbered or utilized for the purposes other than those for which the grant was given, without proper sanctioned of the University Grants Commission and should, at any time the College/University ceased in function such assets shall revert to the University Grants Commission.
8. A register of assets acquired wholly or substantially out of the grant shall be maintained by the University/College in the prescribed proforma.
9. The grantee institution shall ensure the utilization of grant-in-aid for which it is being **sanction/paid**. In case non-utilization/part utilization, thereof simple interest @ 10% per annum as amended from time to time on unutilized amount from the date of drawl to the date of refund as per provisions contained in General Financial Rules of Govt. of India will be charged.
10. The University/College/Institute shall follow strictly the Government of India / University Grants Commission guidelines regarding implementation of the reservation policy [**both vertical (for SC, ST & OBC) and horizontal (for persons with disability etc.)**] in teaching and non-teaching posts.
11. The University/College shall fully implement the Official Language Policy of Union Govt. and comply with the Official Language Act, 1963 and Official Languages (Use for Official purposes of the Union) Rules, 1976 etc.
12. The sanction is issued in exercise of the delegation of powers vide University Grants Commission Office Order No. **69/2014 F.No.10-11/12 (Admn. IA & B) dated 26/03/2014** .
13. The University/Institution shall strictly follow the University Grants Commission Regulations on curbing the menace of Ragging in Higher Educational Institutions, 2009.
14. The University/Institution shall take immediate action for its accreditation by National Assessment & Accreditation Council (NAAC).
15. The accounts of the University/Institution will be open for audit by the Comptroller & Auditor General of India in accordance with the provisions of General Financial Rules, 2005.
16. The annual accounts i.e. balance sheet, income and expenditure statement and statement of receipts and payments are to be prepared strictly in accordance with the Uniform Format of Accounting prescribed by

Government.

17. It is certified from the B.C.R. that the funds are available under the scheme. Entered in BCR at S.No. 1601  
P. No. 22.
18. The funds to the extent of Rs. \_\_\_\_\_ Crores are available under the scheme or BE/RE of the year 2015-16.
19. This issue with the concurrence of IFD Vide No. Diary No. 10946 Dated, 10.03.2015 .
20. This issue with the approval of the **Chairman, (UGC)** Vide Diary No. 28731 Dated 30.04.2015 .

Yours faithfully,

(G.S. AULAKH )  
Under Secretary

Copy forwarded for information and necessary action to :-

- Registrar*
1. The **PRINCIPAL , SHIVAJI UNIVERSITY, KOLHAPUR .**
  2. Office of the Director General of Audit, Central Revenues, A.G.C.R. Building, I.P. Estate, New Delhi.
  3. Accountant General, Govt. of State, **Maharashtra .**
  4. **Dr. Dr. Arjun Shankar Kumbhar , Principal Investigator, Department of CHEMISTRY , Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon Dist. (Sangli) – 416 312 Maharashtra, India .**
  5. **The Principal, Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon Dist. (Sangli) – 416 312 Maharashtra, India**

*6* *Gurad file*

  
(ARUN KUMAR SINHA)  
SECTION OFFICER





2016-17

**NO. SB/FT/CS-153/2013  
SCIENCE AND ENGINEERING RESEARCH BOARD**

**5 & 5A, Lower Ground Floor,  
Vasant Square Mall,  
Plot No. A, Community Centre,  
Sector -5, Pocket -5,  
Vasant Kunj,  
New Delhi-110070**

**Dated:**

**ORDER**

30/06/2014

**Subject:** - Financial Sanction of the research project entitled "Design and applications of biopolymer supported palladium catalysts for organic synthesis" under the guidance of Dr. Arjun Shankar Kumbhar, Department of Chemistry, Padmabhushan Dr. Vasanturadada Patil Mahavidyalaya, Sangli-416312.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 2500000/- (Rupees twenty five lakh only) with break-up of Rs. 1380000/- (Rupees thirteen lakh eighty thousand only) under Non-Recurring and Rs. 1120000/- (Rupees eleven lakh twenty thousand only) under Recurring for a duration of three years. The items of expenditure for which the total allocation of Rs. 2500000/- has been approved for a period of three years, are given below:

SI. No.	HEAD	TOTAL (In Rs.)
A	Non-Recurring	
1	Equipment: Liquid Chromatography Agilent 1220 Infinity LC Gradient System	1380000
A'	Total (Non-Recurring)	1380000
B	Recurring Items	
1	Recurring- A : (Manpower, Consumables, Analytical Charges, Travel(Domestic), Contingencies)	820000
2	Recurring- B: (Overhead Charges)	300000
B'	Total (Recurring)	1120000
C	Total Cost of the Project (A'+B')	2500000

- Sanction of the SERB is also accorded to the payment of Rs. 1380000/- (Rupees thirteen lakh eighty thousand only) under 'Non-Recurring' and Rs. 280000/- (Rupees two lakh eighty thousand only) under 'Recurring' being the grant for the year 2014-15 for implementation of the said research project
- The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) (Non-Recurring & Recurring). This release is being made under Start-Up Research Grant (Young Scientists) - CHEMICAL SCIENCES.
- The Sanction has been issued with the approval of the competent authority under delegated powers and vide Diary No. SERB/F/2306/2014-15 dated 20/06/2014.
- Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ([www.serb.gov.in](http://www.serb.gov.in)).
- Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.
- While providing operational flexibility among various subheads under head Recurring-A, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

77

विश्वविद्यालय अनुदान आयोग  
University Grants Commission  
मानव संसाधन विकास मंत्रालय, भारत सरकार  
Ministry of Human Resource Development, Govt. of India  
पश्चिम विभागीय कार्यालय गणेशखिंद, पुणे- ४११००७  
Western Regional Office, Ganeshkhind, Pune - 411007

No. F. 23-1014/13 (WRO)

Ph: 020 - 25696896, 25696897,  
Fax: 020 - 25691477  
Website- www.ugc.ac.in  
Email: wrougc@gmail.com

The DDO,  
University Grants Commission,  
Pune - 411007.

12 MAR 2015

**Subject: Financial assistance to college teachers for undertaking Minor Research Projects -  
Release of first installment during XII<sup>th</sup> Plan.**

Sir/Madam,

I am directed to convey the sanction of the Commission. The UGC on the recommendations of the Expert Committee has approved the Minor Research Project in the subject of **English** entitled "The Theme of Oneness for Humanity and Culture in Alan Paton's Selected Novels" to be undertaken by **Mr. Patil A. R., of PADMABHUSHAN DR. VASANTRAO DADA PATIL MAHAVIDYALAYA, TASGAON, TASGAON, SANGLI-416312.** The financial assistance of the UGC would be limited to Rs. 200000/- for a period of two years. An amount of Rs. 165000/- (Rupees One lakh sixty five thousand only) is presently being sanctioned as the first installment.

Non-Recurring Grant for Two years	Amount (Rs)	Recurring grant	1 <sup>st</sup> Year Amount	2 <sup>nd</sup> Year Amount	Grant to be approved as 1st Inst.
Books & Journals	60000	Contingency	20000	20000	NR 100% Rec. 1 <sup>st</sup> Year
Equipment	70000	Special Need	0	0	
		Travel/Field work	15000	15000	
		Chemicals & Glassware	0	0	
		Others	0	0	
Total (Rs.)	130000		35000	35000	165000

Total amount for the project: Rs. 200000/-

**NOTE:**

- The grants should be utilized within the time period as specified under the GFR, 2005

The grant is subject to the terms and conditions as mentioned below.

- The project should be implemented as per the UGC guidelines of scheme for Minor Research Project which are available on UGC website i.e. [www.ugc.ac.in](http://www.ugc.ac.in).
- The sanctioned amount is debitible to the Plan Head 3 (31) and is valid for payment during the financial year 2014-15.

Prof. A. R. Patil

Sr. No	Component	Head of A/c 3(31)	Amount
1.	General Component 76%	3(A)	165000
2.	SC 16%	3(B)	
3.	ST 8%	(C)	



3. The amount of the grants shall be drawn by the DDO, UGC (WRO), Pune on the Grants-in-aid bill and shall be disbursed to and credited to the Principal of the college through Electronic mode as per the following details:

a.	Details (Name & Address) of Accounts Holder:	PRINCIPAL, PADMABHUSHAN DR. VASANTRAO DADA PATIL MAHAVIDYALAYA TASGAON, TASGAON, SANGLI, 416312
b.	Account No.:	20123531807
c.	MICR Code:	
d.	IFSC Code:	
e.	Type of Account:	MAHB0000282 Saving Account

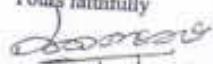
4. The grant is subject to adjustment on the basis of Utilization Certificate in the prescribed Proforma submitted by the University/ College/ Institution.
5. The University/ College shall maintain proper accounts of the expenditure out of the grants, which shall be utilized, only on approved items of expenditure.
6. The University/ Institution may follow the General Financial Rules, 2005 and take urgent necessary action to amend their manuals of financial procedures to bring them in conformity with GFRs, 2005 and those don't have their own approved manuals on financial procedures may adopt the provision of GFRs, 2005 and instruction/ guideline there under from time to time.
7. The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to UGC as early as possible after the close of current financial year.
8. The assets acquired wholly or substantially out of UGC's grant, shall not be disposed of or encumbered or utilized for purposes other than those for which the grant was given, without proper sanction of the UGC, and should at any time the College cease to function, such assets shall revert to the University Grants Commission.
9. A Register of the assets acquired wholly or substantially out of the grant shall be maintained by the University/ College in the prescribed proforma.
10. The grantee institution shall ensure the utilization of grants-in-aid for which it is being sanctioned/ paid. In case non-utilization / part utilization, the simple interest @ 10% per annum as amended from time to time on utilization amount from the date of drawl to the date of refund as per provision contained in General Financial Rules of Govt. of India will be charged.
11. The Univ. /College shall follow strictly the Government of India/ UGC's guidelines regarding implementation of the reservation policy [both vertical (for SC, ST & OBC) and horizontal (for persons with disability etc.)] in teaching and non-teaching posts.
12. The University/ College shall fully implement to Official Language Policy of Union Govt. and comply with the Official Language Act, 1963 and Official Languages (use for official purposes of the Union) Rules, 1976 etc.
13. The sanction issues in exercise of the delegation of powers vide Commission office order No. 130/2013 [F. No. 10-11/12 (Adm. IA & B)] dated 28/5/2013.
14. The University/ Institution shall strictly follow the UGC Regulations on curbing the menace of Ragging in Higher Education Institutions, 2009.
15. The University/ Institution shall take immediate action for its accreditation by National Assessment & Accreditation Council (NAAC).



No. F 23-1014/13 (WRO)

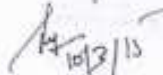
16. The accounts of the University/ Institution will be open for audit by the Comptroller & Auditor General of India in accordance with the provisions of General Financial Rules, 2005.
17. The annual accounts i.e. balance sheet, income and expenditure statement and statement of receipts and payments are to be prepared strictly in accordance with the Uniform Format of Accounting prescribed by Government.
18. An amount of Rs. /- out of Rs. /- has been utilized against this office sanction letter of even dated by the university/Institute/College vide Ref No. dated for the purpose for which it was sanctioned and noted in grant in aid/ BCR register at Pg. No. 1 & S. No.
19. Future grant will be released on receipt of Statement of Expenditure Utilization Certificate (Item-wise).
20. Funds to the extent are available under the Scheme.
21. This issues with the concurrence of IFD vide Diary No. (IFD) dated (N. A.)
22. This issues with the approval of Head of Office.
23. Entry has been made in BCR at Pg. No. 1 & S. No. 262

Yours faithfully

  
 (Naresh Pal Meena)  
 Education Officer

Copies forwarded for information and necessary action to:

1. THE PRINCIPAL  
PADMABHUSHAN DR. VASANTRAO DADA PATIL  
MAHAVIDYALAYA, TASGAON TASGAON, SANGLI -416312.
- ✓ MR. PATIL A. R., PADMABHUSHAN DR. VASANTRAO DADA  
PATIL MAHAVIDYALAYA, TASGAON, SANGLI -  
416312.
3. DIRECTOR (BCUD), SHIVAJI UNIVERSITY, VIDYA NAGAR,  
KOLHAPUR - 416004
4. DIRECTOR, HIGHER EDUCATION, CENTRAL BLDG, PUNE
5. ACCOUNTANT GENERAL, MAHARASHTRA STATE, MUMBAI
6. GUARD FILE.

  
 (L. N. Sahu)  
 Section Officer

UNIVERSITY GRANTS COMMISSION  
WESTERN REGIONAL OFFICE  
GANESHKHIND, PUNE - 411007

Phones: (020) 25691477,  
25691178, 25696897  
Fax: (020) 25691477  
Web site: www.ugc.ac.in

File No: 23-106/12(WRO)

The Accounts Officer  
University Grants Commission  
Ganeshkhind, Pune-411007.

- 5 FEB 2013

**Subject: Financial assistance to college teachers for undertaking Minor Research Projects - Release of first installment during XII<sup>th</sup> Plan.**

Sir/Madam,

The UGC on the recommendations of the Expert Committee has approved the Minor Research Project entitled "A Study of Performance Evaluation of Tasgaon Urban Co-Operative Bank in Tasgaon Taluka" in the subject- **Commerce** to be undertaken by **Mr. Patil M. D., PADMBHUSHAN DR. VASANTRAO DADA PATIL MAHAVIDYALAYA, , TASGAON, SANGLI-416 312**. The financial assistance of the UGC would be limited to Rs. 100000/- (Rupees Only) for a period of two years. An amount of Rs. 77500/- (Rupees Only) is presently being sanctioned as the first installment.

Non-Recurring Grant for Two years	Amount (Rs)	Recurring grant	1 <sup>st</sup> Year Amount	2 <sup>nd</sup> Year Amount	Head of a/c
Books & Journals	20000	Contingency	10000	10000	4(iv)b (For General)
Equipment	35000	Special Need	0	0	
		Travel/Field work	12500	12500	1.B(i)h(i)b (For SC)
		Chemicals & Glassware	0	0	1.B(i)h(i)b (For ST)
		Others	0	0	
<b>Total (Rs.)</b>	<b>55000</b>		<b>22500</b>	<b>22500</b>	

**Total amount for the project: Rs. 100000/-**

The grant is subject to the terms and conditions as mentioned below.

1. A Certificate of Acceptance of the conditions governing the research project should be sent immediately to this office.
2. The amount of the grant shall be drawn by the Accounts Officer (D.D.O), University Grants Commission on the grant-in-aid bill and shall be disbursed to and credited to the above-mentioned institute through D.D./ RTGS Confirmation No/ NEFT/ Transfer No.
3. The sanctioned amount is debatable to the Major Head 4(iv)b(For General), 1.B(i)h(i)b (For SC), 1.B(i)h(i)b (For ST) and is valid for payment during the financial year 2012 -2013 only.
4. The grant is subject to adjustment on the basis of Utilization Certificate in prescribed proforma submitted by University/College/Institute.

**NOTE:**

1. The grant shall not be used self-financial/ non-grant/unaided courses & teachers.
2. Date of implementation will be the date of sanction of first installment.
3. The researcher is required to submit an Acceptance Certificate of the project in the enclosed format to the affiliating university, which would then be sent to UGC

**P.D.V.P. Mahavidyalaya**  
Tasgaon, Dist Sangli

Inward No 1972

Date 11 MAR 2013

File No.

M. D. Patil  
AC  
11-3-13



विश्वविद्यालय अनुदान आयोग  
पश्चिम विभागीय कार्यालय  
मनोरथिंद, पुणे - ४११००२  
University Grants Commission  
Western Regional Office  
Ganeshkhind, Pune - 411007.



दूरभाष Phone: कलकत्ता OFF:- 020 - 25696897  
020 - 25696896  
020 - 25691178  
दूरभाष टोल फ्री: 020 - 25691477

Website - www.ugc.ac.in  
Email: wrugc@gmail.com

File No: 23-758/13(WRO)

30 MAY 2014

✓ THE PRINCIPAL,  
PADMABHUSHAN DR. VASANTRAO  
DADA PATIL MAHAVIDYALAYA,  
TASGAON,  
TASGAON,  
SANGLI-416 312.

Subject: Minor Research Projects approval for during XII<sup>th</sup> Plan.

Sir/Madam,

I am directed to convey the approval of the UGC Minor Research Project in the subject of Marathi entitled "N. D. Mahanoranchya Ajintha Khandkavyavar Adharit Chitrapat..." to be undertaken by Dr. Badame T. K. of PADMABHUSHAN DR. VASANTRAO DADA PATIL MAHAVIDYALAYA, TASGAON, TASGAON, SANGLI-416 312.

Non-Recurring Grant for Two years	Amount (Rs.)	Recurring grant	Amount (Rs.)
Books & Journals	30000	Contingency	30000
Equipment	20000	Special Need	0
		Travel/Field work	20000
		Chemicals & Glassware	0
		Others	0
Total (Rs.)	50000		50000

Total allocation amount for the project: Rs. 100000/-

Certificates as per Annexure-II of Guidelines, Certificate of Acceptance of the conditions governing the research project should be sent immediately to this office.

Dr. T.K. Badame  
P2  
7/6/2014

P. D. V. P. Mahavidyalaya  
Tasgaon, Dist. Sangli.  
Inward No. 200  
Date - 27 JUN 2014  
File No. -

TRUE COPY

For PRINCIPAL  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalay, Tasgaon (Sangli)





Dr. A Mukhopadhyay  
Head  
INSPIRE & FIST Division  
Email: [tsd@nic.in](mailto:tsd@nic.in)  
Tel. + Fax: 011-26602193

भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
टेकनोलाजी भवन नया महरोली मार्ग नई दिल्ली - 110016

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
Department of Science & Technology  
Technology Bhawan, New Mehrauli Road, New Delhi-110016

SR/FST/ College-208/2014

21 November 2014

Subject: Your Proposal under "FIST Program - 2014"

Dear Sir,

This is in connection with the aforesaid proposal submitted by your Department/ Centre for support under the FIST Program of DST. We are happy to inform you that the aforesaid proposal has been identified for support in Level-I category by the DST based on the recommendations of the FIST Advisory Board (FISTAB). The details of the recommendations for 5 years duration of the project are given below:

To strengthen Teaching (and) Research Facilities in all Science departments of the College.
E - Rs 32 lakh (Items to be identified for Teaching Facilities by the College)
NW - Rs 7 lakh (for Setting up Computer Lab)
Books - Rs 3 lakh
Renovation of Lab - Rs 5 lakh (for making e-Learning Room)
Maintenance - Rs 3 lakh
Total : Rs 50.0 Lakh

It may be noted that the allocations indicated now above with respect to any Equipment or any other budget heads are the upper limit of the budget as they are purely based on recommendations and also tentative. However, Department shall now finally firm-up specifications/ configurations of each Equipment, Computational & Networking facility in Computer Lab, Infrastructure Facility as recommended above for acquiring by the Department/ Centre/ School and actual cost of this project shall be firm-up based on these inputs from you. The support for the 'Maintenance' will be provided as per norms under FIST Program. The type of equipment and its specifications/ configurations finalized now by the Department/ Centre/ School would not be possible to change during the course of implementation of the said project. For enabling us to process the case further, including the release of 1<sup>st</sup> installment of grant now, you are requested to please submit the following documents **latest by before 16<sup>th</sup> February 2015 (Monday)**:

- 1) One each Budgetary Quotation from Equipment supplier (all-inclusive i.e. Custom Duty, Bank & other Charges) for all Equipment recommended for support. Please ensure that the budgetary cost is not an inflated one with respect to its specifications given. In case, Equipment list "to be identified & prioritized", please submit quotations of the identified & prioritized Equipment only. Under 'Teaching Facility Support' only laboratory equipment to be utilized for experimental purposes shall be proposed. Teaching Aids like LCD Projector, Smart Boards etc, are out of scope under FIST support and shall not be projected by the College.
- 2) Details plans for implementation of the 'Networking and Computational Facilities' (NW) under the support as per guidelines mentioned in the Terms and Conditions of DST-FIST Program available at the Website: [www.fist-dst.org](http://www.fist-dst.org). Please download 'Terms & Conditions' and submit the same on completion of all formalities along with above-said documents to DST.
- 3) Details & their cost estimates of Items/ activities recommended & proposed under 'Infrastructure Facility' which includes the list of Books, etc.

SR/FST/MS/11-14  
Dr. S. S. Patil  
Dr. G. S. Ghoshal  
PR  
25-11-14

D. V. P. Mahavidyalaya  
Bangaon, Dist. Sangli  
Inward 915  
Date 1.12.14

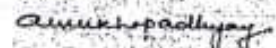
- 4) For implementation of the project, the Department/School/Centre/College shall constitute an 'Project Implementation Group' who shall be responsible & accountable for its implementation during the project duration of 5 years. The composition of the 'Project Implementation Group' shall be informed to DST by the Department/School/ Centre.
- 5) The respective Department/ School/ Centre/College shall open an only Saving Bank Accounts to handle the project grants. However, the concerned Department/Centre or College shall need to forward a photocopy of a Blank Cheque only for their Institute/ University/College Bank Account which is maintained & operated by the Registrar (for University) or Director (for Institute) or Comptroller (for Agricultural University) or Principal (for College) to facilitate the transfer of grants through ECS Transfer System. The Department/Centre or College shall also be requested to ensure the registration in Central Plan Scheme Monitoring System (CPSMS) [www.cpa.nic.in] for R&D Support (100%) head of A/c and attach the Registration Details of their University/Institute/College along with other documents,

The Department/ Centre/ School who have already enjoyed support earlier under FIST Program and recommended for Repeat Support now, shall need to complete all formalities i.e. submission of Project Completion Report, Audited Financial Statements, refund of unspent funds etc. for the previously supported project under DST-FIST Program. Processing towards releasing the grants to such Department/ School/ Centre would not be possible to initiate without completion of all formalities for the previous project. Blank Format towards closure of previous project is also available at the Website: [www.fist-dst.org](http://www.fist-dst.org).

Departments/ Centres/ Schools/ College are also requested for sending all documents at one stage instead of sending in parts by Post only. Please avoid of sending these documents by Email as well as at the last moment. Incomplete documents submitted by any Department/ Centre/ School/ College would be unable to process for releasing grants and the matter would be kept pending maximum for six months, beyond which recommendations for the Department/Centre/School/ College deemed to be forfeited automatically for considering support under DST-FIST Program.

We look forward for kind cooperation from you in this regard and if any clarifications are needed, please feel free to contact us. Please submit the following documents before 14<sup>th</sup> February 2014 (Friday). All documents will be required to send by Post. Documents may not be sent by E-mail for releasing fund.

With best regards.

  
(A. Mukhopadhyay)

To

Principal,  
Department of Chemistry  
Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya,  
Tasgaon,  
Sangli-416312  
Maharashtra

[Note: E – Equipment, NW – Networking & Computational Facility, IF – Infrastructure facility, M – Maintenance]



No.SR/FST/College-208/2014(C)  
GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF SCIENCE & TECHNOLOGY  
R & D (Infrastructure) DIVISION

Technology Bhawan,  
New Mehrauli Road,  
New Delhi -110016.

17<sup>th</sup> March, 2016

ORDER

Subject: Financial assistance (1<sup>st</sup> Installment) to Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, (Maharashtra) under FIST Program.

Sanction of the President is hereby accorded to the implementation of the aforesaid project at a total cost of Rs. 50,00,000/- (Rupees Fifty lakh only) for 5 years at Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, (Maharashtra). The details of this are given below:

To strengthen the Research and Teaching facilities in all Science Departments of the College

Capital Assets: Rs. 47.00 L  
E: Rs. 32.00 L (Teaching Facility) (Rs. 32.00 L for 31 items for various departments (as per list))  
IF: Rs. 8.00 L (Renovation of labs (or setting up a Learning Class Room-Rs.5.00L & Books-Rs.3.00L))  
Networking: Rs. 7.00 L (To set up a Computer Lab)  
General Components: Rs. 3.00 L  
M: Rs. 3.00 L  
Total: Rs. 50.00 Lakh

2. The sanction of the President is also accorded to the release of Rs. 39,50,000/- (Rupees Thirty nine lakh and fifty thousand only) to the Principal, Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, (Maharashtra) under FIST Program as a 1<sup>st</sup> installment of the grant in 2015-2016 under 'creation of capital assets' head for the maximum cost of the aforesaid Equipment including (9.4%) Custom Duty & other duties. The break-up of 1<sup>st</sup> installment grant released now, would be "Equipment": Rs.32.0 lakh for procurement of the equipments mentioned above [Equipments of Foreign Origin to be acquired on-FE Terms only], Infrastructure facility': Rs.0.50 lakh for acquiring Books & 'Networking and Computational facilities'; Rs.7.0 lakh. Under the 'Networking & Computational facilities' the proposed lab will have 15 Desktop Systems, 01 Printer, UPS 5KV Online, and NW accessories.

3. The Department/College will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure. The College is requested to utilize the released funds in first one year.

4. The Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, (Maharashtra) shall implement the aforesaid project with the 'Terms and Conditions' already agreed to by the College. Further, as per Rule 211 of revised GFRs the accounts of this Project Grants at Grantee Organization shall be made available for inspection by the sanctioning authority/audit where ever the Organization is called upon to do so.

5. There is no pending SE/UC on this Project as per details in the PFMS also. This is the first release of this project under FIST Program, which has been initiated, in this financial year so no previous UC is attached with this sanction order.

Contd...2/...

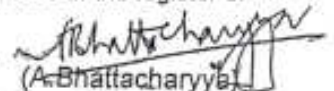
IMP - Copy to  
- Dr. J. S. Ghodke  
- OS/H. UK.  
- Principal.  
R. B. K.  
22-03-2016.

V. D. V. P. Mahavidyalaya  
Tasgaon, Dist. Sangli.  
Inward No. 1713  
Date - 22 MAR 2016  
File No. -



6. The College will furnish to the DST, Utilization Certificate and an audited Statement of Expenditure pertaining to the grant immediately after the end of each financial year.
7. The grant is being released subject to the 'Terms & Conditions' of the Program being agreed to by the Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, (Maharashtra). The College/University/Institute will maintain separate audited accounts and would keep whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the Institute, to be adjusted towards further installment of the grant.
8. The expenditure involved is to be debited to  
Demand No. 86 - Department of Science & Technology;  
"3425" - Other Scientific Research (Major Head);  
60 - Others (Sub-Major Head);  
60.200 - Assistance to other Scientific Bodies (Minor Head);  
25 - Research & Development Support  
25.01 - Grants-in-aid for R&D Support  
25.01.35 - Grants for creation of capital assets for the year 2015-2016 (Plan).  
The above release is made under 'R&D' Scheme.
9. The amount of Rs. 39,50,000/- (Rupees Thirty nine lakh and fifty thousand only) will be disbursed to the Principal, Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, (Maharashtra) in its A/c No. 20123531807, IFSC Code: MAHB0000282 with Bank of Maharashtra, TASGAON (282) Branch, Mall Bldg Gurruwar Peth Tasgaon, Tasgaon.
10. The sanction issues under the powers delegated to the Ministries and with the concurrence of the Integrated Finance Division, Department of Science & Technology vide their C.Dy.No. 5143 /IFD/2015-2016 dated. 02.02.2016.

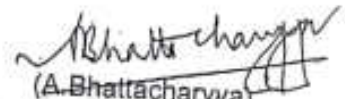
11. The sanction order is entered vide FIST No. 435 dated. 17.03.2016 in the register of grants.

  
(A. Bhattacharyya)  
Scientist 'D'

Email: [a.bhattacharyya@nic.in](mailto:a.bhattacharyya@nic.in)

Copy forwarded for information and necessary action to:

1. Pay & Accounts Officer, Department of Science & Technology, New Delhi - 110 016.
2. Cash Section (with two spare copies).
3. Principal, Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, (Maharashtra) (Pl. Note the New Project No.) (In case the amount sanctioned transferred under this sanction is not received by the P.I within 15 days from the date of issue of the sanction, the PI may intimate the fact with details of the IFD Diary No. & Date to the Joint Secretary and Financial Adviser at the e-mail address [fin.adv.dst.dbt@gmail.com](mailto:fin.adv.dst.dbt@gmail.com) for looking into the matter and resolving it).
4. Office of the Director & Audit, Scientific Department, AGCR Bldg., 3rd Floor, IP Estate, New Delhi - 110002.
5. Office of Accountant General, Maharashtra, Mumbai.
6. Head, R & D (Infrastructure), DST New Delhi.
7. FIST-Secretariat.
8. CoA / IFD, DST, New Delhi.
9. Sanction Folder.

  
(A. Bhattacharyya)  
Scientist 'D'

Email: [a.bhattacharyya@nic.in](mailto:a.bhattacharyya@nic.in)



सत्यमेव जयते

सूचना / Tel : 26862019, 26867373,  
26862134, 26862122 (EP/IAS)  
सूचना / Fax : 26869906, 26815637,  
26863847, 26862418  
वेबसाइट / Website: www.dst.gov.in

**Dr. Arindam Bhattacharyya**  
Scientist - E  
R & D Infrastructure Division  
Email: [a.bhattacharyya@nic.in](mailto:a.bhattacharyya@nic.in)  
Phone: 011-26590539  
Fax: 011-26602193

भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
टेक्नोलॉजी भवन, नया महरौली मार्ग  
नई दिल्ली-110 016

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD  
NEW DELHI-110 016

SR/FST/ College-208/ 2014

04<sup>th</sup> October 2018

Subject: Review Meeting of the ongoing project under "FIST Program 2013/ 2014" at Department of Chemistry, Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon, Sangli-416312, Maharashtra

Dear Sir/ Madam,

This is in reference to the aforesaid project being implemented at your College supported under FIST Program of DST. It is hoped that the grants released in different installments have been utilized for acquiring the required facilities in the College and these are being utilized effectively for teaching & research activities. It has now been decided to review the progress achieved in these projects identified during the year 2013/ 2014 and supported thereof. You are therefore kindly requested to attend the Mid-term Review Meeting on 27<sup>th</sup> October, 2018 (Saturday) at Ramada-Alleppey, Nehru Trophy Finishing Point, Punnamada, Alleppey-688001, Kerala at 9:30 am and present the progress achieved in this project. The duration of each presentation may be limited to 10 minutes. The presentation shall be a scientific one and the College should highlight utilization of the FIST support and its impact on the College's overall growth & achievements including acquiring & utilization of the facilities for teaching & research, improvement in teaching performance, any new experiments set up, impact & quality on research & development, publications records, award of sponsored project, any national/ international recognition etc..

It may be further kindly noted that only the Principal of the College needs to present the progress achieved in the Project during the aforementioned Meeting.

Further, a soft copy of the PPT presentation and Progress Report (as per format available at our Website: [www.fist-dst.org](http://www.fist-dst.org)) of the project should be mailed to [shiva.prasad@nic.in](mailto:shiva.prasad@nic.in) with a copy to [a.bhattacharyya@nic.in](mailto:a.bhattacharyya@nic.in) at DST positively by 17<sup>th</sup> October, 2018.

DST would reimburse the TA/DA including travel by AIR-INDIA only under Apex Economy fare as per Govt. norms, to one participant of each project for attending this meeting at Ramada, Alleppey, Kerala. A line of confirmation on participating in the meeting would also be appreciated. Due to constrain in providing accommodation etc. at Alleppey, we would be unable to provide the same for attending the meeting. However, for any other help or information, you may contact: Dr. G. Nagendra Prabhu (Mobile No. 03495017901; email: [nagendra.prabhu@gmail.com](mailto:nagendra.prabhu@gmail.com)).

Kindly note this is a whole day meeting and so you are requested to plan your travel schedule accordingly. Request for any rescheduling of the presentations would not be entertained.

We look forward to meet you in the meeting.

With best regards

*A. Bhattacharyya*  
(A. Bhattacharyya)

Principal  
Department of Chemistry  
Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya,  
Tasgaon,  
Sangli-416312  
Maharashtra

P. D. V. P Mahavidyalaya  
Tasgaon

Inword No. - 1142

Date - 11/10/2018

File No. -

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Dr. J. S. Ghoshle  
Dr. A. S. Kumbhar  
Rg  
11-10-18



## CSIR Senior Research Fellow



COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH  
HUMAN RESOURCE DEVELOPMENT GROUP  
(Extra Mural Research Division)  
CSIR Complex, Library Avenue, Pusa, New Delhi 110 012  
Tele: 25842074 / 25841701 / 25842729 / 25842704  
<http://www.csirhrdg.res.in>

File No:08/617(0001)/2014-EMR-I

Date: 13/3/2018

### MEMORANDUM

Subject: Extension of Senior Research Fellowship

Sir/Madam,

On the basis of satisfactory research progress of Mr. SACHINKUMAR KISAN SHINDE as assessed and recommended by the three member assessment committee on completion of two/three years as SRF, the Head – Human Resource Development Group (CSIR) has been pleased to accord his approval to the extension of fellowship as SRF with effect from 01/02/2018 to 31/01/2019 with a stipend of Rs 28000/- per month.

The Senior Research Fellowship is subject to the existing terms & conditions governing CSIR fellowship which inter-alia provides that the total tenure of JRF and SRF (from all sources) combined is limited to five years.

Head, HRDG, CSIR has further been pleased to sanction the following additional grant towards the stipend and contingency for the period commencing from 01/02/2018 to 31/01/2019

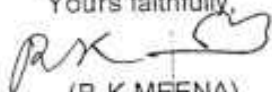
Stipend: Rs 336000/- Contingency: Rs 20000/- Total: Rs 356000/-

The claim may be limited to the period of current financial year. For the period beyond that the claim may be submitted at the start of next financial year. No separate renewal sanction will be issued next year.

The expenditure will be debited to the budget head grant in aid Fellowships P -81 101 for the current financial year.

You are kindly advised to visit the HRDG(CSIR) website ([www.csirhrdg.res.in](http://www.csirhrdg.res.in)) for rules/regulations governing the fellowship/associateship. You are also advised to submit Annual Progress Report alongwith other requisite documents well in time. Noncompliance of CSIR norms for submission of annual progress report alongwith other requisite documents within six months after completion of yearly tenure may result in termination of fellowship/associateship.

Yours faithfully,

  
(R.K.MEENA)  
SECTION OFFICER  
EMR-I  
13/3/2018

To,  
DR. SURESH S. PATIL  
PROJECT GUIDE  
DEPT. OF DEPARTMENT OF CHEMISTRY  
P.D.V.P COLLEGE  
TASGAON, Maharashtra  
Pin 416312  
Copy to:

1. Mr. SACHINKUMAR KISAN SHINDE, Through Project Guide
2. Principal, P.D.V.P COLLEGE  
TASGAON, Maharashtra  
Pin- 416312
3. F&AO (EMR)
4. Bill File
5. Office Copy





COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH  
HUMAN RESOURCE DEVELOPMENT GROUP  
(Extra Mural Research Division)  
CSIR Complex, Library Avenue, Pusa, New Delhi 110 012  
Tele: 25842074 / 25841701 / 25842729 / 25842704  
<http://www.csirhrdg.res.in>

File No:08/617(0001)/2014-EMR-I

Date: 17/10/2017

MEMORANDUM

Subject: Extension of Senior Research Fellowship

Sir/Madam,

On the basis of satisfactory research progress of Mr. SACHINKUMAR KISAN SHINDE as assessed and recommended by the three member assessment committee on completion of two/three years as SRF, the Head – Human Resource Development Group (CSIR) has been pleased to accord his approval to the extension of fellowship as SRF with effect from 01/02/2017 to 31/01/2018 with a stipend of Rs 28000/- per month.

The Senior Research Fellowship is subject to the existing terms & conditions governing CSIR fellowship which inter-alia provides that the total tenure of JRF and SRF (from all sources) combined is limited to five years.

Head, HRDG, CSIR has further been pleased to sanction the following additional grant towards the stipend and contingency for the period commencing from 01/02/2017 to 31/01/2018

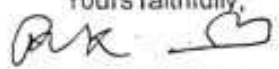
Stipend: Rs 336000/- Contingency: Rs 20000/- Total: Rs 356000/-

The claim may be limited to the period of current financial year. For the period beyond that the claim may be submitted at the start of next financial year. No separate renewal sanction will be issued next year.

The expenditure will be debited to the budget head grant in aid Fellowships P -81 101 for the current financial year.

You are kindly advised to visit the HRDG(CSIR) website ([www.csirhrdg.res.in](http://www.csirhrdg.res.in)) for rules/regulations governing the fellowship/associateship. You are also advised to submit Annual Progress Report alongwith other requisite documents well in time. Noncompliance of CSIR norms for submission of annual progress report alongwith other requisite documents within six months after completion of yearly tenure may result in termination of fellowship/associateship.

Yours faithfully,

  
(R.K.Meena)  
SECTION OFFICER  
EMR-I  
17/10/2017

To,  
DR. SURESH S. PATIL  
PROJECT GUIDE  
DEPT. OF DEPARTMENT OF CHEMISTRY  
P.D.V.P COLLEGE  
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Pin 416312  
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COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH  
HUMAN RESOURCE DEVELOPMENT GROUP  
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<http://www.csirhrdg.res.in>

File No:08/617(0001)/2014-EMR-I

Date: 14/12/2016

MEMORANDUM

Subject: Upgradation of Junior Research Fellow JRF (NET) to Senior Research Fellow, SRF (NET)

Sir/Madam,

On the basis of satisfactory research progress of Mr. SACHINKUMAR KISAN SHINDE as assessed and recommended by the three member assessment committee on completion of two years as JRF, the Head – Human Resource Development Group (CSIR) has been pleased to upgrade fellowship from JRF (NET) to SRF (NET) and enhance stipend from Rs 25000/- p.m. to Rs 28000/- p.m. with effect from 01/02/2016 to 31/01/2017.

The Senior Research Fellowship is subject to the existing terms & conditions governing CSIR fellowship which inter-alia provides that the total tenure of JRF and SRF (from all sources) combined is limited to five years.

Head, HRDG, CSIR has further been pleased to sanction the following additional grant towards the stipend and contingency for the period commencing from 01/02/2016 to 31/01/2017

Stipend: Rs 3,36,000/-

Contingency: Rs 20,000/-

Total: Rs 3,56,000/-

The claim may be limited to the period of current financial years. For the period beyond that the claim may be submitted at the start of next financial year. No separate renewal sanction will be issued next year. The expenditure will be debited to the budget head grant-in-aid Fellowships P -81 101 for the current financial year.

You are kindly advised to visit the HRDG(CSIR) website ([www.csirhrdg.res.in](http://www.csirhrdg.res.in)) for rules/regulations governing the fellowship/associateship. You are also advised to submit Annual Progress Report alongwith other requisite documents well in time. Noncompliance of CSIR norms for submission of annual progress report alongwith other requisite documents within six months after completion of yearly tenure may result in termination of fellowship/associateship.

Yours faithfully,

(R.K.Meena)  
SECTION OFFICER  
EMR-I  
14/12/2016

To,  
DR. SURESH S. PATIL  
PROJECT GUIDE  
DEPT. OF DEPARTMENT OF CHEMISTRY, P.D.V.P COLLEGE  
TASGAON, Maharashtra, Pin 416312

Copy to:

1. Mr. SACHINKUMAR KISAN SHINDE, Through Project Guide
2. Principal, P.D.V.P COLLEGE,  
TASGAON, Maharashtra,  
Pin- 416312.
3. F&AO (EMR)
4. Bill File
5. Office Copy





# Chhatrapati Shahu Maharaj Research, Training and Human Development Institute, Pune

( An Autonomous Institute of Other Backward Class, Social & Educational  
Backward Class, Vimukt Jati & Nomadic Tribes and Special Backward Class  
Welfare Department Government of Maharashtra)



Balchitravani, Gopal Ganesh Agarkar Road, Behind Senapati Bapat Road, Pune (Maharashtra) - 411 004.

Email ID : md.sarthi@maharashtra.gov.in

CIN- U74999PN2018NPL177394

Website : www.sarthi-maharashtrageov.in

**Subject: - SARTHI's National Research Fellowship-2019 for Maratha, Kunbi,  
Kunbi-Maratha and Maratha-Kunbi candidates to pursue M.Phil /  
Ph.D. Degree**

Dear Ashutosh Rajun Jagdale

Congratulations!!

With reference to your application for the Research Fellowships for Maratha, Kunbi, Kunbi -Maratha and Maratha-Kunbi candidate, I am happy to inform you that, Chhatrapati Shahu Maharaj Research, Training and Human Development Institute (here in after referred to as SARTHI) has selected you for the Chhatrapati Shahu Maharaj National Research Fellowship-2019 (here in after referred to as (CSMNRF-2019). The financial assistance under the fellowship is awarded to you for the research subject mentioned in your registration letter submitted by you. The fellowship award is subject to genuineness of documents submitted by you and your compliance to the terms & conditions of SARTHI.

You will eligible for financial assistance, relevant to you, as given in the table below w.e.f. 11.09.2019 under CSMNRF- 2019:-

Sr. no.	Item	Financial Assistance
1.	Amount of Fellowship (For All Subjects)	@Rs. 25,000/-per month for initial two years(JRF), @ Rs. 28,000/- per month for the remaining tenure (SRF)
2.	Contingency (For Humanities, Social Sciences and Commerce)	@Rs.10, 000/-per annum for initial two years, @ Rs. 20,500/- per annum for remaining three years.
3.	Contingency (For Sciences and Engineering & Technology)	@Rs.12,000/-per annum for initial two years, @ Rs.25, 000/-per annum for remaining three years.
4.	Escorts/Reader Assistance	@Rs. 2,000/-per month in case of physically and visually challenged candidates.
5.	HRA	As per University/ Institution rules.

Please note that this award letter is being issued on the basis of photocopies of the following documents furnished by you to SARTHI.





## Chhatrapati Shahu Maharaj Research, Training and Human Development Institute, Pune

(An Autonomous Institute of Other Backward Class, Social & Educational  
Backward Class, Vimukt Jati & Nomadic Tribes and Special Backward Class  
Welfare Department Government of Maharashtra)



Balchitrawani, Gopal Ganesli Agarkar Road, Behind Senapati Bapat Road, Pune (Maharashtra) - 411 004.

Email ID : md.sarthi@maharashtra.gov.in

CIN- U74999PN2018NPL177394

Website : www.sarthi-maharashtrgov.in

**Subject: Chief Minister Special Research Fellowship-2019 for Maratha, Kunbi, Kunbi-  
Maratha and Maratha-Kunbi candidates to pursue M.Phil. / Ph.D. Degree**

Dear Rupesh Chandrakant Patil

Congratulations!!

With reference to your application for the Research Fellowships for Maratha, Kunbi, Kunbi-Maratha and Maratha-Kunbi candidates, I am happy to inform you that Chhatrapati Shahu Maharaj Research, Training and Human Development Institute (hereinafter referred to as SARTHI) has selected you for the Chief Minister Special Research Fellowship-2019 (hereinafter referred to as CMSRF-2019). The financial assistance under the Fellowship is awarded to you for the research subject mentioned in your registration letter submitted by you. The Fellowship award is subject to genuineness of documents submitted by you and your compliance to the terms and conditions of SARTHI.

You will be eligible for financial assistance relevant to you, as given in the table below w.e.f. 11.09.2019 under CMSRF-2019:

Sr.	Item	Financial Assistance
1.	Amount of Fellowship (For All Subjects)	@Rs. 25,000/-per month for initial two years (JRF), @ Rs. 28,000/- per month for the remaining tenure (SRF)
2.	Contingency (For Humanities, Social Sciences and Commerce)	@Rs.10,000/-per annum for initial two years, @ Rs. 20,500/- per annum for remaining three years.
3.	Contingency (For Sciences and Engineering & Technology)	@Rs.12,000/-per annum for initial two years, @ Rs.25,000/-per annum for remaining three years.
4.	Escorts/Reader Assistance	@Rs. 2,000/-per month in case of physically and visually challenged candidates.
5.	HRA	As per University/Institution rules.

Please note that this award letter is being issued on the basis of photocopies of the following documents furnished by you to SARTHI:

1. Photocopy of your registration document for regular and full time M.Phil. /Ph.D. course in a University/ Institution, which is included and declared fit to receive financial assistance under Sec.2 (f) and 12 B of the UGC Act 1956;
2. The photocopies of other relevant documents and pertaining to you.

Please note that the Fellowship amount and other financial assistance as per your eligibility, stream wise, shall be disbursed through your savings Bank Account in Bank of India.



"ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षणप्रसार" - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin- 416 312 ☎ - STD : 02346-250665, 250575 FAX : 250575

• **Affiliated to Shivaji University, Kolhapur** •

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• Established Year : June 1962 • P. B. No. : 14 • Jr. College No. : J22-10-001 • Sr. College Code No. :  $\frac{SIACR}{x}$  Jr.: C-8



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ISO Certified : 9001:2015

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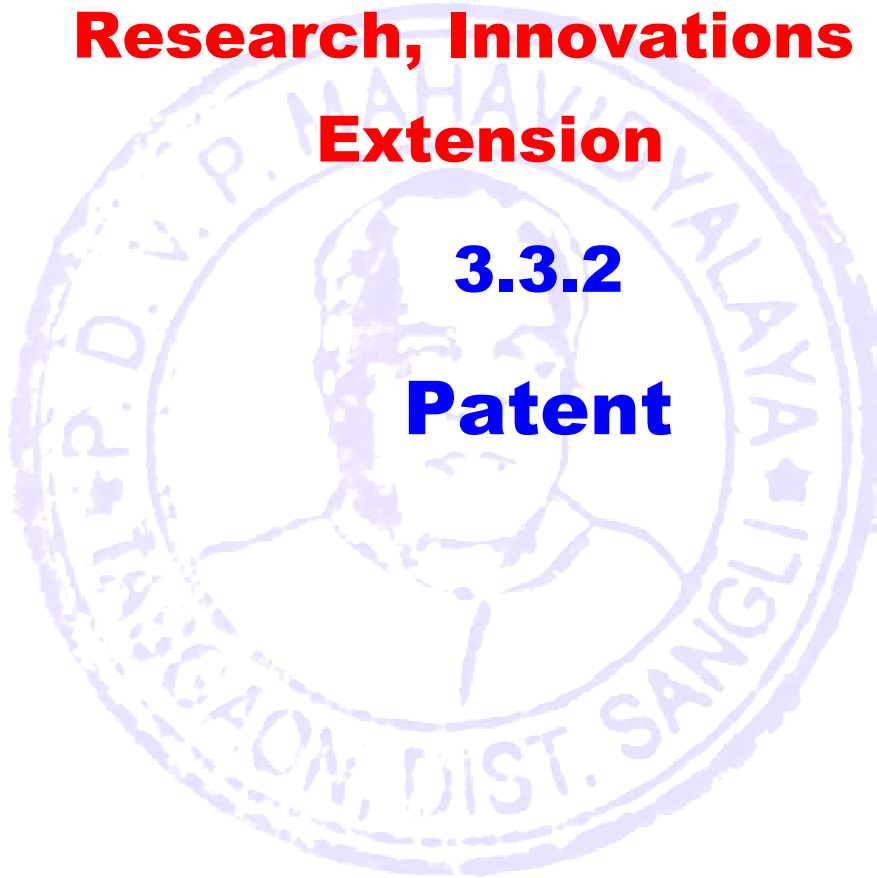
Date :

## Criterion III

### Research, Innovations and Extension

#### 3.3.2

#### Patent







INTELLECTUAL  
PROPERTY INDIA

PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS



सत्यमेव जयते

क्रमांक : 022111793  
SL No :



भारत सरकार  
GOVERNMENT OF INDIA

पेटेंट कार्यालय  
THE PATENT OFFICE

पेटेंट प्रमाणपत्र  
PATENT CERTIFICATE  
(Rule 74 Of The Patents Rules)

पेटेंट सं. / Patent No. : 358284  
आवेदन सं. / Application No. : 201821013419  
फाइल करने की तारीख / Date of Filing : 09/04/2018  
पेटेंटी / Patentee : 1.MR. KADAM SHUDDHODAN NARHARI 2.DR.  
AMBHORE AJAY NIWRUTTIRAO 3.DR. DAWANE  
BHASKAR SADASHIV

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में यथाप्रकटित A RAPID PROCESS FOR THE SYNTHESIS OF ORGANIC SULFIDE BY USING IN SITU-GENERATED N-HETERO SULFANYLSUCCINIMIDES AT ROOM TEMPERATURE. नामक आविष्कार के लिए, पेटेंट अधिनियम, १९७० के उपबंधों के अनुसार आज तारीख 9th day of April 2018 से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled A RAPID PROCESS FOR THE SYNTHESIS OF ORGANIC SULFIDE BY USING IN SITU-GENERATED N-HETERO SULFANYLSUCCINIMIDES AT ROOM TEMPERATURE. as disclosed in the above mentioned application for the term of 20 years from the 9th day of April 2018 in accordance with the provisions of the Patents Act,1970.



अनुदान की तारीख : 10/02/2021  
Date of Grant :

पेटेंट नियंत्रक  
Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, 9th day of April 2020 को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।

Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 9th day of April 2020 and on the same day in every year thereafter.





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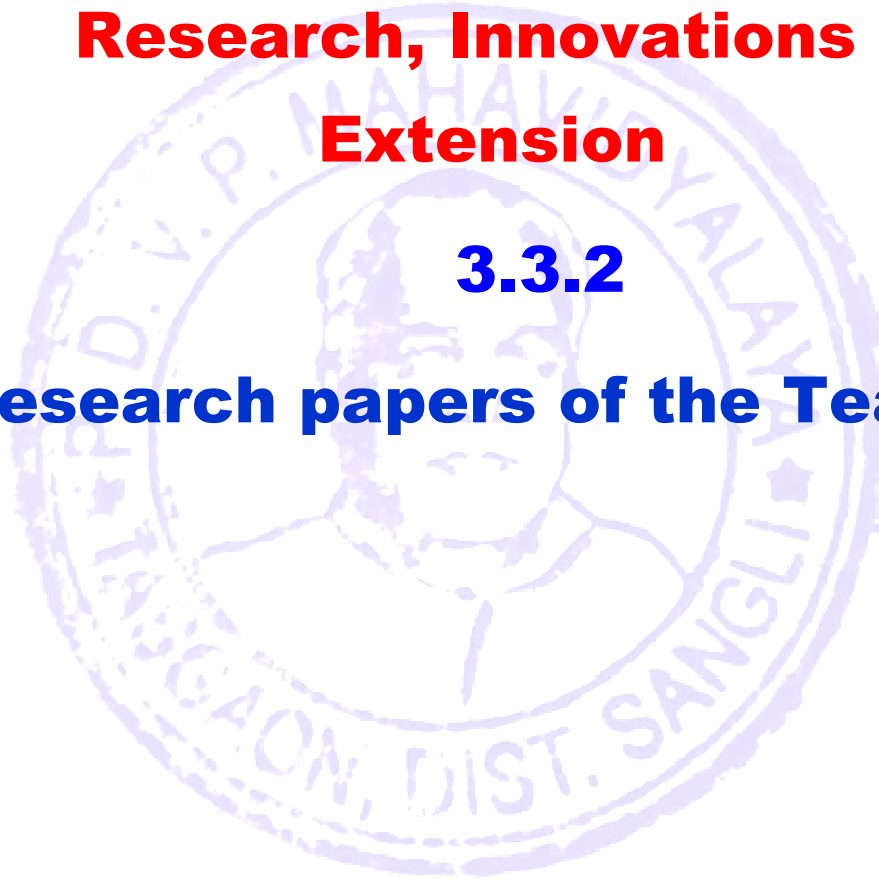
Date :

## Criterion III

### Research, Innovations and Extension

#### 3.3.2

### Research papers of the Teachers





## Revisit to Henry reaction by non conventional heterogeneous and efficient catalyst for nitroalcohol synthesis

Swati D. Jadhav<sup>1</sup> · Rupesh C. Patil<sup>1</sup> · Ashutosh A. Jagdale<sup>1</sup> · Suresh S. Patil<sup>1</sup>

Received: 6 July 2021 / Accepted: 13 October 2021

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### Abstract

A sustainable, green and efficient process for the synthesis of 2-nitro alcohol derivatives from different substituted aromatic aldehydes with nitroalkane by stirring at ambient temperature with high product yield is reported. Adoption of very mild reaction conditions, use of Calcined Eggshell (CES) as natural catalyst and simple workup are expected to contribute to the development of environmentally benign synthetic method for Henry (nitroaldol) reaction. CES is ecologically safe, inexpensive, and attractive heterogeneous base catalyst obtained from renewable resources, thus opening a new perspective for this process.

### Graphical abstract



**Keywords** Calcined eggshell · Heterogeneous catalyst · Henry reaction · Nitro alcohol

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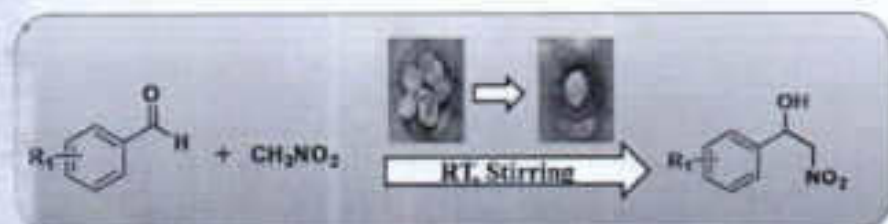
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# Agro-Waste Generated Pd/CAP-Ash Catalyzed Ligand-Free Approach for Suzuki–Miyaura Coupling Reaction

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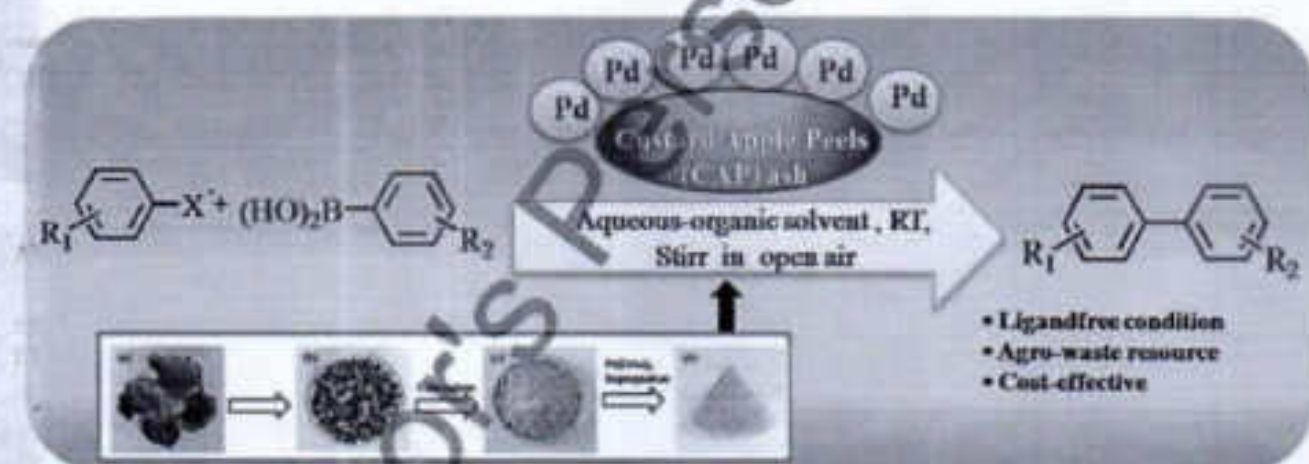
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## Graphic Abstract



**Keywords** Agro-waste · Custard apple peels · Palladium · Suzuki–Miyaura coupling

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## 1 Introduction

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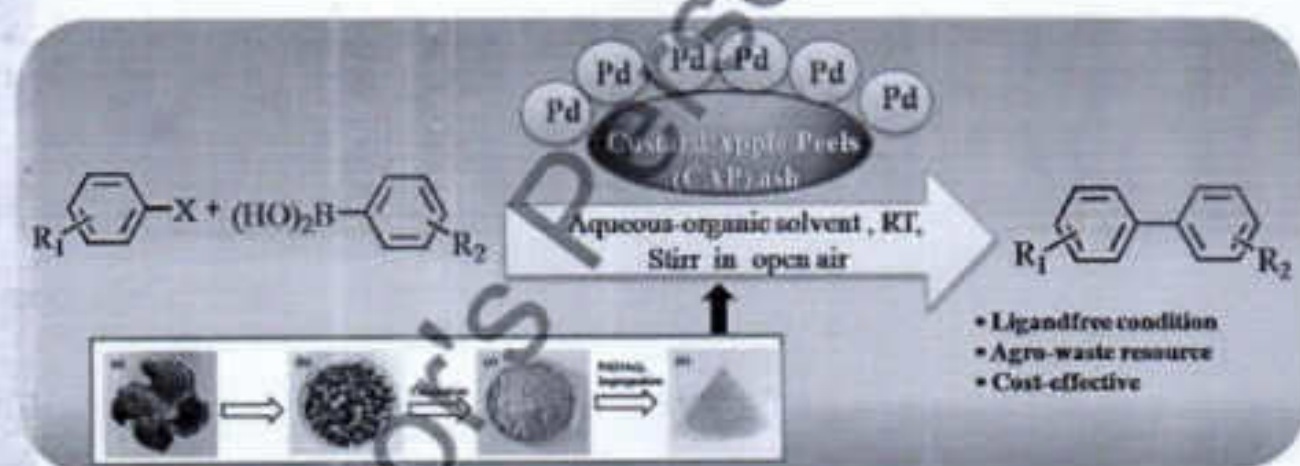
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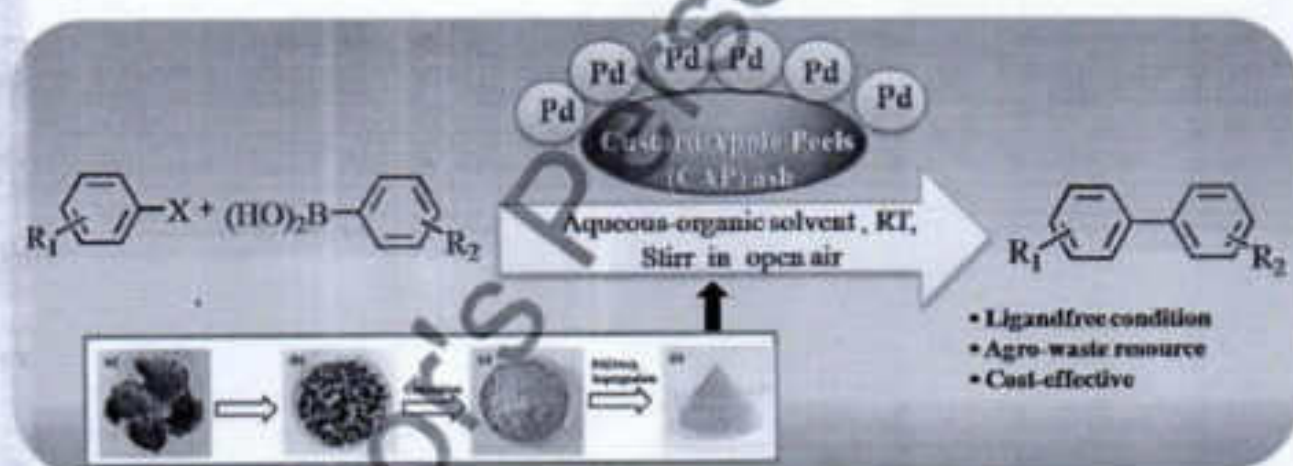
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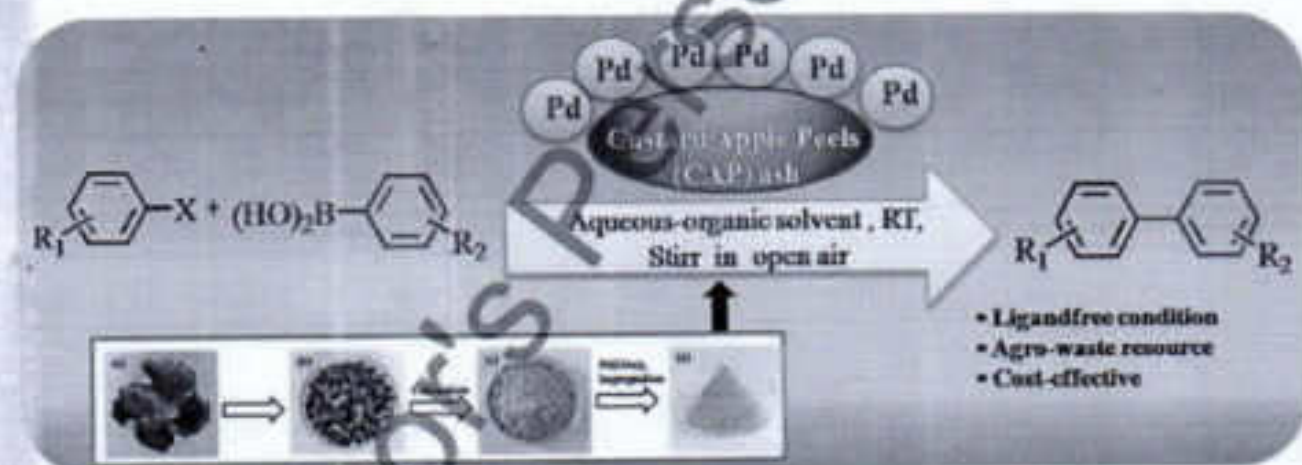
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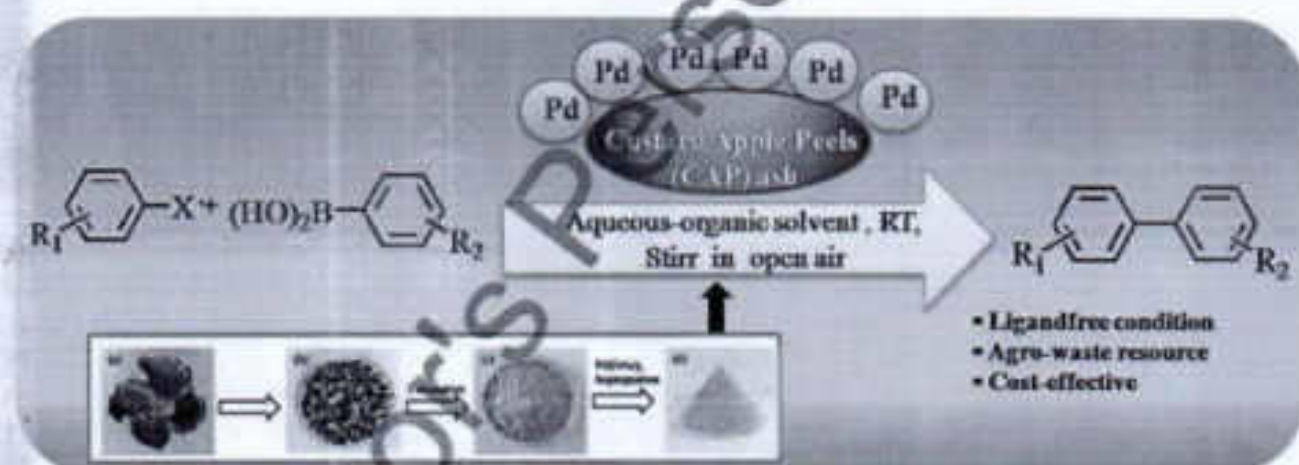
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### Abstract

A transition metal/ligand/additive/promoter-free synthesis of 3-methyl-4-arylmethylene-isoxazol-5(4*H*)-ones and the Biginelli-like synthesis is carried out in a natural acidic medium of *Averrhoa bilimbi* extract (ABE) with cleaner and facile approach mentioned here. The isoxazol-5(4*H*)-ones and 11-acetyl-2-methyl-5,6-dihydro-2*H*-2,6-methanobenzo[*g*][1,3,5]-oxadiazocin-4(3*H*)-ones are synthesized, respectively, under aerobic conditions at room temperature and at reflux temperature of ethanol. This eco-friendly and economically cheap, non-toxic acidic catalytic media is obtained from the renewable resource, and its dynamic phase is confirmed by the optical microscopy, DLS technique, and with critical micelle concentration (c.m.c.) measurements. The notable advantages are excellent yields of the obtained products, versatility in handling substrates, reuse of the catalyst, use of no hazardous organic solvents, and minimization of waste or side products. So, the reported procedure is simple, evergreen, and a sound alternative to the existing protocols for isoxazol-5(4*H*)-one synthesis and for Biginelli-like synthesis as well.

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## Fruit Extract of *Averrhoa bilimbi*: A Green Neoteric Micellar Medium for Isoxazole and Biginelli-Like Synthesis

Bhagyashree M. Patil<sup>1</sup> · Sachinkumar K. Shinde<sup>2</sup> · Ashutosh A. Jagdale<sup>2</sup> · Swati D. Jadhav<sup>2</sup> · Suresh S. Patil<sup>2</sup>

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# Chickpea leaf exudates: a green Brønsted acid type biosurfactant for bis(indole)methane and bis(pyrazolyl)methane synthesis†

 Rupesh C. Patil,<sup>1</sup> Shashikant A. Damate,<sup>2</sup> Dnyandev N. Zambare<sup>2</sup> and Suresh S. Patil<sup>1\*</sup>

A clean and highly efficient protocol for green synthesis of bis(indole)methanes and bis(pyrazolyl)methanes has been successfully achieved by using a naturally sourced bio-surfactant, chickpea leaf exudates (CLE), as a Brønsted acid-type catalyst. The reaction proceeds smoothly with CLE in alcoholic medium at 60 °C in a very short reaction time, and therefore it is a green, environmentally sound alternative to the existing protocols. In comparison to the reported conventional methods, this synthetic pathway complies with several key requirements of green chemistry principles such as avoiding the use of any toxic/hazardous catalyst and additives/promoters, the use of a biodegradable catalyst obtained from renewable resources, auxiliary solvent conditions, and reusability of the catalyst. Thus, the reported protocol offers an attractive option because of its ecological safety, straightforward work-up procedure and excellent values of green chemistry metrics as compared with other reported methods.

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## 1. Introduction

C-C bonding in organic transformations is an indispensable tool for synthesis of numerous structural moieties which are indeed building blocks of agrochemicals, natural products, medicinally important compounds, and so forth.<sup>1,2</sup> The simplest and of course the most imperative synthetic transformations are based on formation of carbon-carbon and carbon-nitrogen bonds. These transformations have been proved as a pioneer for synthesis of various biologically active compounds and construction of fine chemicals pharmaceutical agents, and smart engineering materials, including conducting polymers and molecular wires.<sup>3–5</sup>

Due to the environmental issues associated with many organic transformations, there is a huge challenge for researchers to develop chemical processes using more environmentally acceptable reagents, catalysts, solvents, and atom-efficient methods, and energy-efficient technologies eliminating waste production as well as employing renewable feedstocks are experiencing a profound challenge to meet sustainability

criteria.<sup>6</sup> Furthermore, the environmental risks posed by volatile and toxic organic solvents have become a major concern, as organic reactions employ more consumption of solvents than reactants and the employed solvents are difficult to recycle;<sup>7</sup> to overcome this problem, the first task is to replace organic solvents with auxiliary ones.

Nowadays, an important aspect which is receiving growing attention is the use of alternative reaction media that avoid the problems associated with many of the traditional volatile organic solvents.<sup>8</sup> The use of hazardous solvents in the chemical industry is associated with a variety of indirect environmental impacts such as non-renewable resource reduction as a result of petrochemical solvent production, air emissions due to solvent incineration or high energy investment for solvent recycling processes.<sup>9</sup> Therefore, the ability to efficiently carry out organic reactions in more environmentally friendly solvents remains an important object of green chemistry research. It means that, wherever practicable, synthetic methods should be designed to use and generate substances that possess little or no toxicity to animal as well as human health and the environment.<sup>10</sup> Our interest is using easily available natural feedstocks to replace chemical catalysts and solvents.

Biosurfactants, being naturally sourced materials, have certain advantages over chemical surfactants, such as their biodegradable nature, their less toxic nature, and their ecological acceptability. One of the fundamental properties of surfactants is their self-association into organized molecular structures such as micelles,

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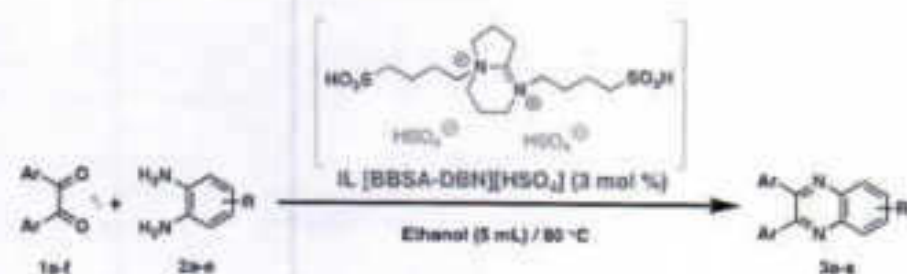
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and high ionic conductance. By virtue of this, they are acknowledged as suitable solvent for wide array of synthetic protocols [39]. ILs are widely classified in two groups viz. protic ionic liquids (PILs) and aprotic ionic liquids (AILs). Among these, protic ionic liquid is a class of ionic liquids that are formed by mixing strictly equimolar amount (1:1) of appropriate Bronsted acids and bases. Proton transfer from the acid to base creates proton-donor as well as proton-acceptor sites establishing hydrogen-bonded network is the key property of PILs that distinguish them from other ILs [40]. Therefore, its arguent need to developed new protocol for the synthesis of quinoxaline using  $-SO_3H$  bifunctionalized Bronsted acidic ILs.

In continuation of our research interest in the development of new methodologies using clean and more efficient catalysts [41–44], herein, we wish to report a synthesis of novel  $-SO_3H$  bifunctionalized Bronsted acidic ionic liquid 1, 5-bis (butanesulphonic acid)-diazobicyclo [4,3,0] non-5-enium hydrogen sulphate [BBSA-DBN]  $[HSO_4^-]$  in aqueous solution and their application to synthesize quinoxalines via one-pot two component condensation of substituted 1,2-diketones and various aromatic 1,2-diamines in ethanol at 80 °C (Scheme 1). The highly Bronsted acidity of IL, due to the presence of two  $-SO_3H$  groups and two  $HSO_4^-$  anions were determined by Hammett method. Moreover, the IL [BBSA-DBN] $[HSO_4^-]$  could be easily recovered and reused at least five times without change in its catalytic activity. Advantage of this protocol are mild reaction condition, high yield, simple work-up, no chromatographic separation required and low reaction time.

## Results and discussion

The synthetic approach used to assemble the zwitterionic precursors to these acidic  $-SO_3H$  functionalized IL, is well precedented [45]. Reaction of the neutral nucleophile 1,5-diazobicyclo[4,3,0]non-5-ene [DBN] with 1,4-butanedisulfonic acid produces the requisite zwitterions in excellent yields. In the second step, the simultaneous realization of the latent acidity of the zwitterions and their conversion into IL, 1, 5-bis(butanesulphonic acid)-diazobicyclo [4,3,0]non-5-enium hydrogen sulphate [BBSA-DBN] $[HSO_4^-]$  is accomplished. The chemical yields for both the zwitterion formation and acidification steps are essentially quantitative. The process of



**Scheme 1** One-pot condensation of 1,2-diketones **1** with aromatic 1,2-diamines **2** for synthesis of quinoxalines **3**.



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# One-pot multicomponent synthesis of *N*-sulfonyl amidines using magnetic separable nanoparticles-decorated *N*-heterocyclic carbene complex with copper

Arvind Pawar<sup>1</sup> · Shivanand Gajare<sup>2</sup> · Audumbar Patil<sup>2</sup> · Rajanikant Kurane<sup>2</sup> · Gajanan Rashinkar<sup>2</sup> · Suresh Patil<sup>1</sup>

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## Abstract

Magnetic separable nanoparticles-decorated *N*-heterocyclic carbene complex with copper (MNP[1-Methyl benzimidazole]NHC@Cu) has been prepared by covalent grafting of ionic liquid like 1-methyl benzimidazole unit on the surface of chloro-functionalized Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles (MNPs) followed by metallation with copper(I) iodide. MNP[1-Methyl benzimidazole]NHC@Cu complex has been characterized by different techniques including Fourier transform infrared (FT-IR) spectroscopy, thermogravimetric analysis (TGA), energy-dispersive X-ray (EDX) analysis, X-ray diffraction (XRD), transmission electron microscopy (TEM) and vibrating sample magnetometer (VSM). MNP[1-Methyl benzimidazole]NHC@Cu complex was successfully implemented as heterogeneous catalyst in one-pot multicomponent synthesis of *N*-sulfonyl amidines from phenylacetylene, tosyl azide and amines at room temperature. Complex could be recycled six times without significant loss in the yield of product.

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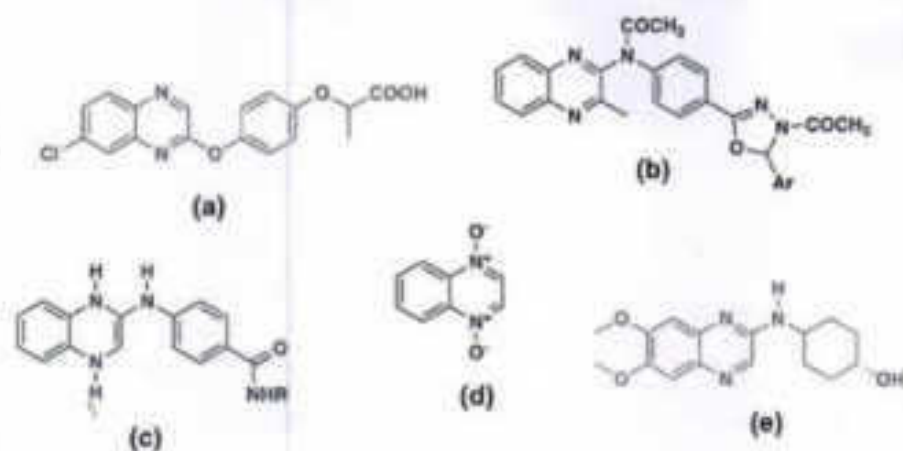


Fig. 1 Some biological active quinoxaline derivatives

However, these methods show varying degrees of success as well as limitations such as use of expensive catalysts, prolonged reaction times, lower yields, use of toxic organic solvents and harsh reaction conditions. Although a large number of catalytic systems have been developed for the synthesis of quinoxaline using the routes, there is a still scope for improvement especially towards developing an efficient protocol using a highly forceful catalyst. Organic transformation by ionic liquids (ILs) has concerned increasing interest offering many economic and practical pros. From a viewpoint of ecological advantages of ILs, it is desirable to use ILs as a catalyst since it is harmless and environmentally benign [31].

Using ILs, avoids the use of toxic and expensive organic solvents that are normally used in organic transformation owing to their special physical and chemical properties such as low vapour pressure, non-volatility, high thermal stability, excellent solvation ability, wide liquid temperature range, non-inflammability, excellent chemical stability, easy recyclability and the possibility of varying their structure to manipulate parameters like density, solubility [32, 33], etc. These properties and most importantly their power as solvent encourage the scientist to synthesis such compounds. Coulombic interactions are the dominant interactions between the ions; however, intermolecular interactions like  $\pi$ - $\pi$  stacking, van der Waals interaction and hydrogen bonding, so forth help the supramolecular organization of the ILs [34]. It should be noted that covalently tethered alkane sulphonic acid group to the IL cation produced a strong Brønsted acid [35]. These ILs with SO<sub>3</sub>H as functional have been intensively studied over the past five years. Also, due to this functional group, their acidic properties and water solubility could be improved [36].

Recently, DBN was significantly used as catalysts in different research area. The combination of cation with DBN can produce novel types of ILs and these hybrid materials are used as catalysts [37]. The great number of functional ILs has been designed for different purposes [38]. ILs have been deemed as recyclable and environment friendly substitutes for volatile organic solvents attributing to their attractive negligible vapour pressure, chemical and thermal stability, non-flammability





## A synergetic role of *Aegle marmelos* fruit ash in the synthesis of biscoumarins and 2-amino-4*H*-chromenes

Rupesh C. Patil, et al. [full author details at the end of the article]

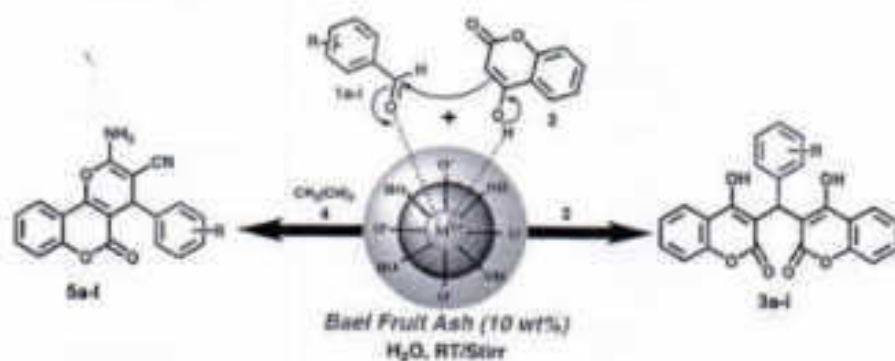
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### Abstract

A dry rind of *Aegle marmelos* (bael) fruit ash as a synergetic alternative material to an expensive, toxic and corrosive catalysts for the synthesis of biscoumarins and 2-amino-4*H*-chromenes at ambient temperature in water is reported. The spectroscopic evidence from EDX, FTIR, XRD and SEM analysis of bael fruit ash supports the presence of metal oxides, carbonates and hydroxides which are intensely responsible for the acceleration of the reactions. The striking features of this protocol are utilization of bio-waste, cost-effective, recyclable and biodegradable catalytic system, which provide good to excellent yields in a short reaction time.

### Graphic abstract



**Keywords** Bio-waste · Bael fruit · Natural catalyst · Biscoumarins · 2-Amino-4*H*-chromenes

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## A synergetic role of *Aegle marmelos* fruit ash in the synthesis of biscoumarins and 2-amino-4*H*-chromenes

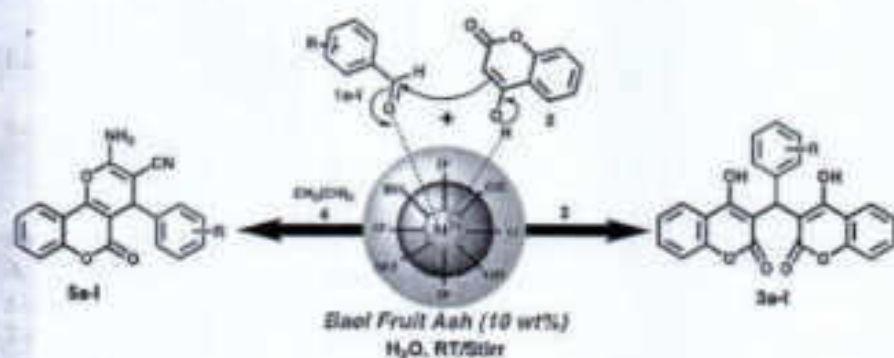
Rupesh C. Patil, et al. [full author details at the end of the article]

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### Abstract

A dry rind of *Aegle marmelos* (bael) fruit ash as a synergetic alternative material to an expensive, toxic and corrosive catalysts for the synthesis of biscoumarins and 2-amino-4*H*-chromenes at ambient temperature in water is reported. The spectroscopic evidence from EDX, FTIR, XRD and SEM analysis of bael fruit ash supports the presence of metal oxides, carbonates and hydroxides which are intensely responsible for the acceleration of the reactions. The striking features of this protocol are utilization of bio-waste, cost-effective, recyclable and biodegradable catalytic system, which provide good to excellent yields in a short reaction time.

### Graphic abstract



**Keywords** Bio-waste · Bael fruit · Natural catalyst · Biscoumarins · 2-Amino-4*H*-chromenes

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11164-020-04367-6>) contains supplementary material, which is available to authorized users.





# Supported NHC-Benzimi@Cu Complex as a Magnetically Separable and Reusable Catalyst for the Multicomponent and Click Synthesis of 1,4-Disubstituted 1,2,3-Triazoles via Huisgen 1,3-Dipolar Cycloaddition

Arvind Pawar<sup>1,3</sup> · Shivanand Gajare<sup>2</sup> · Ashutosh Jagdale<sup>1</sup> · Sandip Patil<sup>1</sup> · Wilson Chandane<sup>2</sup> · Gajanan Rashinkar<sup>2</sup> · Suresh Patil<sup>1</sup>

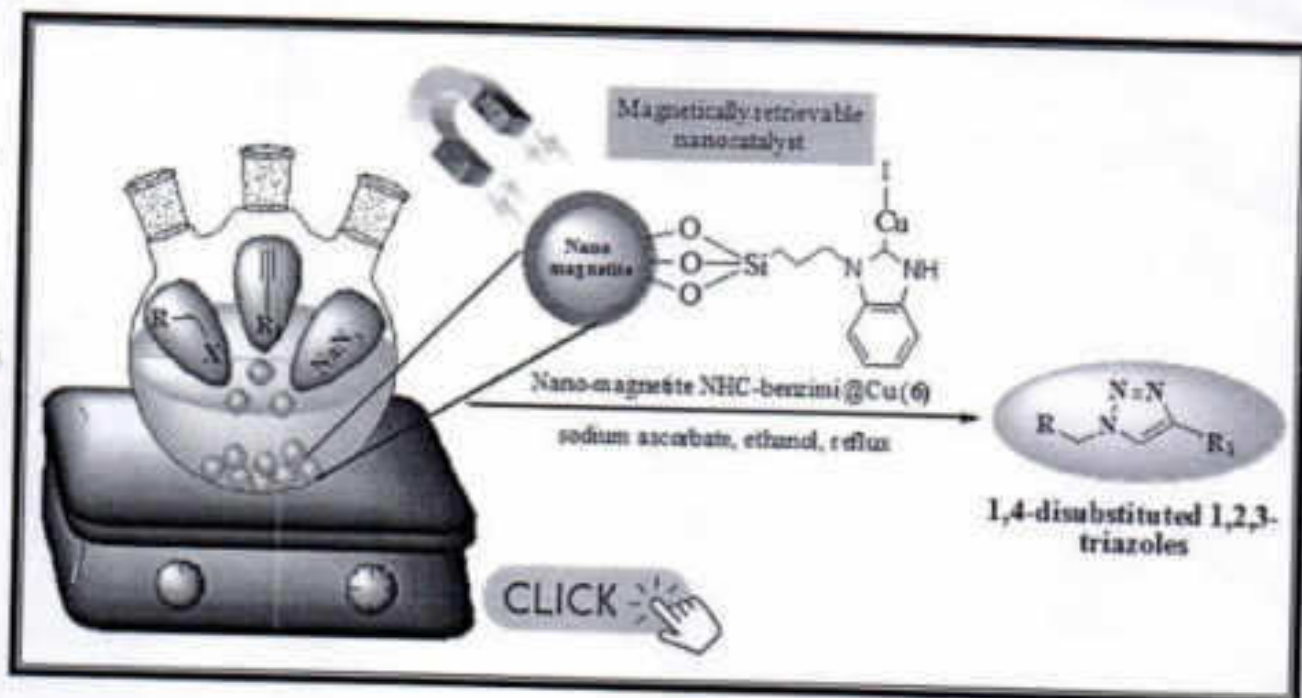
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## Abstract

In this paper, we report a novel magnetically separable silica coated copper nano-magnetite NHC-benzimi@Cu complex as heterogeneous catalyst for the multicomponent click reaction via Huisgen 1,3-dipolar cycloaddition reaction of alkyl or aryl halide, sodium azide and terminal alkyne, which affords various 1,4-disubstituted 1,2,3-triazoles. The multistep prepared nano catalyst has been characterized by various spectroscopic methods such as FT-IR, TGA, EDX, XRD, TEM and VSM. The heterogeneous nano catalyst structures coated on the copper surface are responsible for the excellent catalyst performances in the reaction. The reusability of the catalyst makes the present protocol more fascinating from an environmental and economic point of view.

## Graphic Abstract



**Keywords** Magnetically retrievable nanocatalyst · Click reaction · Copper iodide · 1,2,3-triazoles · Reusability

Extended author information available on the last page of the article

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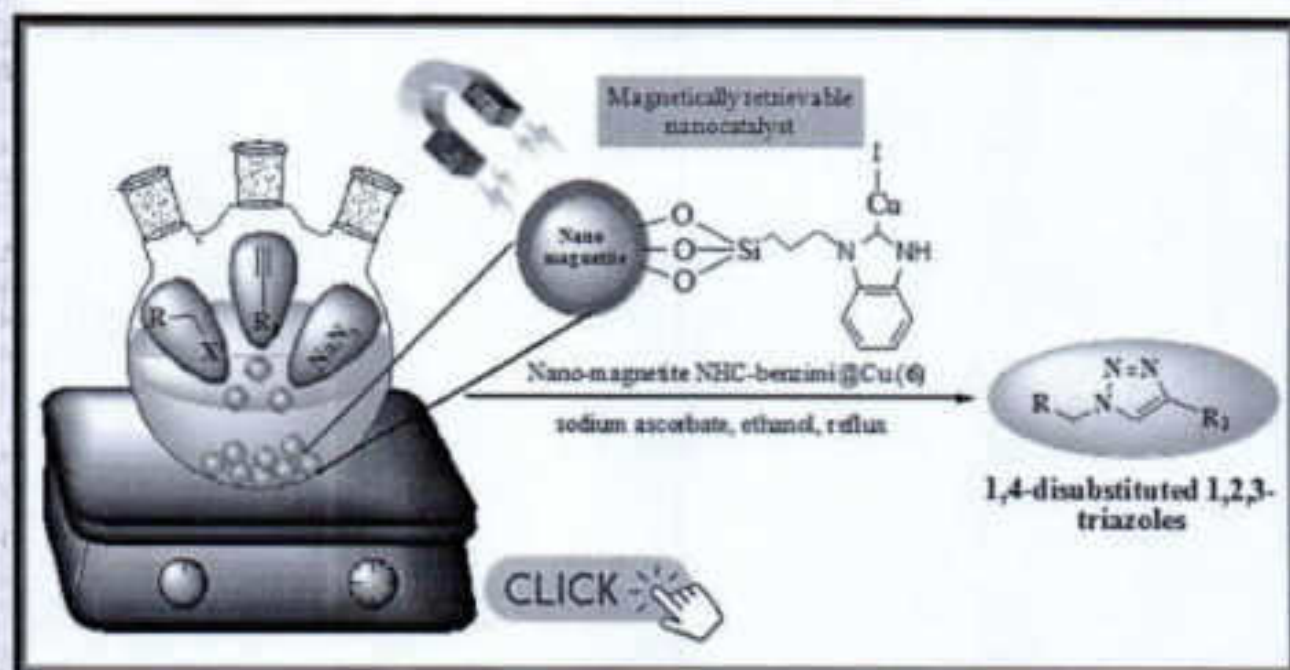
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## Natural Feedstock in Catalysis: A Sustainable Route Towards Organic Transformations

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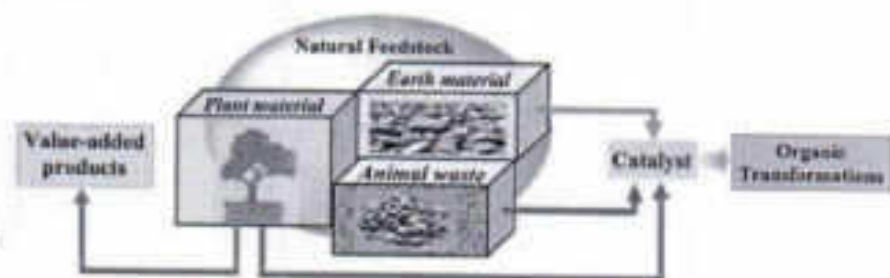
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### Abstract

Catalysts are the jewel in the crown of the chemical industry, accelerating reaction kinetics and augmenting the efficiency of desired reaction paths. Natural feedstock is a renewable resource capable of providing valuable functional products; in addition, it confers an opportunity to create catalysts. As an alternative to stoichiometric reagents, and as a part of a sustainable approach, the implications of using natural feedstocks as a source of new catalysts has attracted considerable interest. Natural feedstock-derived catalysts can promote chemical transformations more efficiently. Recent reports have highlighted the significant role of these biogenic, cost-effective, innocuous, biodegradable materials as catalysts in many biologically and pharmacologically important protocols. This review outlines the decisive organic transformations for which feedstock-derived catalysts have been employed effectively and successfully, along with their economic and environmental benefits over traditional catalytic systems.

### Graphic Abstract



**Keywords** Plant material · Animal waste · Earth material · Catalysis · Organic transformations

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## Brønsted acid hydrotrope combined catalysis in water: a green approach for the synthesis of indoloquinolines and bis-tetronic acids

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### Abstract

The present work describes the applications of Brønsted acid hydrotrope combined catalyst (BAHC) as a mild, efficient and reusable catalyst for synthesis of indoloquinolines and bis-tetronic acids in water. Using BAHC, we synthesized many indoloquinoline derivatives from isatins and *o*-phenylene diamine using 10 mol% PTSA in 40% aqueous hydrotropic (NaPTS) solution at room temperature with 83–90% yields. On the other hand, the reaction of tetronic acid with the aldehydes/isatins forms bis-tetronic acids with 83–88% yields through Knoevenagel condensation–Michael addition pathway in same BHAC. Moreover, the BAHC can be recycled upto 5th cycles with slight decrease in product yields. The extremely simple operational methodology, green solvent, ambient reaction conditions and high yields render this approach extremely appealing for the synthesis of different heterocyclic compounds.

**Keywords** Brønsted acid hydrotrope combined catalyst (BAHC) · Water · Indoloquinolines · Bis-tetronic acids

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## PAPER



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## Metal-free efficient thiolation of C(sp<sup>2</sup>) functionalization *via in situ*-generated NHTS for the synthesis of novel sulfenylated 2-aminothiazole and imidazothiazole†

Shuddhodan N. Kadam,<sup>a</sup> Ajay N. Ambhore,<sup>b</sup> Rahul D. Kamble,<sup>c</sup> Mahesh G. Wakhradkar,<sup>c</sup> Priya D. Gavhane,<sup>c</sup> Milind V. Gaikwad,<sup>b</sup> Krishna Chaitanya Gunturu<sup>a,c</sup> and Bhaskar S. Dawane<sup>a,c†</sup>

A direct metal-free approach for the synthesis of novel sulfenylated 2-aminothiazole and imidazothiazole derivatives at room temperature is reported via an *in situ*-generated electrophilic thiolating agent. The present protocol provides mild and selective access for the insertion of C–S bond functionalization with good yield. The mechanistic path was justified via density functional theory (DFT) calculations, which explore the role of the solvent in the reaction mechanism.

### Introduction

The prevalent occurrence of organosulfur compounds in vital biological systems, drug architectures and natural products present themselves as versatile scaffolds in organic chemistry, medicinal chemistry and materials chemistry.<sup>1–3</sup> They constitute an active portion of commercially available drugs.<sup>4,5</sup> These consequences have led to an unending quest for a capable catalytic system, comprising a blend of carbon–sulfur bonds to create organosulfur compounds.<sup>6–10</sup> The majority of reported transformations for C–S bond coupling includes the synthesis of diaryl sulfides using imidazoheterocycles,<sup>11–16</sup> indoles<sup>17–23</sup> or aryl halides<sup>24–26</sup> by reaction with thiols or thiones. Several catalytic systems utilized for the cross dehydrogenative coupling reaction (CDC) of the C–S bond include the use of transition metals,<sup>21–26</sup> elemental sulfur,<sup>27–29</sup> and iodine.<sup>40–44</sup> Amongst these protocols, those capable of encountering direct metal-free regioselective C–S bond coupling in bifunctional motifs for the selective synthesis of heterocyclic organosulfur compounds are highly desirable.<sup>45–52</sup> Moreover, among numerous catalytic systems reported for the synthesis of organosulfur compounds, the use of *N*-halosuccinimides was proven to be a highly useful

approach;<sup>53–59</sup> however, *N*-halosuccinimides have a general tendency to oxidise secondary alcohols to their corresponding ketones.<sup>60,61</sup> In recent years, the use of *N*-sulfanylsuccinimides for the direct sulfenylation of aromatic and heteroaromatic C–H bonds has become an interesting strategy.<sup>62–72</sup> Very few reports are available for the synthesis of catechol thioethers.<sup>73–77</sup> However, the selective synthesis of organosulfur compounds has not been reported hitherto *via in situ*-generated *N*-(heteroarylthio)succinimide (NHTS), by utilizing *N*-halosuccinimide and heterocyclic thiols such as 1H-benzof[*d*]imidazole-2-thiol, benzof[*d*]oxazole-2-thiol and 5-(pyridin-4-yl)-1,3,4-oxadiazole-2-thiol. The use of these heterocyclic thiols may impart advantages in the areas of small molecule syntheses as well as pharmaceuticals as imidazothiazole and thiazoles are considered to possess a broad spectrum of biological activity.<sup>78,80</sup> Consequently, the selective C–S electrophilic sulfenylation of pseudo aromatic imidazothiazoles with secondary alcohols may provide a beneficial synthetic route for medicinal chemistry research. Jie *et al.* have reported the organocatalytic sulfenylation of β-naphthols using *N*-(arylthio)succinimide as the sulfur source, and they have observed that the dearomatization of β-naphthols takes place with the oxidation of an alcoholic group to a ketone (Scheme 1).<sup>79</sup>

Nevertheless, alcohols also possess the propensity to react with thiols to generate thioethers in the presence of certain catalytic systems.<sup>81–86</sup> These annotations and our previous study regarding the synthesis of bioactive compounds<sup>87–89</sup> have provoked us to focus on the development of a new catalytic system for the selective C(sp<sup>2</sup>)-H bond thiolation of 2-aminothiazoles and imidazothiazoles using heterocyclic thiols and *N*-halosuccinimide.

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† Electronic supplementary information (ESI) available. See DOI: 10.1039/d0nj05904h



# Original Article: DTP/SiO<sub>2</sub>: An Efficient and Reusable Heterogeneous Catalyst for synthesis of Dihydropyrano[3,2-c]chromene-3-Carbonitrile Derivatives



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**ABSTRACT** R.D. Kamble, M.V. Gaikwad<sup>\*</sup>, M.R. Tapare, S.V. Hese, S.N. Kadam, A.N. Ambhore, B.S. Dawane. DTP/SiO<sub>2</sub>: An Efficient and Reusable Heterogeneous Catalyst for synthesis of Dihydropyrano[3,2-c]chromene-3-Carbonitrile Derivatives. *J. Appl. Organomet. Chem.*, 2021; 1(1):22-28.

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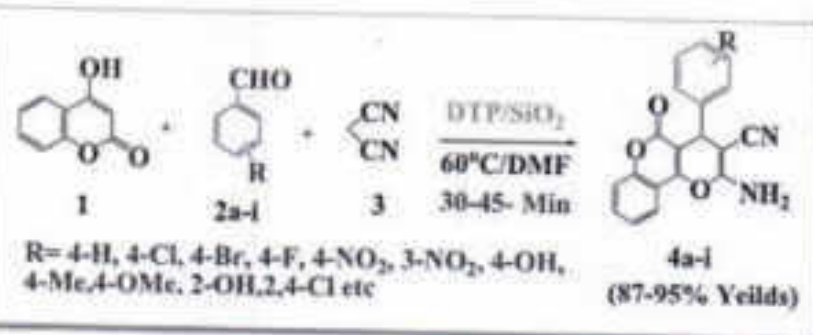
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## Keywords:

DTP/SiO<sub>2</sub>, green synthesis, dihydropyrano[3,2-c]chromene-3-carbonitrile.

## ABSTRACT

An efficient and convenient method has been developed for the synthesis of 2-amino-5-oxo-4-phenyl-4,5-dihydropyrano[3,2-c]chromene-3-carbonitrile derivatives from one-pot multicomponent reaction between 4-hydroxy-2H-chromen-2-one. Aromatic aldehydes and malononitrile were catalyzed by DTP/SiO<sub>2</sub> as an efficient and reusable heterogeneous catalyst. The current method provides advantages over reported method viz simple operational procedure, easy isolation and recyclability of the catalyst, environmental benign, reduced reaction time and superior yield.



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## Silica-supported sodium carbonate: an efficient heterogeneous catalyst for the synthesis of new thiazolopyrimidine derivatives

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### Abstract

Herein we describe a new convenient strategy for the synthesis of substituted thiazolopyrimidines. The present approach delivers the use of silica-supported sodium carbonate (SSC) as a recyclable heterogeneous catalyst in PEG-400 solvent. The described synthetic route offers an easy access for the synthesis of titled compounds through green chemistry protocols.

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Short communication

## A Short Synthesis of Carbazole Alkaloids Murrayanine and Mukonine

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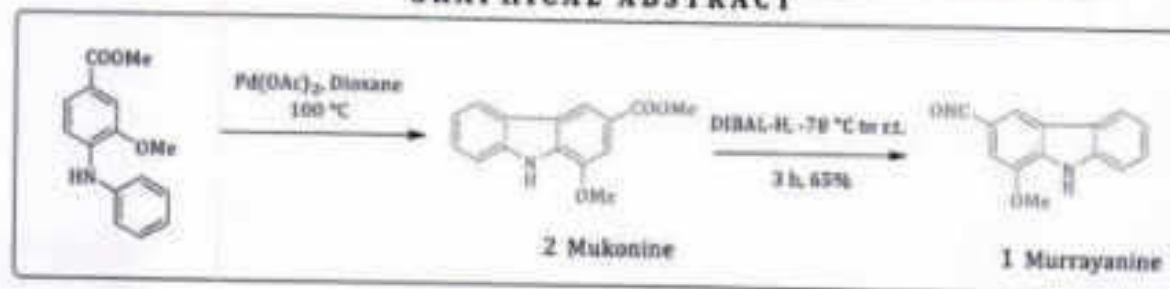
Murrayanine

Buchard coupling

### ABSTRACT

The short, easy and total synthesis of Murrayanine (1), Mukonine (2), carbazole alkaloids were elaborated, based on a regioselective buchwald coupling of methyl 4-bromo-3-methoxybenzoate with aniline and successive transformation into the corresponding carbazole alkaloids by oxidative coupling followed by cyclization of the phenyl and aryl rings.

### GRAPHICAL ABSTRACT



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## [BBSA-DBN][HSO<sub>4</sub>]: a novel –SO<sub>3</sub>H functionalized Bronsted acidic ionic liquid for easy access of quinoxalines

Megha U. Patil<sup>1</sup> · Sachinkumar K. Shinde<sup>1</sup> · Sandip P. Patil<sup>1</sup> · Suresh S. Patil<sup>1</sup>

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### Abstract

A novel –SO<sub>3</sub>H difunctionalized Bronsted acidic ionic liquid (BAIL) 1, 5-bis (butanesulphonic acid)-diazobicyclo [4.3.0] non-5-enium hydrogen sulphate [BBSA-DBN][HSO<sub>4</sub>] is introduced for efficient synthesis of quinoxalines via condensation of substituted 1,2-diketones and various aromatic 1,2-diamines. It could serve as a dual functional catalyst for these reactions. This method has the advantages of mild reaction conditions, high yields, short reaction times, easy work-up, non-chromatographic separations and being environmentally friendly. This protocol provides an effective and environmentally friendly alternative methodology for production of quinoxalines and extends the chemical utilization of benzil in organic synthesis. This room-temperature-derived ionic liquid is highly acidic due to presence of two –SO<sub>3</sub>H groups and two HSO<sub>4</sub><sup>–</sup> anions. Moreover, the IL [BBSA-DBN][HSO<sub>4</sub>] could be easily recovered and reused at least five times without change in its catalytic activity. The formation of IL [BBSA-DBN][HSO<sub>4</sub>] was confirmed by <sup>1</sup>H, <sup>13</sup>C NMR spectroscopic techniques.

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11164-020-04227-3>) contains supplementary material, which is available to authorized users.

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# *Averrhoa bilimbi* in organic transformation: a highly efficient and green biosurfactant for the synthesis of multi-functional chromenes and xanthenes

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A simple, clean and efficient one-pot three-component synthesis of multi-functional chromene and xanthene derivatives has been developed in this study in the presence of a catalytic amount of Brønsted acidic-type biosurfactant bilimbi fruit extract (BFE) under elevated temperature condition. BFE is an unprocessed micellar catalyst that works well in an ethanolic aqueous medium. Employment of ethanol as a co-surfactant enhances catalytic performance of BFE as a biosurfactant. The presence of micelles in the reaction medium was detected using light microscopy and their critical micelle concentration was measured by electrical conductivity method. Some new derivatives of chromene and xanthene are reported here. This novel catalytic medium obtained from an environmentally renewable resource is highly advantageous because of its non-toxicity, higher efficiency, operational simplicity, bio-compatibility as well as absence of any tedious work-up or column chromatography and thus no waste generation. Here, we also signify the 'greenness and sustainability' of the present protocol on the basis of EcoScale metric which validates the practical application of the synthetic procedure.

**Keywords:** Bilimbi fruit extract, biosurfactant, green chemistry, natural catalyst.

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cases they are just incinerated to recover heat<sup>1,2</sup>. Therefore, their substitution with more environment-friendly options can directly have a positive effect on both emission and hazardous issues<sup>3</sup>. Hence, it is desirable to use environmentally benign water as a safe, abundant, inexpensive and non-toxic solvent instead of organic solvents<sup>4</sup>. Due to the same features, accomplishing organic reactions in water has been explored over the past few decades<sup>5-8</sup>.

## Methods

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All these findings validate the case of a naturally occurring medium/phase acting as surfactant, known as a biosurfactant. The surfactants that are directly obtained from natural sources, viz. plants, animals, or microbial cells, or by separation procedures such as extraction, precipitation or distillation are known as biosurfactants. They have potential industrial applications such as use in improved oil recovery, lubricants, food processing

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# *Averrhoa bilimbi* in organic transformation: a highly efficient and green biosurfactant for the synthesis of multi-functional chromenes and xanthenes

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# Ash of pomegranate peels (APP): A bio-waste heterogeneous catalyst for sustainable synthesis of $\alpha,\alpha'$ -bis(substituted benzylidene)cycloalkanones and 2-arylidene-1-tetralones

Rupesh C. Patil<sup>1</sup> · Uttam P. Patil<sup>2</sup> · Ashutosh A. Jagdale<sup>1</sup> · Sachinkumar K. Shinde<sup>1</sup> · Suresh S. Patil<sup>1</sup>

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## Abstract

$\alpha,\alpha'$ -bis(substituted benzylidene)cycloalkanones were efficiently prepared from variously substituted aldehydes and cycloalkanones in water by using ash of pomegranate peels (APP) as a catalyst. The APP-catalyst was obtained from bio-waste by simple thermal treatment to dry peels of pomegranate fruit and formation of its active phase was confirmed by FT-IR, XRD, XRF, EDX, SEM, DSC-TGA and BET techniques. The analysis revealed that the present catalyst has basic sites which promote the synthesis of desired products. The main attractions of our protocol are utilization of highly abundant bio-waste-derived catalyst and good-to-excellent yield in shortest reaction time. This green protocol was further extended for structurally diverse 2-arylidene-1-tetralones by condensation of equimolar quantity of aromatic aldehydes and 1-tetralone at low temperature. The catalyst could be quantitatively recovered and reused effectively for five times.

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11164-020-04160-5>) contains supplementary material, which is available to authorized users.

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## Biowaste-Derived Heterogeneous Catalyst for the One-Pot Multicomponent Synthesis of Diverse and Densely Functionalized 2-Amino-4*H*-Chromenes

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Chromene skeletons are crucial structural motifs existing in abundant natural products and drug molecules.<sup>1</sup> These oxygen-containing heterocyclic compounds have a broad range of biological properties such as antimicrobial,<sup>2</sup> anti-HIV,<sup>3</sup> anti-inflammatory,<sup>4</sup> and cytotoxic activities.<sup>5</sup> They are being investigated in neurodegenerative disorders such as Alzheimer's disease, Parkinson's disease, and Huntington's disease.<sup>6–8</sup> Notably, several drug molecules possessing 4*H*-chromene moieties are currently in use for the treatment of such ailments as asthma, hypertension, ischemia and urinary incontinence.<sup>9–11</sup>

The synthesis of these O-heterocycles involves the three-component coupling of C-H activated acids with malononitrile and aromatic aldehydes in the presence of homogeneous and heterogeneous catalysts such as piperidine,<sup>12</sup> triethylamine,<sup>13</sup> DBU,<sup>14</sup> (NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub>,<sup>15</sup> POPINO,<sup>16</sup> piperazine,<sup>17</sup> aqueous K<sub>2</sub>CO<sub>3</sub>,<sup>18</sup> hydrotalcite (HT),<sup>19</sup> TiO<sub>2</sub> nanowire,<sup>20</sup> MgO,<sup>21</sup> mesolite,<sup>22</sup> nanozeolite clinoptilolite,<sup>23</sup> trichloroisocyanuric acid<sup>24</sup> and 2-aminopyridine.<sup>25</sup> In no denial of fact, the reported methods are creditable; however, the implication of hazardous reagents and solvents, lengthy processes, energy investment for heating purposes and complications in the separation of products are realistic problems associated with these methods. Considering the diverse functionality of 2-amino-4*H*-chromenes, it was deemed worthwhile to explore a convenient protocol for the synthesis of these heterocycles.

Waste biomass has been increasingly targeted as a renewable feedstock for the production of high energy-density fuels, construction materials and, more recently, platform chemicals and high-value functional products. Using waste material to develop promising heterogeneous catalysts in addition to the target product makes the system more cost-effective and environmentally benign.<sup>26,27</sup> The functionalized heterogeneous catalysts evaluated from waste biomass are mainly composed of metal oxides and possess high surface area and significant pore volume with high thermal stability.<sup>28</sup> The basic active sites of the heterogeneous ash catalyst may be responsible for the acceleration of the rate of reactions.

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 Supplemental data for this article can be accessed here.

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## Waste mussel shell as a highly efficient heterogeneous catalyst for the synthesis of polyfunctionalized 4*H*-pyrans in aqueous media

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### Abstract

An economical and environmentally friendly heterogeneous base catalyst has been developed from a waste freshwater mussel shell and employed successfully for the synthesis of 4*H*-pyrans in an aqueous medium at ambient temperature. 2-arylidene-malononitrile, an intermediate of 4*H*-pyran reaction, was also prepared using the same catalyst. The catalyst was characterized by FT-IR, XRD, XRF, EDS, and SEM. Analytical tools such as XRF and EDS explored the presence of calcium oxide as a main component in the mussel shell, while the XRD pattern showed crystalline nature and SEM image displayed porous surface with irregular cavities. The catalyst exhibited unprecedented performance in the one-pot three-component condensation reaction of C–H activated acidic compounds with aromatic aldehydes and malononitrile in the green reaction medium and offered pure products without chromatographic separation.

**Keywords** Heterogeneous catalyst · Mussel shell · Green solvent · 4*H*-pyrans

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11144-020-01743-6>) contains supplementary material, which is available to authorized users.

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## Sulfonic acid@pericarp-pomegranate: A natural supported catalyst for synthesis of bis(indolyl)alkanes

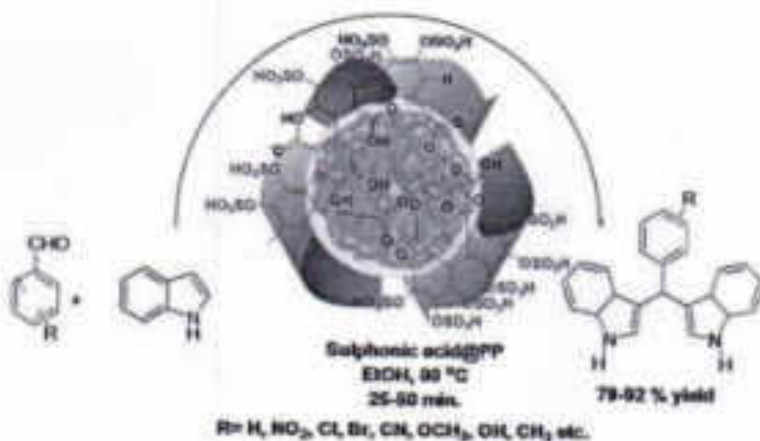
Monika Patil, et al. [full author details at the end of the article]

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### Abstract

A heterogeneous solid acid catalyst, sulfonic acid supported on pericarp-pomegranate (sulfonic acid@PP) is prepared with green an eco-friendly approach. The prepared sulfonic acid@PP catalyst was extensively characterized by IR, FE-SEM, EDX and TGA techniques. The efficiency of the catalyst has been investigated for the synthesis of bis(indolyl)alkanes by electrophilic substitution reaction of indoles with carbonyl compounds in ethanol at 80 °C. Easy recovery by simple filtration and at least three times reusability without significant loss in the yield of the desired product are conspicuous features of the reported catalyst. In addition, the notable features of this protocol are high conversions, shorter reaction times, cleaner reaction profile, simple experimental and work-up procedure.

### Graphic abstract



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RESEARCH ARTICLE

# Bio-surfactant: a green and environmentally benign reaction medium for ligand-free Pd-catalyzed Mizoroki–Heck cross-coupling reaction in water

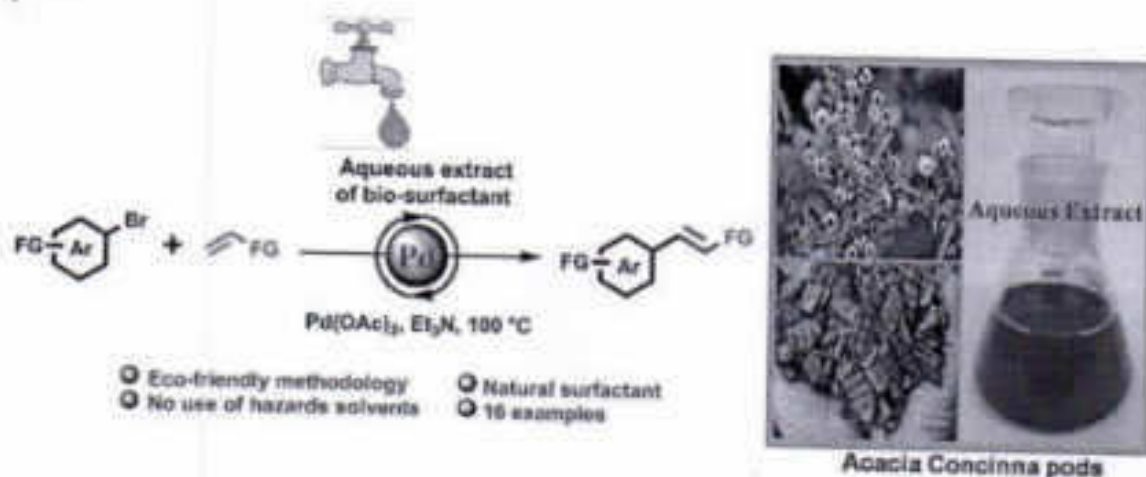
Seema P. Patil<sup>1,2</sup> · Sanjay N. Jadhav<sup>3</sup> · Chandrashekhar V. Rode<sup>3</sup> · Rajendra V. Shejwal<sup>4</sup> · Arjun S. Kumbhar<sup>1</sup>

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## Abstract

A simple and efficient protocol for the ligand-free Mizoroki–Heck coupling reaction of various aryl bromides with different olefins has been reported by using in situ generated PdNPs of size 5–10 nm in aqueous solution of bio-surfactant. The bio-surfactant used in this study is a saponin extract of the seeds of pericarps (pods) of the *Acacia concinna* plant. The in situ generated PdNPs have been characterized by various techniques such as HRTEM, EDS and XPS. The influence of various parameters such as the nature and amount of bases, the nature of Pd precatalysts as well as the effect of temperature has been investigated on Mizoroki–Heck coupling reaction. The generated PdNPs significantly coupled the various aryl bromides with different olefins in aqueous extract of the seeds of pericarps (pods) of the *Acacia concinna* plant at 100 °C.

## Graphic abstract



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## Synthesis of hydrazinylquinoline-3-carbonitrile derivatives using green protocol and screening of their bioactivity

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#### ABSTRACT

*Synthesis of bioactive heterocyclic compounds is the continuous work in every era. With achieving novel scaffold, discovery of synthetic rout as a diversion to the tradition rout is also a main aim on the mind of each research. Improvement of eco-friendly way for the synthesis of bioactive compounds is one of the leading objectives of medicinal chemist. Traditional synthetic rout suffers from number of serious barriers. These disadvantages are removed by applying the green chemistry principle which results in to the new and simple way for that synthesis. In this section we report an efficient green rout for the synthesis of hydrazinylquinoline-3-carbonitrile derivatives (4a-j) by using Bleaching Earth Clay (pH 12.5) in PEG-400 as green reaction media. All the synthesized compounds are characterized and screened for their antimicrobial activity in which most of the screened compounds shows significant activity.*

**Keywords :** quinoline, BEC (pH-12.5), PEG-400, Antimicrobial.

#### Introduction

Convergent synthesis of heterocyclic compounds from relatively simple starting materials can be achieved using tandem C-C bond formations [1-2]. Such transformations are usually operated in one pot without isolation or purification of intermediates. The development of tandem reactions for efficient construction of small molecules with operational





# Influence of rare earth ions ( $\text{Sm}^{3+}$ , $\text{Dy}^{3+}$ ) substitution on magnetic and microwave performance of magnesium ferrite

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## ABSTRACT

The nano-crystalline rare earth ( $\text{Sm}^{3+}$ ,  $\text{Dy}^{3+}$ ) substituted  $\text{MgFe}_2\text{O}_4$  with composition  $\text{Mg}(\text{Sm}_{0.4x}(\text{Dy})_{0.4x})\text{Fe}_{2-0.8x}\text{O}_4$  [ $x$  varies from 0.0 to 0.3 in steps of 0.05] have been prepared by chemical combustion route. X-ray diffraction analysis confirmed the formation of the spinel cubic phase as a major phase along with the perovskite orthoferrite phase as a minor phase in all the samples except  $\text{MgFe}_2\text{O}_4$ . The room temperature magnetic properties of these samples have been investigated. It has been observed that with an increase in substitution of rare-earth ions ( $\text{Sm}^{3+}$ ,  $\text{Dy}^{3+}$ ), for iron in  $\text{MgFe}_2\text{O}_4$ , initial permeability increases, attain peak value for the composition with  $x = 0.15$ , and decreases for higher substitution concentrations. The microwave absorption performance of the  $\text{Mg}(\text{Sm}_{0.4x}(\text{Dy})_{0.4x})\text{Fe}_{2-0.8x}\text{O}_4$  systems have been investigated. The reflection coefficients are found to be higher as compared to  $\text{MgFe}_2\text{O}_4$  whereas Voltage Standing Wave Ratio (VSWR) found to be lower. Overall investigations indicate  $\text{Mg}(\text{Sm}_{0.4x}(\text{Dy})_{0.4x})\text{Fe}_{2-0.8x}\text{O}_4$  is a promising candidate for microwave device fabrication.

## 1. Introduction

Magnesium ferrite is a ferrimagnetic material with reasonably high resistivity, magnetic permeability, Curie temperature, and low loss. Due to these properties, magnesium ferrite and substituted magnesium ferrites were used for the fabrication of high-density magnetic recording heads, high-frequency devices, sensors, electronic devices, and microwave absorbers [1]. It is expected that the rare earth ion substitution in place of iron improves the magnetic as well as electric properties of spinel ferrites [2–4]. Now-a-days spinel ferrites are widely used for biomedical as well as photocatalytic applications [5–8]. Bamzai et al. [9] studied the structural and magnetic properties of dysprosium substituted magnesium ferrite. They observed the presence of an ortho-ferrite phase namely  $\text{DyFeO}_3$  as evidenced from X-ray diffraction analysis. Gadkar et al. [10] have observed the orthoferrite phase due to  $\text{SmFeO}_3$  for samarium substituted Mg-Cd ferrites. Jiali Liang et al. reported magnetic properties of rare-earth substituted cobalt magnesium ferrite where the samples have been reduced in the  $\text{Ar} + \text{H}_2$  atmosphere [11]. The authors have noted that the non-stoichiometric composition gives maximum magnetization. Yusuf et al. reported high-frequency dielectric properties of nanocrystalline yttrium substituted manganese

ferrite synthesized by the micro-emulsion method. Prior to dielectric measurements, the samples were thoroughly characterized using TGA, XRD, FTIR, SEM techniques [12]. Balasuragan et al. reported magnetic and optical properties of nanocrystalline magnesium-based spinel ferrite systems processed by ball milling [13]. Murugesan et al. reported structural, electrical, and dielectric properties of Mg, Co, and Cu-based spinel ferrites. The contribution of grain and grain boundary has been elucidated using impedance spectroscopy [14]. Gaba et al. reported the effect of cerium ion doping on structural and magnetic properties of sol-gel synthesized nano-crystalline magnesium ferrite. Prior to the investigation, the samples were characterized thoroughly using microscopic techniques and electron paramagnetic resonance properties have also been investigated [15]. Elkady et al. reported structural and magnetic properties of gadolinium substituted magnesium ferrite and proposed many applications such as hyperthermia, neutron capture therapy, etc. Maximum value of the saturation magnetization was found to be 26 emu/gm at room temperature among the samples examined [3]. Abdelatif et al. have investigated magnetic properties, specifically, magneto-impedance of rare earth substituted spinel ferrites. In their study the rare earth elements viz Dy, Gd, and Sm were doped in the Mn-Cr spinel ferrite system. Giant magnetoimpedance of 60% is

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# Studies on Real and Imaginary Part of Permeability for Sm–Dy Substituted Mg Ferrite

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The ferrite samples having composition  $Mg[(Sm)_{0.5}(Dy)_{0.5}]_xFe_{3-x}O_4$ , in which  $x$  varies from 0.05 to 0.3 in steps of 0.05 have been prepared by using combustion method. X-ray diffraction analysis confirmed the formation of cubic spinel structure in addition of ortho-ferrite phase due to substitution of rare earth ions. The initial permeability and complex permeability of toroid samples are calculated by measuring the values of inductance and Q-factor. It is seen that initial permeability and real part of initial permeability increases with increase in Samarium(Sm)–Dysprosium (Dy) rare earth element in magnetium (Mg) up to  $x = 0.15$  and thereafter it decreases. The composition  $Mg[(Sm)_{0.5}(Dy)_{0.5}]_{0.15}Fe_{2.85}O_4$  show low loss factor and initial permeability becomes higher as compared to other prepared rare earth content samples.

Karthik et al.<sup>[14–16]</sup> and Aldo Hrzam et al.<sup>[17]</sup> have studied various properties of nanomaterials.

This work, reports the effect of Sm – Dy substitution on structural and magnetic properties of Mg ferrite materials.

## 2. Results and Discussion

Figure 1 shows the XRD pattern of the  $Mg[(Sm)_{0.5}(Dy)_{0.5}]_{0.2}Fe_{2.8}O_4$  ferrite material. The presence of nominated peaks in the pattern confirmed the formation of cubic spinel ferrite phase with presence of ortho-ferrite phase due to rare

earth ions. Loganathan et al.<sup>[18]</sup> have also observed such a phase for  $Sr^{2+}$  substituted  $MgFe_2O_4$  nanoparticles.

Structural parameters like lattice parameter ( $a$ ), crystallite size ( $D$ ), strain ( $\epsilon$ ),<sup>[19]</sup> and X-ray density ( $\rho_x$ )<sup>[20]</sup> of all the ferrites under investigation were calculated and are presented in Table 1. From this table, it is seen that no remarkable change occurs in lattice parameter, crystallite size, and strain of magnetium ferrites with rare earth substitution. The value of maximum strain are observed in the range of  $2.96 \times 10^{-4}$ – $3.33 \times 10^{-4}$ . It is found that X-ray density of ferrites increases with increasing rare earth content. This is attributed to increasing mass with increasing volume. Similar result was also reported by Shinde et al.<sup>[21]</sup> for  $Nd^{3+}$  substituted Ni–Zn ferrites.

Initial permeability ( $\mu_i$ ) and complex permeability of toroid samples were calculated by measuring  $L$  and  $Q$  values on LCR-Q meter using the formula described elsewhere.<sup>[22,23]</sup> The frequency variation of initial permeability ( $\mu_i$ ), real part of initial permeability ( $\mu'$ ) and imaginary part of initial permeability ( $\mu''$ ) for the Sm–Dy substituted Mg ferrite are shown in Figures 2, 3 and 4, respectively.

From Figure 2, it is seen that  $\mu_i$  of all the ferrites show normal behavior. The value of  $\mu_i$  increases with increase in rare earth content up to  $x = 0.15$  and then decreases with increase in rare earth content. From Figure 3, it is clear that  $\mu'$  increases with increase in frequency up to 25 kHz and then nearly remains constant as frequency increases. The value of  $\mu''$  gradually decreases up to frequency 500 kHz and thereafter it nearly remains constant with increasing frequency as shown in Figure 4. Initial permeability and loss factor at different frequencies of the samples under investigations are reported in Table 2. Similar type of study have been reported by Stergiou<sup>[24]</sup> for rare earth doped Ni–Co and Ni–Co–Zn spinel ferrites.

Figure 5 shows variation of loss factor with frequency for  $Mg[(Sm)_{0.5}(Dy)_{0.5}]_xFe_{3-x}O_4$ , for  $x = 0.05$  to 0.30. It is observed

## 1. Introduction

Magnesium ferrite is an interesting and important ferrimagnetic material among the soft ferrites.<sup>[1]</sup> They are used for the fabrication of high density recording sensors, color imaging, high frequency devices, microwave absorbents due to its high electrical resistivity, and magnetic properties.<sup>[2–4]</sup> Magnesium ions play an important role in the grain growth and densification for formation of the ferrite materials.<sup>[5]</sup> In addition, rare earth ions substitution in place of Fe of ferrite material also shows structural distortion<sup>[6]</sup> and strain in lattice; thereby, enhancing magnetic as well as electrical properties.<sup>[7]</sup> Several researches have been conducted on electrical and magnetic as well as gas sensing properties of rare-earth substituted ferrites.<sup>[8–11]</sup>

Kumbhar et al.<sup>[12]</sup> prepared Sm–Dy substituted magnetium ferrite by auto combustion method. They reported that real part of initial permeability of ferrite materials initially increases with frequency and thereafter remains constant for higher frequency. Xion et al.<sup>[13]</sup> studied structural and magnetic properties of  $(Nd_xGd_{1-x})_2Fe_{2-x}Cr_x$  and  $(Nd_xTb_{1-x})_2Fe_{2-x}Cr_x$  intermetallic compounds. They have shown that the value of saturation magnetization increases with increasing Nd content for both compounds.

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# Ni-Cu-Zn Nanoferrite Prepared at Lower Sintering Temperature

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**Abstract.** Spinel ferrite with chemical formula  $Ni_{0.4}Cu_{0.1}Zn_{0.5}Fe_2O_4$  was synthesized by oxalate co-precipitation technique and characterized by X-ray diffraction, Infra-red spectroscopy, energy dispersive X-ray spectroscopy and field emission scanning electron microscopy techniques. X-ray diffraction analysis confirms the formation of single phase cubic spinel structure. Crystallite size of the ferrite obtained by Debye Scherrer formula is found to be about 36.55nm. Lattice constant of the ferrite is about 8.3816 Å and which is slightly higher than reported by microwave sintering technique. Absorption bands appear at 587.2  $cm^{-1}$  and 462.9  $cm^{-1}$  corresponding to the tetrahedral (A) and octahedral (B) sites in the IR spectra gives strong characteristic of spinel ferrite. E-DAX spectra confirm the required stoichiometric proportion of elements achieved in the ferrite. FESEM images give the information about morphology of prepared ferrite. It is observed that with co-precipitation technique and at lower sintering temperature (600 °C), we can synthesize well nano-ferrite material.

**Keyword:** Ni-Cu-Zn ferrite; Co-precipitation method; structural properties.

## INTRODUCTION

In recent years, a considerable amount of research has been carried out on ferrites because of their applications in biodiesel production, gas sensors, humidity sensors, Li-Ni batteries, super-capacitors [1-5]. The rapid development of ferrites for the new fields of computer circuits and microwave components [6] promises a greater effect on the daily lives of engineers and the public in the near future. Now a day, ferrite materials are largely synthesized in nano-metric scale for new and improved properties, which are considerably different from bulk materials. These materials are technologically important and have been used in many applications, including magnetic recording media and magnetic fluids for the storage and or retrieval of information, magnetic resonance imaging (MRI) enhancement, magnetically guided drug delivery [7]. In last decade lot of research work carried out on properties of Ni-Zn ferrites. It was found that the poor densification and slow grain growth rate of Ni-Zn ferrite can be greatly improved by the substitution of Cu<sup>2+</sup> ions due to the formation of a liquid phase during sintering [8]. Recently there is a growing interest on Ni-Cu-Zn ferrites used in the fabrication of electronic devices instead of Ni-Zn ferrites and Mg-Zn ferrite.

Several researchers have prepared Ni-Cu-Zn nano-ferrite by various methods such as reverse micelle method, auto-combustion method, oxalate based precursor method, microwave sintering method, sol-gel method etc. Magnetic properties of copper substituted Ni-Zn nano-crystalline ferrites have been reported by Ghazemi et al. [9]. They were prepared ferrites by employing reverse micelle process and found that saturation magnetization decreases with increase in copper content. Batoz and Ansari [10] synthesized the Ni-Cu-Zn ferrite nanoparticles through auto-combustion method for multilayer chip inductor. Structural and dielectric properties of Ni-Cu-Zn ferrites have been studied by Raghavender et al. [11]. They synthesis Ni-Cu-Zn nano-crystalline ferrites by oxalate based precursor method and reported that the dielectric constant and loss of ferrites are lower than that of prepared by other synthesis techniques.





RESEARCH ARTICLE

## Studies on Canopy Parameters of Some Mangroves Along the Coast of Maharashtra

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### ABSTRACT

Mangrove species, viz., *Avicennia officinalis*, *Avicennia marina* var. *acutissima*, *Avicennia marina* (dwarf), *Rhizophora mucronata*, *Sonneratia alba*, *Aegiceras corniculatum*, *Kandelia candel* were chosen for measurement of height of the tree and girth or circumference. The sampling was random and at least 50 records were made. The girth is measured by the tape. The measurement of the height is made with the help of Abney level. The Tables 1 to 8 records the values for girth, height and canopy cover as well as for correlation coefficient ( $r$ ). There correlation between girth and canopy in all the species studied however in case of *Avicennia officinalis* and *Aegiceras corniculatum* girth and height show more correlation than girth and C. cover. The positive co-relation observed between girth and canopy is more or less 0.7 except *Avicennia marina* (dwarf) *Excoecaria agallocha* and *Aegiceras corniculatum*. The co-relation is observed in girth and height is difficult to explain. This case is observed in *Avicennia officinalis* and *Aegiceras corniculatum*.

Keywords : Mangroves, Canopy, Height, Girth Correlation



Effect of Biofertilizers on Chlorophyll Contents in Maize (*Zea Mays* L.) Variety African TallShinde M.Y.<sup>1</sup>, Khade, S.K.<sup>2</sup>, Patil, V.A.<sup>1</sup><sup>1</sup> P.G. Department of Botany, Dattajirao Kadam Arts, Science and Commerce College, Ichalkaranji, Dist. Kolhapur-416113, Maharashtra, India<sup>2</sup> Padmashiksha Dr Yashwantrao Dada Patil Mahavidyalaya, Talgaon, Maharashtra, India

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## ABSTRACT

An attempt has been made to study the effect of different biofertilizers such as Azotobacter and Phosphate solubilizing bacteria (PSB) on chlorophyll content of maize variety African Tall. The experiments were carried out in a randomized complete block design with three replications. The biofertilizers used were Azotobacter (A), phosphate solubilizing bacteria (P) and combine treatment Azotobacter + phosphate solubilizing bacteria (A + P), without treatment was control. The comparative extraction of chlorophylls (Chlorophyll a, chlorophyll b and total chlorophyll) and carotenoids from maize was studied by using 80% acetone as extraction method. The studies relate to the amount of concentration of chlorophyll and carotenoids between the control and treated of maize crop. Investigation revealed that method of Arnon, is simple method for extracting the pigment molecules along with other methods used for extraction and results showed higher content of chlorophyll-a, Chlorophyll-b, total chlorophyll and Carotenoids in the treated plants in comparison with the control plants. By the application of biofertilizers treatment levels were corresponding to (TA<sub>1</sub>), (TP<sub>1</sub>), (TA+P<sub>1</sub>) respectively to the treated fodder, little amount of differences were observed in the concentrations of pigments between treated and control plants selected for present study.

## 1. Introduction

Maize is an important staple food crop, occupies a prominent place among cereals and first rank in terms of productivity and third in total area and production after wheat and rice while in India it stands fourth ranks next to rice, wheat and jowar in terms of area and production (IITA, 2006). Total pigment molecules present in the leaf, are chlorophyll-a, chlorophyll-b and total chlorophyll, carotenoids which are essential for photosynthesis. Follet et al. (1981) reported that the chlorophyll coloration is related to the amount of nutrients absorbed by the plant from soil. Biofertilizers applied to the soil, supply plant nutrients for crop growth and serve as important instruments in yield development and physiological processes. Most plants possess chlorophyll a and chlorophyll b as the main photosynthetic pigments (Young and Britton, 1993).

Chlorophylls and carotenoids are essential pigments of higher plant assimilatory tissues and responsible for variations of color from dark-green to yellow. Moreover, they play important roles in photosynthesis capturing light energy which is converted into chemical energy (Bauernfeind, 1981). Carotenoids provide bright coloration, serve as antioxidants, and can be a source for vitamin A activity (Britton et al., 1995).

Nitrogen (N) is a key element in chlorophyll, therefore there is usually a high correlation between them (Schepers et al., 2005). Positive correlation of nitrogen and chlorophyll is previously reported by some researchers (Ding et al., 2005; DaMatta et al., 2002). The distribution of chlorophyll is the key indicator of crop photosynthesis within maize leaves is quite homogenous at a specific growth stage indicator. Chlorophyll content of leaf tissue is a good index of photosynthetic activity (Chowdhury and Kohri, 2003) and timing of fertilizer application (Haboudane et al., 2002; Wu et al. 2008) of crop. This crucial pigment also plays role as an index of plant growth and production of organic matter (Lahai et al. 2003). Chlorophyll content is an indicator for crop growth and development, therefore accurate determining and assessing of chlorophyll concentration is essential (Bannari et al., 2007).

The quantification of chlorophyll and carotenoids provides important information about the effects of environments on plant growth (Schlemmer et al., 2005). Chlorophyll concentration usually is a good indicator of plant nutrient stress, photosynthesis and growing periods, the content of chlorophyll in the plant leaves indicates the growth status of the crops, also it is the important condition for exchange of mass and energy from the outside world and therefore real-time monitoring of the content of chlorophyll is a key step to complete crop monitoring and yield estimation (Canfield et al. 1993; Rao et al. 2007).

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## RESPONSE OF NITROGEN AND AMINO ACID SOURCES ON DEVELOPMENT OF *FUSARIUM OXYSPORUM* CAUSING ROOT ROT OF SOYBEAN

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### ABSTRACT

During sample collection in Maharashtra, it was observed that soybean (*Glycine max* L.) roots infected by *Fusarium oxysporum*, were found to be dominant among the diseased samples. From these samples wild sensitive (Fo-5) and highly resistant (Fo-15) isolates were identified using fungicide roko. The aim of present investigation was to evaluate nitrogen and amino acid sources on disease development of soybean caused by *Fusarium oxysporum*. The sensitive and resistant isolates of *Fusarium oxysporum*, when grown on Czapek Dox agar medium show different response to nitrogen, and amino acid sources on development

of disease on soybean. Different nitrogen sources like Sodium nitrate, ammonium nitrate, potassium nitrate and calcium nitrate were evaluated for growth response which showed variation in results. Four amino acid sources namely, Proline, Serine, Histidine and Phenyl alanine were used in this study. There was variation in the growth of the sensitive and resistant isolates on different amino acids. All these amino acids show different action on the growth of sensitive and resistant isolates. There was significant variation, in the growth of development of pathogen. *Fusarium oxysporum*, causing root of soybean, either stimulant or inhibitory, when nitrogen and amino acid sources used.

**KEYWORDS:** Soybean, *Fusarium oxysporum*, root rot, nitrogen and amino acid sources.

### INTRODUCTION

Soybean [*Glycine max* (L.) Merrill.] is a native of northern China. It is the most important legume crop in the world. Soybean is also called 'Golden bean', 'Miracle bean' and 'Crop of planet.' Soybean is capable of fixing and utilizing atmospheric nitrogen through symbiotic

**EFFECT OF BIOFERTILIZERS ON MORPHOLOGICAL CHARACTERS AND YIELD COMPONENTS OF MAIZE (ZEA MAYS L.) VARIETY VARUN****KHADE S.K**Department of Botany  
Padmashree Dr. Vasantadevi Patil Mahavidyalaya, Targan, (MS)  
skkhade2006@yahoo.com**ABSTRACT**

An attempt has been made to study the effect of biofertilizers viz. *Azotobacter* and phosphate solubilizing bacteria (PSB) on morphological characters and yield components of Maize (*Zea mays* L.) variety - Varun at field of Bedag Dist.Surgli, Maharashtra. The experiment was carried out a randomized complete block design with three replications. The morphological characters and yield components like plant height, number of leaves per plant, length of leaves, stem and cob diameter and length of cob are measured in cm. It is revealed that, the experiment was considerably enhanced in morphological characters and yields components parameters. The value of treatment means was compared using least significance difference ( $\alpha=0.05$ ). It is evident from the results of biofertilizers treatment producing high yield in maize variety Varun.

**KEYWORDS** - Maize (*Zea mays* L.) Varun, morphological and yield

**INTRODUCTION**

Maize (*Zea mays* L.) is a most important cereal crop, every part of the maize plant has economic value which is the grain, leaves, stalk, cobs and cobs are used to produce a large variety of food and non food products (ITA, 2006). Apart from this, corn is an important industrial raw material and provides a large opportunity (Purohit *et al.*, 2008). Maize plant is a best example of  $C_4$  mode of carbon fixation, plant efficiently utilizes inputs because of its rapid growth and high biomass (Miller *et al.*, 2010). Begum *et al.* 2011 suggested that effect of nitrogen and phosphate biofertilizers were evaluated positively, there were an increase in plant height, ear weight, ear length and grain yield. The productivity of maize is dependent on its nutrient requirement and management particularly that of nitrogen, phosphorus and potassium (Arunkumar, 2007). The extensive research programme over the years on beneficial bacteria and fungi has resulted in the development of a wide range of biofertilizers which not only fulfill the nutrient requirement of various crop species but increase the crop yield and nutrient composition. *Azotobacter* species besides playing a role in nitrogen fixation, it has the capacity to synthesize and secrete considerable amounts of





INVITRO AGGRESSIVENESS OF TRICHODERMA SPP AGAINST  
FUSARIUM OXYSPORUM INCITING ROOT ROT OF SOYBEAN.

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ABSTRACT

Root rot of Soybean (*Glycine max* L.) is caused by *Fusarium oxysporum*. This paper describes the efficacy of *Trichoderma* spp against sensitive and resistant isolates of *Fusarium oxysporum* by dual culture method under *invitro* conditions. *Trichoderma atroviride*, *Trichoderma viride*, *T. harzianum*, *T. virens*, *T. koningi* and *T. pseudokoningii* species were used for antagonistic study. Results indicate that all *Trichoderma* species showed great antagonistic activity. But among them, *T. atroviride*, *T. koningi* and *T. harzianum* showed 90% and 80 % antagonistic activity than others in case of sensitive isolate of test fungus. Resistant isolate of pathogen was

restricting the antagonism in some extent.

**KEYWORDS:** Soybean (*Glycine max* L.), *Fusarium oxysporum*, *Trichoderma* species dual culture.

INTRODUCTION

The main cause of reduction of the crop yield are the diseases. Plant diseases are infections which are caused by variety of pathogens namely bacteria, fungi, viruses, nematodes, insects etc. According to the American Phytopathological Society (APS) fungi are the No. 1 cause of crop yield loss from 10 to 100 % worldwide. They causes the severe diseases like root rot, late blight, downy mildew, wilt, pulse seed-borne diseases, powdery mildews, rusts and smuts which having a significant impact on yield and quality, hence managing them becomes the first part of crop production (Chiranjeevi *et al.*, 2002). Soybean [*Glycine max* (L.) Merrill.] is a native of Northern China. It is the most important legume crop in the world. Soybean is also called 'Golden bean', 'Miracle bean' and 'Crop of planet'. Soybean is capable of fixing and utilizing atmospheric nitrogen through symbiotic relationship with





COMPARISON OF CULTURAL AND MORPHOLOGICAL  
VARIATION AMONG DIFFERENT FUSARIUM OXYSPORUM  
ISOLATES CAUSING ROOT ROT OF SOYBEAN (GLYCINE MAX)

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ABSTRACT

18 isolates of *Fusarium oxysporum* causing root rot of soybean were recorded for its cultural and morphological variations. The *Fusarium oxysporum* isolates Fo4, Fo8, Fo 11, Fo12, Fo14, Fo15, Fo16, Fo17, having the radial colony growth between diameter of 85 mm to 90 mm were among the fast growing category whereas isolates Fo1, Fo3, Fo10, Fo13, Fo18 showed colony growth between 66 mm to 80 mm classified as medium growing and below 64 mm growth of isolates were recorded as slow growing. The biggest size macro-conidia were obtained in isolates Fo 18 (30 – 32 × 5 – 6 μm) whereas, the smallest size were obtained from isolate Fo6 (11 – 13 × 3 – 4 μm). The biggest

size micro-conidia were obtained in isolate Fo18 (7 – 10 × 1 – 3 μm) whereas, the smallest size were obtained from isolates Fo5 and Fo6 (2 – 4 × 1 – 2 μm). The number of septa in macro and micro-conidia were 3-4 and 0-1 respectively all conidia showed hyaline nature. The Macro-conidia were sickle shaped with blunt ends and micro-conidia were round to oval. Chlamyospores were recorded from all 11 days culture of *F. oxysporum*. The highest dry mycelium weight was obtained from the isolate Fo13 having weight 188.0 mg and minimum dry mycelium weight 133.0 mg was obtained from the isolate Fo8.

**KEYWORDS:** Root rot, Soybean, Variation, Conidia, *Fusarium oxysporum*.

INTRODUCTION

Soybean (*Glycine max* (L) Merrill) is an important pulse food crop belongs to family Fabaceae. India is one of the largest producer of soybean in world and the major regions where soybean is cultivated are mainly Maharashtra, Karnataka, Gujarat, Andhra Pradesh. This crop is treated as golden bean because of its three dimensional utility viz. pulse, oil seed

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## Correlation Studies of Bhakuchi Wadi Reservoir of Sangli District, Maharashtra

**Alka Inamdr**

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### Abstract

This investigation describes the physico-chemical profile and correlation matrix of Bhakuchi wadi perennial reservoir of Sangli in Maharashtra where limnological studies were conducted from August 2016 to July 2017. The physico-chemical parameters varied seasonally. The Secchi disc values varied from 13.5 to 81.5 cm. The pH remained alkaline between 8.0 to 8.8. The dissolved oxygen varied from 4.32 to 9.53 mg/l during study period. The total alkalinity values ranged between 108 and 302 mg/l. The total hardness values varied from 115 to 412 mg/l for annual period. Calcium content was fluctuated from 43.62 to 66.26 mg/l. The magnesium values are ranged between 29.71 to 34.1 mg/l. The values of total dissolved solids were observed from 200 to 510. Chlorides and total dissolved solids were maximum during summer and minimum in winter season. The reservoir may be placed under the category of oligotrophic in winter season. In correlation matrix five carbon di-oxide is negatively correlated with all parameters.

**Key words:** Physico-chemical parameters, Correlation coefficient, Bhakuchi wadi reservoir

### Introduction

India has vast fresh water resources in the form of both lentic and lotic ecosystems. The lentic ecosystems include ponds, lakes, tanks and reservoirs. The perennial reservoirs play an important role as a valuable water resource for domestic, agriculture and aquaculture. The lentic ecosystems have long attracted attention of ecologists, both for their importance as a source of drinking water and the development of fisheries.

Several limnological studies have been carried out in this region, notable among these are of Kamat (1965), Goel *et al* (1988) and Bhosale *et al* (1994). Most of the studies were carried out in water bodies of urban area. Few of studies from rural area are reported by Hujare (2008) and Jadhav *et al* (2009).

The study has been designed to understand the hydrobiological features of reservoir, to assess water quality which will state the potability, suitability for fish culture and irrigation purpose.

### Material And Methods

#### Study Area:

The fresh water reservoir of Bhakuchi wadi is located in Sangli district (74° 37' N latitude and 17° 19' E longitude) of south-eastern Maharashtra. A year can be broadly divided into three seasons; summer season from March to May, rainy season from June to October and winter from November to February.

This is minor irrigation project constructed in 1988-91 in Khanapur taluqa of Sangli district. The total capacity of storage is 680.30 Mcft and dead storage is 59.96 Mcft. The catchment area of reservoir is 261.21 sq. miles. Total length of dam including slipway is 1990 M with 150 M is only the length of slipway. It is of clear overflow type. Earthen type of dam having height of 19.70 M. Total water spread is 1207 hectare having 108.80 hectare of submergence area. The bottom of reservoir is rocky. The reservoir water is formerly used for irrigation but also for washing, bathing and pisciculture activities. The reservoirs store rain water received from adjoining catchment area and is much influenced by anthropogenic activities.



## Physicochemical analysis and diversity of Chlorophyceae in four lakes of Kolhapur District Maharashtra, India.

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### ABSTRACT:

The diversity in Chlorophyceae (47 spp.) has been studied at four lakes (Khupire, Sawarwadi, Ganeshwadi and Palsambe) in Kolhapur district. Wherein, six orders viz. Chlorococcales (17 sp.), Volvocales (4 spp.), Zygnematales (23 spp.), Siphonales, Chaetophorales and Chladophorales (1 sp. each) have been recorded. Different physicochemical parameters from these lakes also been studied to understand their compatibility in response to algal growth. The Palasambe lake is found to susceptible for algal bloom.

**KEYWORDS:** Chlorophyceae, parameter, water quality, correlation, diversity

### INTRODUCTION:

Contamination of water bodies has become one of the most important and common environmental problems. Two main types of pollution threats can be recognized viz., organic pollution which leads to high organic content in aquatic ecosystems and, resulting into eutrophication. It is a well-known fact that polluted water can hamper the water quality thus limiting the use of water bodies for many purposes.

Organic pollution in lentic water bodies occurs when large quantities of organic compounds from many sources are released into them. Organic pollutants originate from domestic waste, sewage water and farm water. Organic pollution can adversely affect the water quality in many ways. During the decomposition of organic waste, dissolved oxygen in the water may be used up at a greater rate than it can be replenished thus, giving rise to oxygen depletion which causes severe effects on the aquatic community. Organic effluents also commonly contain large quantities of

# Effect of Biofertilizer changes on DPPH radical scavenging activity of Maize (*Zea mays* L.) Variety Eco-92

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## ABSTRACT

The objectives of this research were to evaluate the performance of 1, 1-diphenyl-2-picrylhydrazyl radical scavenging activity (DPPH) at immaturity and physiological maturity stages, to study the correlation studied antioxidant activities. The effect of different biofertilizers such as Azotobacter and Phosphate Solubilizing Bacteria (PSB) on 1,1-diphenyl-2-picrylhydrazyl radical scavenging activity in the Maize (*Zea mays* L.) variety Eco-92. Maize cob harvested at dry kernel stage was significant and slightly higher than cob harvest at fresh kernel stage. It reveals from the figure, significantly different at ( $p < 0.05$ ) higher in application of biofertilizers treatments. However, treatment with combined application of Azotobacter+PSB biofertilizer (A+P) biofertilizers had the highest 1,1-diphenyl-2-picrylhydrazyl radical scavenging activity (DPPH) as compared to control. Overall, Azotobacter and PSB biofertilizers improved the quality and Antioxidant activity to a stronger scavenging potential.

**Keywords:** Azotobacter, PSB, Eco -92, DPPH etc.

## INTRODUCTION

Maize (*Zea mays* L.) being an important staple food crop after Rice and Wheat throughout the world (FAO, 2002). Maize originated from Mexico. Every part of the maize plant has economic value and cob can all be used to produce a large variety of food and non-food production (IITA 2006). It has a wide variety of uses including use as a raw material for edible and processed food, in animal feed, and in industrial applications. In many countries, maize grains are transformed into various products. They can be roasted, boiled, fried, or ground and fermented to produce bakery products or alcoholic beverages (Rooney & Serna-Saldivar 2003). Maize grain is well-off in molecules with antioxidant characteristics, such as phenol compounds, carotenoids, anthocyanins, and flavonoids (Nuss ET et al. 2010). Capturing the value





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## Identification of soil borne mycoflora of soybean (*Glycine max*) from different localities of Maharashtra state

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### Research Paper - Botany

#### ABSTRACT

A survey of soybean (variety Ahilya) infected by different fungal diseases was carried out in different localities of Sangli, Kolhapur, Satara, Pune and Solapur districts of Maharashtra. During present investigation 10 different localities of soybean grown regions were examined for their disease incidence. The survey from these districts showed that there were some fungal species which showed severe diseases to soybean. It was observed that *Fusarium oxysporum* (Schlecht) was dominant in all 10 isolates. This report indicates the increasing importance of effective disease management. To design an effective method for controlling soil borne diseases of soybean further biological and chemical applications are needed.

**Key words-** *Fusarium oxysporum*, Soil borne mycoflora, Soybean.

#### Introduction

Soybean (*Glycine max* (L.) Merrill) is an important pulse food crop belongs to family fabaceae. India is one of the largest producer of soybean (60%) in world and in India the major cultivated regions are mainly Maharashtra, Karnataka, Gujarat, Andhrapradesh. This crop is treated as golden bean because of its three dimensional utility viz. pulse, oil seed and vegetable (Anonymous, 2007). Soy oil finds a variety of uses for domestic and industrial





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## ABSTRACT

Knowledge about the diversity, distribution and abundance of spider is very scattered in India. Spiders are common generalist predator in ecosystem, having an important role in the biological control of pest. They are good indicator of the fluctuating weather condition and change in their diversity aid to evaluate the condition of habitat. In present investigation 19 different spider species of 13 families were reported during 2019-2020.

**Key words:** Biodiversity, Spider, Tasgaon, Sangli, Maharashtra.

## Introduction

India is rich in flora and fauna and is a mega diverse country. Spiders are the top of the lower food web in ecosystem. Spider belongs to class Arachnida of the phylum Arthropoda and rank seventh in total species diversity among other orders of animal kingdom. In the recent past 'Research Survey' show the importance of spider to human welfare. Spiders are one of the most charming and diverse invertebrate animal in the world. In all over the world 44,540 species of spider belonging to 3,924 genera of 112 families. The spider fauna of India is represented by 1520 spider species, belonging to 377 genera and 60 families (Sebastian and Peter, 2009). Spiders are air breathing exclusively carnivorous arthropods. Major contribution to the Indian spiders study were made by Tikadar (1980-1987). Spiders are the most omnipresent and frequent predator in agricultural and natural ecosystem. Spiders are an important food source for aves, reptiles, amphibians, wasps and other animals. Due to scarcity of workers, much of the Arthropod diversity in most of the parts of Maharashtra remains unexplored. Many spiders are nocturnal and the color variation is observed to reduce their visibility during day time (Saravan, 2006).

**Study area:** Tasgaon Tahsil (17.0295° N, 74.6078° E; 819.74 sq. Km.)

## Material and Methods -

### Equipments:

Pencil, Pen, Notebook, Camera (Nikon, Sony).

### Location :



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## Research Article

# DEFLECTIONS IN GLUTATHIONE CONTENT IN SiO<sub>2</sub> AND ABHRAK BHASMA INFLUENCED PROTECTION IN CCl<sub>4</sub> INDUCED ACUTELY INTOXICATED LIVER AND KIDNEY IN MALE ALBINO RAT

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#### Key Words:

Abhtrak Bhasma, Glutathione, CCl<sub>4</sub>, SiO<sub>2</sub>, LPO.

### ABSTRACT

Abhtrak bhasma (Silica ore derived product) is an Ayurvedic drug used against liver diseases. CCl<sub>4</sub> (3.00ml/kg body wt/day for 7 days) induced acute toxicity in liver and associated injury in kidney are protected by abhtrak bhasma in albino rat (Buwa, 2000; Teli *et al.*, 2013). In present work the injury was protected by abhtrak bhasma (30mg and 40mg/gm wet wt. of tissue) and partially by SiO<sub>2</sub> (10, 20 mg/body wet wt. of tissue) by simultaneous treatment. During the protection, CCl<sub>4</sub> induced free radicals appear to be scavenged by GSH as the alterations in GSH are compared with LPO changes studied earlier in same experimental conditions (Teli and Kanase, 2020). SiO<sub>2</sub> was used as silica control for drug to distinguish the role of silica from Ayurvedic drug.

The results indicate that the silica in the form of SiO<sub>2</sub> is partially potent in protection as compared to abhtrak bhasma. Silica in the form of abhtrak bhasma was fully potent to protect acutely intoxicated liver and also the associated renal injury. Thus abhtrak bhasma protection seems to function through GSH/GSSH metabolism in liver and kidney effective through monitoring hepatic cell death and survival; in normal conditions of free radical scavenging. Thus results indicate that abhtrak bhasma mediated effects use the same pathway and thus strengthens the natural *in vivo* pathways of liver and kidney protection in rat or behaves as a positive immunomodulator.

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### INTRODUCTION

Abhtrak bhasma is one of the Ayurvedic medicine used independently or with other drugs and known to cure many ailments (Sharma, 1977). It was used to treat CCl<sub>4</sub> induced hepatotoxicity and associated kidney toxicity to study its protective and cure effects along with probable mode of action in our continued work. There are many parameters being investigated to reveal its probable mode by action/s, so that, it can be manipulated therapeutically in integrated medicine and/or the mode/s of actions can be exploited in use or to design modern drugs for various diseases.

Acute hepatotoxicity model of CCl<sub>4</sub> featuring fatty degeneration of liver with specific histological architecture (Kanase, 1998; Buwa, 2000; Chougule, 2007) with associated altered histological appearance of kidney accompanied by deflected liver and kidney functions (Teli *et al.*, 2013) has been used to test hepatoprotective and nephroprotective influences of various Ayurvedic drugs (Patil *et al.*, 1993;

Kanase, 1998) and also with abhtrak bhasma (Teli *et al.*, 2013; Teli *et al.*, 2014; Teli and Kanase, 2020) in our earlier studies.

CCl<sub>4</sub> mediated acute toxicity in liver and its harmful effect on kidney is known to produce free radicals formation (Teli *et al.*, 2015; Teli and Kanase, 2020) to lead histological damage to liver and kidney. So also abhtrak bhasma influences to protect it (Buwa, 2000). The managements of free radicals during protection of liver and kidney can be revealed through study of one of the free radicals scavengers.

Present studies were designed to illustrate the role of glutathione a natural free radical scavenger during abhtrak bhasma mediated protective action against CCl<sub>4</sub> induced acute hepatotoxicity and associated renal toxicity as CCl<sub>4</sub> is known to increase LPO in present experimental conditions of work (Teli and Kanase, 2020).

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## ABHRAK BHASMA AND SiO<sub>2</sub> INFLUENCED FREE RADICAL STATUS IN LIVER AND KIDNEY OF CCl<sub>4</sub>-INDUCED ACUTELY INTOXICATED MALE ALBINO RAT

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### ABSTRACT

**Objective:** The objective of the study was to study the mechanism of action of abhrahk bhasma-mediated liver and kidney protection in CCl<sub>4</sub>-induced acute hepatotoxicity-induced male albino rats. Action of abhrahk bhasma is compared with the action of SiO<sub>2</sub>, in similar experimental conditions to differentiate the role of silica.

**Methods:** Male albino rats (*Rattus norvegicus*) were used for experiments. The acute hepatotoxicity was induced by daily dose of CCl<sub>4</sub> (3.0 ml/kg body wt for 7 days consecutive). Concurrent treatment of abhrahk bhasma in graded doses (10, 20, 30, and 40 mg) was given for 7 days (PO). SiO<sub>2</sub> (10, 20, 30, and 40 mg) in graded doses was also given in independent groups of rats as silica control. Lipid peroxidation (LPO) in liver and kidney was studied by malondialdehyde (MDA) estimations as parameter of toxicity and also to study protection.

**Results:** CCl<sub>4</sub>-induced hepatotoxicity (MDA levels) is partially managed by low doses of SiO<sub>2</sub>, but not by high doses. Abhrahk bhasma hepatoprotective activities were dose dependent. A 40 mg dose maintained normal levels of LPO. Abhrahk bhasma also protected associated renal toxicity.

**Conclusion:** Abhrahk bhasma protected CCl<sub>4</sub>-induced hepatotoxicity and also associated renal toxicity. Silica from both SiO<sub>2</sub> and abhrahk bhasma is hepatoprotective in 10 ml doses (10 and 20 mg) but silica processed in abhrahk bhasma by traditional Ayurvedic processes increased its potency and hepatoprotection and added the potency of renal protection.

**Keywords:** Abhrahk Bhasma, Acute Hepatotoxicity, Lipid Peroxidation, CCl<sub>4</sub>, SiO<sub>2</sub>.

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### INTRODUCTION

As the traditional and ethnic being tested for their efficacy, new formulations of hepatoprotective drugs have also been tested in rats [1]. Our laboratory is also engaged in testing bhasmas for their efficacy and probable mode of action against induced hepatotoxicity [2,3]. In our earlier study, abhrahk bhasma and SiO<sub>2</sub> protective efficiency were tested against single dose of CCl<sub>4</sub> (3.0 ml of CCl<sub>4</sub>/kg body wt given once) induced hepatotoxicity in male albino rat [4]. In the present study, the protective potency of abhrahk bhasma and SiO<sub>2</sub>, graded doses was tested against CCl<sub>4</sub>-induced acute hepatotoxicity model [5].

The hepatotoxic effects of CCl<sub>4</sub> are largely due to its active metabolite/s, including the free radicals CCl<sub>3</sub> and CCl<sub>2</sub>OO [6], causing lipid peroxidative degradation of biomembranes leading to centrilobular hepatotoxicity [7], which is referred as fatty degeneration. Metabolically produced aldehydes can act as second toxic messengers of free radicals [8]. Malondialdehyde (MDA), the cytotoxic aldehyde, is one of the final products of polyunsaturated fatty acids peroxidation in the cells [9]. MDA is a major aldehyde resulting from the peroxidation of biological tissue and it is an indicator of tissue damage [10-12].

The control of lipid peroxidation (LPO) *in vivo* is important for several reasons, in particular because it contributes to the development of atherosclerosis [13]. Thus to prevent free radicals associated damage to tissues/organs or to control/management of free radicals, drug/s are helpful. Thus, abhrahk bhasma and SiO<sub>2</sub> are used to control oxidative damage that leads to atherosclerosis and further development of associated cardiac complications.

The experimental design evaluates the potency of hepato and nephroprotection of abhrahk bhasma and distinguishes role of SiO<sub>2</sub>, also, since abhrahk bhasma is derived from ore of silica.

### METHODS

Male albino rats (130-140 g each) were used for experiment. They were obtained from the departmental animal house [Reg. No. 233/CPCSEA]. They were basically derived from *Rattus norvegicus* breeding pairs obtained from National Institute of Virology, Pune (India). During breeding, maintenance, and experimentation, the animals were provided with standard pellet diet (by Azarit Foods, Sangli, MS, India) and water *ad libitum* (during 8 am-9 am).

#### Preparation of abhrahk bhasma and SiO<sub>2</sub>

Abhrahk bhasma was prepared as per Rasa Ratna Samucchaya [14]. SiO<sub>2</sub> was obtained from local chemical store.

#### Experimental schedule

3 ml of CCl<sub>4</sub>/kg body wt of rat/day was injected (SC) for 7 consecutive days to induce acute hepatotoxicity in animals. Graded doses (10, 20, 30, and 40 mg/kg body wt of rat) of abhrahk bhasma and SiO<sub>2</sub> were administered (PO) simultaneously with CCl<sub>4</sub>.

Doses of abhrahk bhasma and SiO<sub>2</sub> were administered with honey (PO). Honey control rats (six animals) were also maintained. Since their results were similar to normal, they are not included in the present data. The male albino rats were assigned into the following groups, each containing six animals and the various treatments were given as follows.

- Group 1 - The rats were maintained as normal without any treatment
- Group 2 - Hepatotoxicity induced by dose of 3.0 ml CCl<sub>4</sub>/kg body wt/day for 7 days
- Group 3 - 10 mg abhrahk bhasma/kg body wt/day for 7 days was given po
- Group 4 - 20 mg abhrahk bhasma/kg body wt/day for 7 days was given po

**REFLECTION OF SOCIAL WELFARE VERSUS PRIVATE BENEFITS  
IN HENRIK IBSEN'S PLAY *AN ENEMY OF THE PEOPLE*****DR. DATTATRAY BALASO THORBOLE**Assistant Professor,  
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Mahavidyalaya, Tasgaon Dist, Sangli  
Pin: 416312 (MS)**ABSTRACT**

*The present article tries to analyze, interpret and discuss in details in the context of the major social aspect that is 'Social Welfare Versus Private Benefits' in An Enemy of the People play. The main research objective of this article is to explain how the two types of the social approaches reflected in An Enemy of the People play. The entire play is based on two important issues like Social Welfare Versus Private Benefits in which politicians use their political power for their own benefit and try to show how we are superior to those who take care of social welfare. Henrik Ibsen has shown the condition of politicians and how they misuse their power for their political purpose in this play. Social welfare versus private benefits is the protagonist and the antagonists of the present play. It means social welfare is represented in Dr. Stockman's character, a medical officer in municipal health center in a small town of Norway and a private benefit is represented in the Peter Stockman's character, the doctor stockman's elder brother and the Mayor of the town. So you can see that in this article, Henrik Ibsen shows how there is a difference between a common man and a powerful person in this world. This article is an attempt to present a real picture of how people's attitude towards to see the society in the special reference of themes like social welfare versus self-interests behavior's in this play through the various characters. Thus, the present article will help to understand to the researchers as well as students in the context of the major social aspects like Social Welfare Versus Private Benefits.*

**Keywords:** Social Welfare, Private Benefits, Pollution, Contrast, Social Approach, Politics, Etc.

**Introduction**

The present study is an attempt to analyses and interprets the social welfare versus private benefits of Henrik Ibsen's play *An Enemy of the People*. In these plays, Ibsen skillfully illustrated the contrast between the two brothers from a social point of view. The conflict between two brothers is the central theme of this play in the context of who is doing a good work for the society. This conflict arises due to their different nature. Their devotion towards the society, development of society, public welfare, private interests, balances of





## Reflection of Humanistic Approach in Henrik Ibsen's An Enemy of the People (1882) Play

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### Abstract

The present research article is related to the 'Humanistic Approach' in Henrik Ibsen's *An Enemy of the People* (1882) play. The main research objective of this article is to explain how humanistic approaches reflected in this play. In that regards, two things are mainly reflected in this play by the playwright. One is the portrayal of people (character) who work sincerely for the society, and the other is the people (character) who see how they can benefit themselves without considering the welfare of the society. Through the character these two different personalities the researcher has tried to show that humanistic approach in it. It is a good attempt to show what is good and bad for society. Henrik Ibsen has shown the reflection of humanistic approach through the role of different characters in this play. Henrik Ibsen has shown the condition of politicians and how they misuse their power for their political purpose in this play. However, the main research objective of this article is to try to suggest that human principles should be properly nurtured for humanity while working in different fields. This article is an attempt to present a real picture of how people's attitude towards to see the society in the special reference of themes like humanistic approach in this play through the various characters. Researcher is going to discuss here in details in the context of some of the human values for humanity such as brotherhood, friendship, role and duties of press, hospitalities acceptance, recognition, appreciation, honesty, loyalty, unity, courtesy and respect etc. Thus, the present article will help to understand to the researchers as well as students in the context of the major social aspects like Humanistic Approach in Henrik Ibsen's *An Enemy of the People* (1882) Play.

**Keywords:** Social aspects, Humanistic Approach, Politic, culture, community, society, Public health, discuss etc.

### Introduction:

The present research article tries to analyze, interpret and discuss in details in the context of the major social aspects 'Humanistic Approach' in *An Enemy of the People* play. *An enemy of the people* is written by Henrik Ibsen. It is appeared in 1882. *An enemy of the people* presents a complex analysis of society and class in humanistic point of view. *An enemy of the people* playwright shows that, some of the upper classes people use the power of the majority for their own benefits and try to sidestep the humanitarian approach. In this play, Ibsen shown that, how the superior class as they try to rule the minority or even the struggles or working poor people. Henrik Ibsen skillfully illustrated the contrast between the two brothers with the special reference of social aspects like humanistic approach. The conflict between two brothers is the central theme of this play in the context of humanistic approach that is doing a good work for the society. This conflict arises due to their different nature. Their devotion towards the society, development of society, public welfare, private interests, balances of environment, pollution, water, political power, moral values, rule of government, corruption, scientific view etc. Considering all these things in

## 7. Reflection of Human Values in Mulk Raj Anand's Fiction

Dr. D. B. Thorbole

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### Abstract

Mulk Raj Anand is tremendously outstanding personality as an Indian novelist, renowned essayist, social reformer, craftsmanship commentator, editorial manager, writer, a short story author and social activist. He released additional area of scholars of novels alongside Raja Rao and R. K. Narayan and produced a lot of English literature and his supremacy in the realistic and thoughtful description of the untouched class of Indian society denotes. His virtue is as he is a socially committed novelist. Mulk Raj Anand's two novels show the reality of his early Indian society in the early twentieth century in terms of writing, including untouchability and human values. He was one of the founding fathers of Indian English novel writing in the specific context of human values. So, the present paper tries to analyze, interpret and discuss in details the term of reflection of human values in Mulk Raj Anand's fiction in the context of Indian English literature. The Indian English literary tradition is wide range in the history of English literature. Human values are the most prominent issue reflected in their writing as they face many problems in it. Indian English Literary Writing tackles the problems and frustrations of Indian cultural issues in the context of human values. According to the larger purpose of this important study, the present paper focuses on how Mulk Raj Anand's human values affect to people to people, group to group, individuals and people from all over the world. So, the present paper will help to understand the importance of human values in Mulk Raj Anand's writing to all community of the society.

**Key Words:-** Human Values, down-trouble, underprivileged, Indian literature, humiliation, Society & Culture, Problems and Frustrations, fiction & discussion etc.

### 1. Introduction

Mulk Raj Anand was a considerable respected writer, novelist, critic, editor, journalist and social activist of the twentieth century in Indian English literature. Mulk Raj Anand was committed to being a novelist. He has produced a good deal of literature in this literary genre. He





## Water Management: the Need of the Future

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### Abstract:

*The present paper tries to investigate, understand and discuss in details about the Water Management: The Need of the Future in the perspective of all human beings in the society. As we all know that well aware about the need of water and its importance. Nowadays is big problem creates about the water management in our Indian society. Water... water ... water .....where did the water go? All of you know that today's water is the life of tomorrow. The basic needs of a human being are air, food, clothing, home and water. But in it, the greatest basic need of that is water. The earth is a planet in our solar system that exists in the water. Seventy-one percent of the earth is water and twenty-nine percent is land. But, ninety-nine percent of it is water alkaline and the remaining two percent is fresh-water. So, in the present paper would be concentration on how to use of water and where it is needed. And you should have to think about it because you need water to drink. Without food, plants, trees, what would you eat? Does the business in your village and area do not require water? So why don't you want water management? It is very needful to all human beings on the earth. Therefore, the present article gives a brief overview of importance of water and its use and also covered how to do water management for our future need.*

**Keywords:** water, management, human being, need, future, discussion, problem.

### Introduction:

Doing maintenance, repairing means aren't water management. It is just part of the management. The idea beyond that is expected in management. Facing up to the any difficult occasion may be part of maintenance or repairing. But how can such an event be avoided, there are certain things you need to do, in that situation, management is the way to research how to do water management. Irregular rainfall and low groundwater levels are a consequence of future crises. This is the time to recognize the importance of water. It is the need of the period to stop the rain drops and the waters.

Water management means, it is the proper distribution of available water resources on the earth to do properly supply all living community which is called as water management. Nowadays, Due to water pollution, water resource reduction, and global temperature rise, this question is raging on all levels, from local to global. All of you know that, one of the big problems of water management arising in front of to us. Rising prices of land and displacement of locals are opposing the construction of new dams or river linking projects for water management. And it is the basic problem of water managements. In that case, the great social worker, Medha Patkar has done awareness work in this regard worldwide. Similarly, people like Rajendra Singh, who is also the oldest Jhadi who created the water revolution in the state of Rajasthan and



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## शिवजी संशोधन पत्रिका

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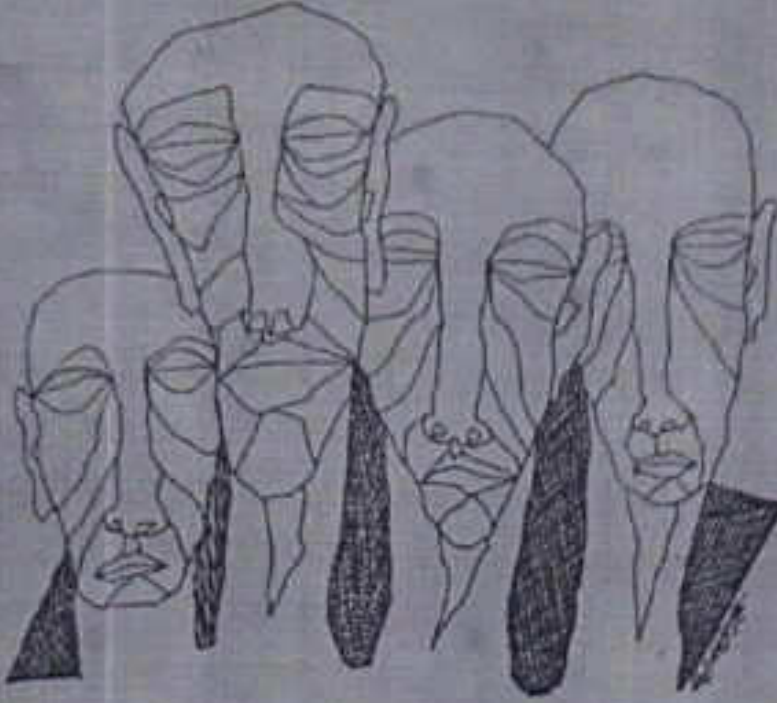
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॥ अरुन्धत मुक्तिबोध जन्मशताब्दी विशेषांक ॥









## मानुषतेची संकल्पना आणि मुक्तिबोधांच्या कादंबऱ्या

डॉ. तातोबा बदामे

शरच्चंद्र मुक्तिबोधांनी ललित वाङ्मय निर्मिती बरोबरच अतिशय मूलगामी असे समीक्षालेखनही केले. नवकवितेचे प्रतिनिधित्व करणाऱ्या मुक्तिबोधांनी त्रिखंडात्मक कादंबरी लेखनाचाही तितक्याच यशस्वी पद्धतीने प्रयत्न केला. त्यांनी मर्मग्राही व साक्षेपी समीक्षालेखनही केले.

श्या काळात वा. सी. मर्हेकर सौंदर्यवादी विचारसरणीतून कलाकृतीच्या आकृतिबंधाचे, लयतत्त्वासंबंधीचे लेखन करत होते त्या विचारसरणीला विरोध करणारी भूमिका मुक्तिबोधांनी वारंवार मांडली. मर्हेकरांच्या लयनिष्ठ विचारसरणीला तीव्र आक्षेप घेतला. लयतत्त्ववादी भूमिकेचे जोरदार खंडण करताना वाङ्मयकृतीच्या मूल्यमापनासाठी 'मानुषता' ही नवी संकल्पना त्यांनी मांडली.

'मानुषता' सारखी संकल्पना मांडणारे शरच्चंद्र मुक्तिबोध म्हणूनच दखलपात्र समीक्षक ठरले. त्यांच्या 'सृष्टी', 'सौंदर्य आणि साहित्यमूल्य' या समीक्षा ग्रंथात दहा भागांमध्ये विस्ताराने त्यांनी ललित साहित्यकृतीच्या मूल्यांकनासाठीचा एकमेव सर्वोत्कृष्ट

संदर्भार्थ । जानेवारी-फेब्रुवारी-मार्च-२०२१ । ७३





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# लोकसंस्कृतीची आविष्कार रूपे



## तौलनिक लोकसंस्कृती अभ्यास : नवे अभ्यासक्षेत्र

डॉ. तातोबा वदामे

पद्यभूषण डॉ. भंमंतरावदादा पार्टील महाविद्यालय, तामगाव त्रि.सांगली

प्रास्ताविक :

तौलनिक साहित्याभ्यासासून विकसित झालेली अनेक अभ्यासक्षेत्रे जगभरात अभ्यासली जात आहेत. प्रत्येक देशात तौलनिक साहित्याभ्यास स्वतंत्रपणे विकसित झाला आहे. ज्ञान, जर्मनी, अमेरिका यांचे उदाहरण घेतल्यास तिथे अनुक्रम प्रभावाभ्यास, उद्गमअभ्यास आणि संस्कृती अभ्यास मोठ्या प्रमाणावर होत असल्यास दिसून येते. भारतात तौलनिक लोकसंस्कृती अभ्यास व्यापला हवेत. त्यासाठी पृष्ठभूमी भारतात सहज उपलब्ध आहे.

तौलनिक लोकसंस्कृती अभ्यास : नवे अभ्यासक्षेत्र

तौलनिक लोकसंस्कृती अभ्यासक्षेत्र हे एक व्यापक अभ्यासक्षेत्र आहे. भारतासारख्या छद्मप्राय देशात अनेक भाषा, संस्कृती, कलांचे भांडार दिसून येते. भाषावार प्रांतरचना झाल्याने बरबर वेगळ्या दिसणाऱ्या प्रदेशांना विभिन्न कला-संस्कृतीनी जोडलेले आहे. भारतात साजरे केले जाणारे सण, समारंभ, बरबर वेगळे वाटत असले तरी ते संस्कृतीच्या आंतरीक धाग्याने एकमेकांत घट्ट विणले गेले आहेत. भारतात असणारे विविध धर्म, जाती, पंथ, संप्रदाय आपापले स्वतंत्र तत्त्वज्ञान, आचारधर्म असूनही या विविधतेन कमातीची एकताही प्रदिस होताना दिसते. अशा प्रकारच्या वैशिष्ट्यपूर्ण पृष्ठभूमीमुळेच भारतातील लोकसंस्कृतीचा तौलनिक अभ्यास शक्य आहे असे वाटते.

जागतिकीकरणास अडीच ते तीन तप उलटून गेल्यानंतर आता माहिती तंत्रज्ञानाच्या युगाचा बोलबाला सर्वत्र दिसून येत आहे. संपूर्ण जग आंतरजाल, चलभाष या तंत्रांनुषंगी व्यापले आहे. जगाचे अंतर संपुष्टात आले असल्याने जगातील विभिन्न संस्कृतींचा प्रभाव व स्वीकारही वेगाने होत आहे. पाश्चात्य संस्कृतीचा भारतीयांक निश्चितपणे प्रभाव पडला असला, तरी आज पाश्चात्यांनीही भारतीया संस्कृतीचा प्रभाव स्वीकारला असल्याचे उत्तम उदाहरण योगविद्येच्या आणि आयुर्वेदाच्या जगभरातल्या स्वीकारामुळे सहजपणे लक्षात येते. जागतिकीकरणामुळे वाढते शहरीकरण आणि तंत्रज्ञानातील प्रभावामुळे वाढते यांत्रिकीकरण सर्वत्र प्रत्ययाला येत आहे; असे असले तरीही लोकसांस्कृतिक वारसा लोकांनी सर्वत्र जपला असल्याचे दिसून येते.

सांस्कृतिक अस्मिता आणि अस्मितांच्या संस्कृती :

७४ । लोकसंस्कृतीची आविष्कार रूपे

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## ११. तृतीयपंथी यांचा समाजशास्त्रीय अभ्यास

डॉ. विनोदकुमार धोंडीराव कुंभार

सहाय्यक प्राध्यापक आणि विभागप्रमुख, समाजशास्त्र विभाग, पी. डी. सी. पी. महाविद्यालय, तालगाव.

### प्रस्तावना

भारतीय समाजात विविध निकषावरून असावणता दिसून येते. तसेच काही समूह आजही दुर्बलित, ध्वस्त म्हणून जीवन जगत आहेत. तृतीयपंथीयांमध्ये समाज हिनतेच्या दृष्टिज्वेनातून पाहते. त्यामुळे तृतीयपंथी व्यक्ती स्वातंत्र्ये जीवन जगण्याच्या पद्धतीचा अवलंब करतात. तसेच या प्रकारच्या जीवनपद्धतीमुळे ते समाजाच्या मुख्य प्रवाहातून अतिशय विंचव ध्वस्त राहिले आहेत. तसेच अशा व्यक्ती तृतीयपंथीयांच्या समुहामध्ये सहभागी होतात. तृतीयपंथी समुदायामध्ये सहभागी होणाऱ्या व्यक्तीला समुदायाचे नियम आणि अटी यांचे पालन करणे लागते. तसेच समुदायाच्या प्रथा आणि परंपरा यांचा स्वीकार करणे लागते. तृतीयपंथी समुहातील काही व्यक्ती पुरुष असूनही ते स्त्रियांच्या कृतीचे अनुकरण करतात. काही तृतीयपंथी जन्मतःच व्यंग घेऊन जन्माला येतात तर काहीना समाजातील अनिष्ट प्रथा-परंपरांनुसार नयनासाठी देवाला सोडले जाते. यामुळे त्यांना तृतीयपंथीयांचे जीवन जगावे लागते. काही व्यक्तीमध्ये झालेल्या शारीरिक आणि मानसिक बदलांमुळे त्यांना तृतीयपंथीयांचे जीवन जगावे लागते. काही सांस्कृतिक कार्यक्रमांमध्ये त्यांना महत्त्वाचे स्थान मिळत असते तरी समाजातील जास्तीतजास्त लोकांकडून त्यांना अपमान आणि अपहेलना स्वीकारावी लागते. २०११ च्या जनगणना अहवालांनुसार, भारतातील तृतीयपंथीयांची लोकसंख्या ८५०८०३ आहे तर महाराष्ट्रातील लोकसंख्या ४०८९२ इतकी आहे.

### ध्याख्या

“तृतीयपंथी म्हणजे शारीरिक पुरुष असून त्यांची लैंगिक ओळख, फेसगूला आणि लैंगिक भूमिका स्त्रीप्रमाणे असते. त्यांना तृतीयपंथी म्हणतात. (<https://mr.wikipedia.org>).

“एकादी व्यक्ती जन्मतःच नैसर्गिकरित्या लैंगिक विकृती घेऊन जन्मास येतो आणि अशा वेळेस तो स्त्री लिंग आहे की पुलिंग आहे हे स्पष्ट होत नाही, म्हणजेच तो नर आहे की मादी हे स्पष्ट होत नाही या विकृतीलाच आपल्या समाजात तृतीयपंथी असे संबोधले जाते.” (<https://marathi.pratilipi.com>)

### उद्दिष्टे

- तृतीयपंथीयांच्या समस्यांचा अभ्यास करणे.
- तृतीयपंथीयांच्या समस्यांवर उपाययोजना सुचविणे.

### संशोधनपद्धती

प्रस्तुत संशोधनासाठी वर्णनात्मक संशोधन पद्धतीचा वापर करण्यात आला आहे.





भारतीय समाजातील सामाजिक संस्थांचे बदलते स्वरूप

डॉ.विनोदकुमार भोंडीराम कुंभार

सहाय्यक प्राध्यापक, समाजशास्त्र विभाग, पी.डी.व्ही.पी.महाविद्यालय, तासगाव

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प्रस्तावना:

भारतीय समाजामध्ये जात, वर्ग आणि धर्म या तीनही संकल्पना परस्परांवर अवलंबून आहेत. भारतीय समाजामध्ये प्रामुख्याने कुटुंबसंस्था, धार्मिक संस्था, राज्यसंस्था, अर्थसंस्था, विवाहसंस्था प्रमाणेच सामाजिक संस्थांमध्ये जातीसंस्था ही एक मूलभूत सामाजिक संस्था म्हणून अस्तित्वात असल्याचे दिसून येते. भारतीय समाजामध्ये प्रत्येक व्यक्तीचे स्थान, तिचा दर्जा, समाजामध्ये राहण्याचे नियम, जीवन जगण्याची एकूण पद्धती, ही त्या व्यक्तीची जात, वर्ग आणि धर्म यावर प्रामुख्याने अवलंबून होती. बदलत समाजामधील सर्व नियमने, मुल्ये इत्यादी जात, वर्ग आणि धर्म यामुळे वैशिष्ट्य रचनेमध्ये विभागलेली होती आणि समाजातील प्रत्येक व्यक्तीला या नियमांचा पालन करावे लागत होते. तसेच ज्या व्यक्तीकडून या नियमांचे पालन होत नाही, त्या व्यक्तीला कोणती शिक्षा करावी हेसुद्धा जात, वर्ग आणि धर्म यानुसारच ठरत असे. समाजातील व्यक्तींच्या नावांची रचना सुद्धा जात, वर्ग आणि धर्म नुसारच ठरत असे. अशा या भारतीय समाजामध्ये मुख्य भूमिका बजावणाऱ्या जात धर्म आणि वर्ग या संकल्पनांना आणि सामाजिक संस्थांचा अभ्यास करणे आपण महत्त्वपूर्ण ठरते. तसेच यांचे स्वरूप स्वातंत्र्यापूर्वी कसे होते आणि स्वातंत्र्यापूर्वीनंतर यामध्ये कोणता बदल होत आहे याचाही अभ्यास करणे महत्त्वपूर्ण ठरते. मानवाच्या मूलभूत गरजा पूर्ण करण्यासाठी सामाजिक संस्था निर्माण झाल्या. प्रत्येक सामाजिक संस्थेचे एक मूलभूत कार्य असते. प्रत्युत संशोधन लेखांमध्ये संशोधकाने जात, वर्ग, धर्म, विवाहसंस्था, कुटुंबसंस्था, शिक्षणसंस्था इत्यादींचे स्वातंत्र्यापूर्वीचे स्वरूप आणि स्वातंत्र्यापूर्वीनंतर या सामाजिक संस्थांमध्ये झालेले परिवर्तनाचा अभ्यास करण्याचा प्रयत्न केलेला आहे.

उद्दिष्टे:

१. स्वातंत्र्यापूर्वीचे सामाजिक संस्थांचे स्वरूप स्पष्ट करणे.
२. स्वातंत्र्यापूर्वीनंतर सामाजिक संस्थांमध्ये झालेले परिवर्तनाचा अभ्यास करणे.

संशोधन पद्धती:

प्रत्युत संशोधन लेखासाठी संशोधकाने वर्णनात्मक संशोधन पद्धतीचा वापर केलेला आहे. तसेच माहिती संकलनासाठी दुय्यम स्त्रोतांचा वापर करण्यात आलेला आहे. यामध्ये प्रामुख्याने संदर्भ ग्रंथ, इंटरनेट इत्यादींचा वापर करण्यात आलेला आहे आणि त्यानुसार पिढ्यालेल्या माहितीचे विश्लेषण पुढीलप्रमाणे करण्यात आलेले आहे.

सामाजिक संस्थांचे स्वरूप आणि सामाजिक संस्थांमध्ये झालेले परिवर्तन:

• जातीव्यवस्था:

डॉ.मुजुमदार व मदन पांढ्यां मते, " जात हा एक संत वर्ग आहे."

जातिव्यवस्थेचा अभ्यास प्रामुख्याने डॉ.जी.एस.सुर्वे, हर्बर्ट रीजले इत्यादी अनेक समाजशास्त्रज्ञांनी केलेला दिसून येतो. डॉ.जी.एस.सुर्वे यांनी जातिव्यवस्थेची प्रमुख वैशिष्ट्ये सांगितलेली आहे. त्यामध्ये समाजाची सहाय्यक विभागणी, स्तंभान परंपरा, खाण्या-पिण्या संदर्भात व सामाजिक संस्थांविषयक निर्बंध, सामाजिक व धार्मिक अजायबात व विशेष अधिकार, विवाहविषयक नियम, व्यवसाय स्वातंत्र्याविषयक नियम इत्यादी मुख्य वैशिष्ट्यसंदर्भात सांगणी दिसून येते. डॉ.जी.एस.सुर्वे यांनी जातीची वैशिष्ट्ये सांगितली आहेत त्यावरून भारतीय समाजातील जातीव्यवस्थेचे स्वरूप समजण्यास मदत होते.

स्वातंत्र्यापूर्वीचे प्रामुख्याने भारतीय समाज चार वर्गांमध्ये विभागला केलेला होता. यामध्ये ब्राह्मण, क्षत्रिय, वैश्य, शूद्र आणि अतिशूद्र यानुसार समाजाचे विभाजन झालेले होते. तसेच प्रत्येक

## 19. Inculcation of Human Values

**Dr. Arjun Wagh**

P. D. V. P. Mahavidyalaya, Tasgaon, Dist. - Sangli (MS) India.

### Abstract

In earliest societies, religion had a dominating pressure in every sphere of human activity. Result was, the content of education was more or less religious in nature. Besides mental training, moral training was emphasized to a great extent. Learners had to experience rigorous character training and value-education during their stay in Gurikuls or Ashrams.

**Key Word:** Human Value, Inculcation

### Objectives

1. To know human values
2. To understand the way to inculcate Human values among the students

### Introduction

Much stress was on spiritual development of the teachers. Thus, The Entire Education System Was Primarily Value Oriented! But as the days passed by, there was a gradual erosion of values and the so-called modern education entered inside the modern world. Character training and value-education started getting ignored. Materialism, cutthroat competition, influence of Western Culture, etc. contributed a lot which resulted in all kinds of value-crisis.

Newspapers were full of news like rape of minor children, kidnapping, forgery, gang rape of girls/women, thefts, murder, killing of brides for dowry, etc. Vices like drinking, drugging, gambling etc. are now on increase. Thus, by all such quoted facts it is seen that a factor called "Contentment" has started losing the ground! Corruption has entered in all walks of life. Based on the above quoted facts one can understand the strong need for the education in human values. The process of inculcating values must start right from the primary education level. In other words, Education in Human Values needs to be incorporated as an integral component of the entire educational system.

After all this discussion, the question that now jumps up like a boomerang is what is value? Literally, value means something that has a price, and is precious. In a given situation, a person may have a number of alternative responses. However, he or she chooses one which is





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*Our Editors have reviewed papers with experts' committee, and they have checked the papers on their level best to stop furtive literature. Except it, the respective authors of the papers are responsible for originality of the papers and intensive thoughts in the papers. Nobody can republish these papers without pre-permission of the publisher.*

*- Chief & Executive Editor*





## A GEOGRAPHICAL ANALYSIS OF LOCAL PROBLEMS IN MUNICIPAL SOLID WASTE MANAGEMENT OF SATARA CITY.

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3. Assistant professor, Department of Geography, P. D. V. P. College, Talgaon

### Abstract

Municipal solid waste management is a global environmental issue which concerns about a very significant problem in today's world. There is a considerable amount of disposal of waste without proper segregation which has led to both economic and environment sufferings. It is still practiced in many cities. There is a tremendous amount of loss in terms of environmental degradation, health hazards and economic demand due to direct disposal of waste. It is better to segregate the waste at the initial stage where it is generated, rather than going for a later option which is inconvenient and expensive. There has to be appropriate planning for proper waste management by means of analysis of the waste situation of the area.

The problem of solid waste management is face from Municipal authority, but in the coming future, solid waste management is if properly not measures we having the waste situation. Mostly in urban centers generate the critical issue of solid waste. Solid waste management is if not appropriate managed, we have air, water, land pollution, some diseases, and disturbance of living life and besides a lot of energy. Today we are experienced various diseases, skin irritation, heart and breathing problems, and more examples of diseases due to improper disposal of solid waste. Serious and various health problems are facing India's world due to improper solid waste management.

**Keywords:** Solid waste management, segregation, environmental degradation, disposal of solid waste.

### Introduction:

The rapid increasing population, economic growth, urbanization and industrial development it has resulted the high rate increased of solid waste generation. Especially in urban areas, the problems of solid waste expand because more people are migrating towards the middle and metro cities. Solid waste generation rate is increased day by day due to increasing population but solid waste management done from municipal authority. In India, Municipal or local authorities provides the services of solid waste collection, transportation and disposal treatment. The solid waste collection and storage is the dumpster, bins, dust bins or containers.



## **Water Management: Present Situation and Upcoming Challenges**

**Mr. Gavit Sunil Soma**

(Assistant Professor)

P. D. V. P. Mahavidyalaya Tasgaon.

### **Abstract:**

Water distinguishes our world compare to all the others we know about. Though the overall deliver of available freshwater is more than sufficient to meet all present and estimated water demands. The lack of sufficient fresh water to meet human intake water and hygiene needs is certainly a constraint on human fitness and production and hence on economic development as well as on the protection of a clean surroundings and healthy ecosystem. This paper identified the issue facing water managers these days and upcoming research needed to well again inform those who struggle to generate a more sustainable and attractive upcoming.

**Key Word:** Water management, water condition, Global Environment, Challenges etc.

### **Introduction:**

All through the world, demographic, financial, and technological trends contain accelerate our ability to by design and naively adjust the environment we survive in and that sustain us. We human have befallen the main driver of ecological change. Our actions are impacting our overall atmosphere, with our climate. This in turn impact the amount and spatial and of time distributions of rainfall that falls on watershed and the time of its surplus. Together with change in landscape, due to increase in food and energy making and from the society of public into urban centers, we are varying the amount and quality of our freshwater wealth on which we depend to live, both actually and carefully. Water plays a role in the creation of the lot we create. There is no substitute and while it is renewable there is only a limited quantity of it.

### **Objectives:**

- To study the present situation of water condition
- To understand the present and upcoming challenges of water management
- To analyze and interpretation of about water management

### **Freshwater Stress:**

Now a day's each one is troubled about the possible water shortage in the face of increasing, mainly population driven, water difficulty, and its penalty on our energy and food production. The universal danger Perception Survey conducted with 900 standard expert by the World Economic Forum reports that the maximum level of community shock over the next 10 years. In recent decades the gain raise in water use on a overall scale has exceed double that of population growth. This has lead to more, and larger, region in the world being subject to water stress where the present limited rates of water use and utilization, let alone the beloved rates, are invalid. Water stress and supplies are varying. What they will be in the upcoming is unsure, but it is positive that they resolve change.

### **Globalization:**

Growing globalization is inspiring the realization of new rules and events for the international trade of goods and services, rejecting the rising cheek of global Firm engaged



## Global Climate Change and It's Social, Economic and Environmental Consequences

**Sunil S. Gavitt**

*Assistant Professor, Department of Geography, Padma Bhushan Dr. Vasantroodada Patil Mahavidyalaya,  
Tangann-Dist-Sangli (M.S.)*

### **Abstract:**

Climate change is one of the foremost challenges of our time and adds significant stress to our society and the atmosphere. From variable weather patterns that pressure food production, to growing sea levels that boost the risk of terrible flood, the impact of climate change are global in capacity and unique in balance. Without severe action now, adapt to these impacts in the potential will be more hard and rich. This outline deals with the thought of Global Climate Change, the related conditions, causes, consequences, solutions, and its possible fitness impact. It shows the want to proceed directly if we are to let alone a permanent build-up of greenhouse gases and global warming at a potentially vast cost to the wealth and civilization global. Therefore, address climate change require a "unique attitude of collaboration, not only among country but also between unusual levels of government, secret segment, and persons.

**Keywords:** greenhouse gases Global, Climate Change

### **Introduction:**

Climate change is a severe risk to scarcity decline and could open decades of progress efforts. While climate change is universal, its harmful impacts are more strictly felt by poor citizens and poor countries. They are more helpless because of their high confidence in natural wealth and partial ability to get by with climate changeability and extreme. Restore and maintain key ecosystems can help a community in their adjustment hard work and hold up livelihoods that depend ahead on the services of these ecosystems. Affecting towards low-carbon society can help decrease greenhouse gas emission, civilizing human fitness, and well-being and create the green job. Climate change is an actuality of days. We need to act immediately if we are to let alone a permanent build-up of greenhouse gases and global warming at a potentially vast cost to the financial system and humanity universal. Society for financial assistance and growth study suggests that if we act at present, we have ten to fifteen years of breathing space through which act is potential at a rather diffident charge. But each year of delay reduces this breathing space, while require ever more severe events to create a distinction. Present financial confusion is not a motive to wait. Its macro-financial penalty will be determined in a relatively short point, after which increase will begin again, while the penalty of functional on global warming will maintain to cultivate more and more dear over point. This study presents a summary of Global Climate Change intending to help value the idea, its pressure and to give a coming to the ways it affects civilization and the natural situation and proffering solution

### **Objectives:**

1. To understand concept of greenhouse effect
2. To study social, economic and environmental consequences of global climate change

### **Methodology and Data sources:**

The present research article is theoretical in nature. The data collected from various published and unpublished articles, newspapers, journals and books.

### **Greenhouse Effect**

A normal structure is known as the "greenhouse effect" which regulates temperature in the world. Just as wineglass in a greenhouse keeps heat in, our feeling traps the sun's heat near the earth's plane, above all during heat-trapping properties of confident "greenhouse gases". Earth is fiery by daylight. The majority of the sun's force passes during the atmosphere, to temperate the earth's plane, oceans, and atmosphere. The normal process is well-known as the greenhouse effect. Devoid of greenhouse gases, Earth's regular hotness would be  $-19^{\circ}\text{C}$  in its place of  $+14^{\circ}\text{C}$ , or  $33^{\circ}\text{C}$  colder. Above the history ten thousand years, the quantity of greenhouse gases in our atmosphere has been rather steady. Then little centuries ago, their concentration begins to rise due to the growing requirement for energy caused by industrialization and growing populations, and due to shifting land use and human being settlement patterns.

### **Greenhouse Gases**

The greenhouse gases and their sources are as below:

**Water vapor** is the main general greenhouse gas but others are especially important too. Some occur obviously and some approach from human being activity.

**CO<sub>2</sub>**: is the most significant greenhouse gas released by human activities, mostly through the burning of fossil fuels. It is the main contributor to climate change.

**CH<sub>4</sub>**: is formed when vegetation is burned, digested, or rotted with no O<sub>2</sub> present. Compost dumps, rice paddies, and grazing cows and other livestock release lots of methane

**N<sub>2</sub>O**: can be found naturally in the environment but human being activities are growing the amounts. Nitrous oxide is at large when chemical fertilizers. Nitrous oxide is released when chemical fertilizers and measures are used in crop growing.



✓  
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Research Article

## An Analysis of Spatial Distribution of Major Settlements in Nandurbar District (Ms)

Mr. Sunil Soma Gavit and Dr. A. K. Hange

Research Scholar, SRMTM University Nanded Maharashtra, India

Research Guide Shriwaji Mahavidyalaya Renapur, Latur Maharashtra, India

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MR. SUNIL SOMA GAVIT

**Abstract:** The spatial distribution of major settlements across a country and their interconnectivity and obtain ability from major settlements areas are significant for providing healthcare, allocating resources and socio-economic development. We hypothesize that there are variations in the spatial patterns of major settlements across different places in Nandurbar district that exist in accordance with different human activities and environmental conditions. We analyse and compare the spatial patterns of major settlements in Nandurbar district. The analyses highlight large inequities in access, the isolation of many settlements in Nandurbar district.

**Keywords:** Settlements, Spacing

### INTRODUCTION:

Today, urbanization is common developing activity of the world. The world recognized the importance of urbanization in the economy of that place, so day by day various major settlements places are emerging throughout the world. To conserve and protect the urban and rural culture are essential for the regional development. In Nandurbar district there are various urban places are situated this all places have its own characteristics historical, cultural, geographical as well as religious importance. These all destination are unevenly distributed all over the district. And to study of these major settlements destinations and its distribution is very essential for the future planning.

#### Objectives:

- To study the classification and distribution of settlements in study region.
- To study the spacing of settlements in study region.

### METHODOLOGY:

This study is based on secondary data sources. Secondary data is collected by various sources like book, journal, maps, newspapers etc. For the analysis of data nearest neighbour technique has been used.

#### Study Region:

Nandurbar district is the northern most district of the Maharashtra state. Nandurbar is a tribal district bestowed with abundant natural resources. This district bounded from west and North West by Gujarat State, to the north and north east by Madhya Pradesh state, in the south Dhule district. It situated between the 17° 2' to 17° 3' North and 74° 06' to 74° 36' East longitudes. This district covers area about 5034.23 sq. km, 16,48,296 (2011) population concentrated in this district. This district has Narmada and Tapi and their sub streams river as well as mountain ranges of Satpuda.

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## 8. Demographical Characteristics of Mangalwedha Tahsil in Solapur District

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### Abstract

Mangalwedha tahsil is located in the north-western part of Solapur district. The tahsil situated in Bhina and Sina river basin. It is surrounded by Pandharpur tahsil to the northern part, Mohol tahsil to the northeast part, Solapur South tahsil to the east, Indi tahsil of Bijapur district to the southeast part, Jath tahsil of Sangli district to the south and Sangola tahsil to the west part. It's an area of 1596.09 sq Km; the 2<sup>nd</sup> rank of tahsil in Solapur District. This tahsil has situated on the upper part of Ujjani dam in Solapur District. The latitudinal extent is 17°11'0" N to 17°37'0" North and longitudinal extent is 75°18'17" E to 75°40'14" East. This Karmala tahsil is mainly rural in character and has 123 villages according to 2011 census. The total population of tahsil was 254489 people and holds 10<sup>th</sup> rank in district & literacy rate was 75.5 % and holds 7<sup>th</sup> rank in Solapur district as per 2011 census. The study is based on secondary data which is collected from census & Government documents.

**Key words:** Population composition, Population growth, Distribution, Socio economic Development.

### Introduction

An integrated programme for the utilization of population should include long term aims and instruments for the development of human capacities, notably; professional and occupational skills may constitute the most formidable bottlenecks in the successful implementation of the programme of economic and social development. The development of population through education and vocational training should, therefore, be accorded a very high priority in the future planning and programme of economic development.

Population has both quantitative & qualitative dimension. Characteristics like the size, composition and distribution of population and skilled labour force, literacy level, the number of



## 9. Goods and Services Tax - Challenges in India

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### 1. Introduction

"The goods and services tax law in India is a comprehensive, multi-stage, destination-based tax that is levied on every value addition". Taxation policy plays a very crucial role on the economy of a country. The main source of revenue of the government comes from the taxes levied on the citizens who can be direct or indirect. When the impact and incidence falls on same person it is called as direct tax and when the impact and incidence falls on two different people i.e. The burden can be shifted to any other person it is called as indirect tax. Before the introduction of GST India had a complicated indirect tax system with multiple taxes imposed by union and state separately, with the introduction of GST all the indirect taxes will be under an umbrella and ensuring a smooth national market with high economic growth rate. GST is a single point tax levied on the supply of goods and services, right from the manufacturer to the consumer. It would bring down the prices of goods and services which in turn will help the companies as consumption will increase

- Higher threshold for registration which will exempts many small traders and service providers.
- In the GST system, when all the taxes are integrated it would eliminate the number of compliances like return filing.
- It would help to eliminate the separate tax imposition on goods and services which requires the transaction to split its value among goods and services leading to greater complications.
- GST would simplify the working procedures and would minimize the tax burden of E-commerce and logistics companies.
- Employment generation for youths as GST trained experts.



## भारतातील शहरीकरण :समस्या आणि उपाययोजना

**डॉ. बंडू जयसिंग कदम**

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### प्रस्तावना

स्वातंत्र्यप्राप्तीनंतर शहराची वाढ वेगाने झाली. या वाढीबरोबर समस्या वेगाने वाढल्या आहेत. वाढती लोकसंख्या ही भारताच्या विकासातील मोठा अडथळा आहे. या वाढत्या लोकसंख्येला सोपी-सुविधा पुरविण्यासाठी शहरपातळीवर कोणकोणत्या योजना राबवायला हव्यात, याविषयीचे विश्लेषण करतानाच दुसऱ्या बाजूला वाढत्या लोकसंख्येमुळे शहराचे कसे बकालीकरण होत आहे याचाही विचार करण्यात आला आहे. थोडक्यात प्रस्तुत शोधनिबंधामध्ये आपल्या देशातील शहरीकरण निर्माण झालेल्या समस्या आणि त्या समस्यावरती उपाययोजना यावर प्रकाश टाकण्याचा प्रयत्न करण्यात आला आहे.

### शहरीकरण म्हणजे काय?

शहरीकरण म्हणजे शहराच्या लोकसंख्येची व त्याच्या क्षेत्राची वाढ. वाढते औद्योगिकीकरण व खेड्यातून शहराकडे होणारे लोकांचे स्थलांतर यांचासुद्धा शहरीकरणामध्ये समावेश होतो. 2011 च्या जनगणनेनुसार 30.16 टक्के लोकसंख्या शहरांमध्ये राहते. एका पाहणीनुसार 2030 पर्यंत जवळपास 25 कोटी अतिरिक्त लोकसंख्या शहरांमध्ये येणार आहे. असेही दिसून आले आहे, की शहरीकरण आणि विकास हे बरोबरीनेच चालतात. जी राज्ये झपाट्याने विकास करत आहेत त्यांचाच शहरीकरणाचा वेग अधिक आहे. 2012-13 सालच्या पाहणीनुसार महाराष्ट्राच्या शहरीकरणाची टक्केवारी 45.2 टक्के होती. ती 2030 पर्यंत 58 टक्के होण्याची शक्यता आहे. भारतातील 3 मोठ्या मेट्रो शहरांची लोकसंख्या जगातील काही देश जसे कॅनडा, मलेशिया, सौदी अरेबिया, ऑस्ट्रेलिया यांच्यापेक्षा मोठी होईल.

### अभ्यासाची उद्दिष्टे

- शहरीकरण या संकल्पनेचा अभ्यास करणे
- शहरीकरणमुळे निर्माण होणाऱ्या समस्यांचा अभ्यास करणे.
- वाढत्या समस्या कमी करण्यासाठी उपाययोजना सुचविणे.

### संशोधन पध्दती आणि तथ्य संकलन

प्रस्तुत शोधनिबंध तयार करण्यासाठी दुय्यम सामग्रीचा वापर करण्यात आला आहे. यामध्ये प्रामुख्याने वेगवेगळे संदर्भ ग्रंथ, वेगवेगळ्या समित्यांचे अहवाल, मासिके, वर्तमान पत्रे, इंटरनेट इत्यादींचा वापर करण्यात आला आहे.

### शहरीकरणाचे परिणाम (समस्या)





महाराष्ट्रातील शेती : एक चिकित्सक अभ्यास

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**शोषवारा:**

भारतीय शेती अर्थव्यवस्थेचा कणा आहे. १९९१ मध्ये नवीन धोरणाचा स्वीकार केला गेला. त्यास आज २७ वर्षे पूर्ण झाली आहेत. ६८.७: लोकसंख्या आजही शेती व पुरक व्यवसायावर अवलंबून आहे. नियोजनाचा स्वीकार करून आज ६७ वर्षे पूर्ण झाली तरी नैसर्गिक साधन संपत्तीवर संपूर्ण अर्थव्यवस्था अवलंबून आहे. दुष्काळ, अतिवृष्टी, गारपीठ अशा सर्व नैसर्गिक आपत्तींचा सामना शेतकरी करत आहे. प्रतिकूलतेवर मात करत आर्थिक विकासाचा दर बदलत आहे. कधी कमी तर कधी जास्त अशी शेती विकासादराची स्थिती आहे. प्रस्तुत शोधनिबंधामध्ये महाराष्ट्रातील शेतीवर प्रकाश टाकण्याचा प्रयत्न करण्यात आला आहे.

**प्रस्तावना-**

भारतीय शेती अर्थव्यवस्थेचा कणा आहे. 1991 मध्ये नवीन धोरणाचा स्वीकार केला गेला. त्यास आज 27 वर्षे पूर्ण झाली आहेत. 68.7% लोकसंख्या आजही शेती व पुरक व्यवसायावर अवलंबून आहे. नियोजनाचा स्वीकार करून आज 67 वर्षे पूर्ण झाली तरी नैसर्गिक साधन संपत्तीवर संपूर्ण अर्थव्यवस्था अवलंबून आहे. दुष्काळ, अतिवृष्टी, गारपीठ अशा सर्व नैसर्गिक आपत्तींचा सामना शेतकरी करत आहे. प्रतिकूलतेवर मात करत आर्थिक विकासाचा दर बदलत आहे. कधी कमी तर कधी जास्त अशी शेती विकासादराची स्थिती आहे.

देशाच्या तुलनेत महाराष्ट्राचे भौगोलिक क्षेत्र 9.4% आहे. तर शेत जमीन क्षेत्र 12.3% आहे. शेती उत्पादनासाठी 11.6% इतके क्षेत्र उपलब्ध आहे. देशाच्या स्थूल उत्पन्नामध्ये 23.2 महाराष्ट्राचा वाटा आहे. महाराष्ट्राची 11.24 कोटी लोकसंख्या 2011 च्या जनगणनेनुसार आहे.

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## DRAGON FRUIT: GATEWAY TO PROSPERITY FOR DROUGHT STRICKEN FARMERS IN SANGLI DISTRICT

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### ABSTRACT

*This research paper is an investigative study which is based on secondary data. Secondary data resources which are previously available, it refers to data which has been collect and analysed by someone else. Dragon fruit is a climbing vine cactus species which has invigorated universal recognition, first as an attractive plant and then as a fruit a fruit crop. There is worldwide demand increase for dragon fruit because of its nutritional value as well as its medicinal properties. It indicates importance of this fruit in the horticulture export. Natural environment of Sangli district is favourable for production of dragon fruit having good quality with low cost in whole the year. Gross production of dragon fruit in Sangli district shows positive change, at the end of the year 20219-20 gross production and cultivated area of dragon fruit was near about 900 tonne and 550 acre respectively. This indicates economical importance of dragon fruit production in Sangli district. This indicates that dragon fruit production is gateway to prosperity for drought stricken farmers in Sangli district.*

### KEYWORDS

Dragon fruit, Drought

### INTRODUCTION

Dragon fruit is a climbing vine cactus species which has invigorated universal recognition, first as an attractive plant and then as a fruit a fruit crop. Its fruit is the most gorgeous in the family Cactaceae with a bright red skin studded with green scales and white or red flesh with tiny black seeds. The flower is so gorgeous that it is nicknamed as "Noble Woman" or "Queen of Night". The juicy flesh of the fruit is full of flavour in taste. It is well accepted as a new crop in Australia, China, Israel, Malaysia, Nicaragua, Taiwan and Vietnam. In Vietnam, it has become a major export, which fetches a higher price than even Durian, the "King of Fruits" in Southeast Asia. The main limitation is that the establishment cost is high due to the use of trellises for climbing. However, the cost of establishment will depend on the type of trellises used, and knowledge shows that a relatively cheap trellising is sufficient. The other agronomic practices are easy and a lesser amount of expensive, maintenance cost is low and aftercare is minimal due to fewer pest and disease attacks. The biggest advantages of this crop are that once planted, it will grow for about twenty years and one hectare could accommodate



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# *B.Aadhar*

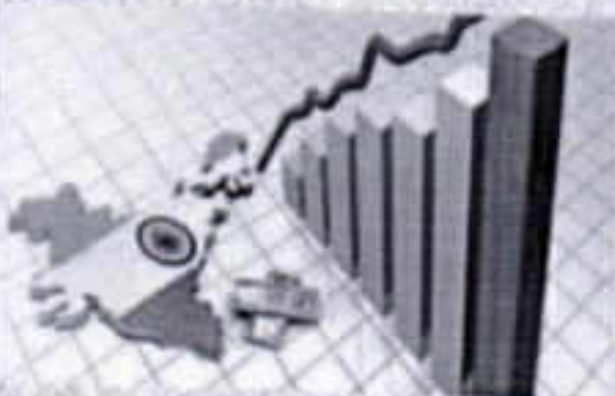
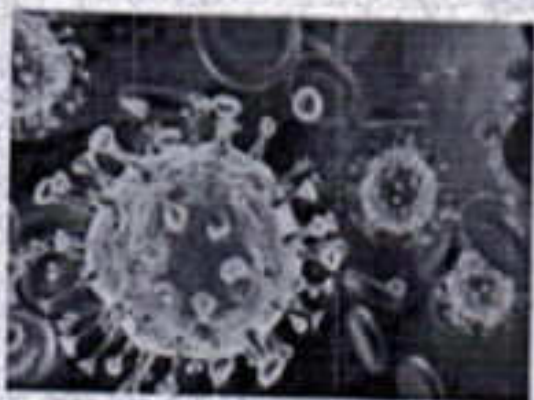
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**Impact of COVID-19 on Indin Economy**



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## Impact Of Covid-19 On Digital Payments In India An Overview

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Department of Commerce P.D.V.P. Mhavidyalaya, Tasgaon

### Abstract

The worldwide spread of the COVID-19 pandemic has disrupted how people buy goods and services and how they take in e-commerce. The uniform lockdown rules across India and the growing uncertainty among consumers to go outside and shop for necessary goods have tilted the nation towards e-commerce. The world has been moving towards all things digital for some time now. However, the year 2020 put into perspective the dire need to adapt to digital technology as soon as possible. This adaptation happened almost instantly with the lockdown coming into effect, especially for digital payments in India. The share of digital transactions in the total volume of non-cash retail payments increased to 97.0 % during 2019-20, up from 95.4 per cent in the previous year. The decline in digital transactions during the lockdown period is suggestive of the addition of the digital economy with the real economy. Empirical analysis for the period 2009-2019 supported statistically significant unidirectional Granger causal relationship from the growth of nominal GDP and private final consumption expenditure (PFCE) to the growth of digital and retail transaction value.

**Key Words:** E-Commerce, Digital Payment, Covid-19

### Introduction

The worldwide spread of the COVID-19 pandemic has disrupted how people buy goods and services and how they take in e-commerce. The uniform lockdown rules across India and the growing uncertainty among consumers to go outside and shop for necessary goods have tilted the nation towards e-commerce. Consumers have switched from shops, supermarkets, and shopping malls to online portals for the purchase of goods, ranging from basic commodities to branded goods. Since the norm of social distancing has been initiated for almost the entirety of year 2020, the scope of online purchases and online businesses is expected to rush. Many people are implementing the concept of online retail and the surge in FTUs (First Time Users) on e-commerce sites is visible.

COVID-19 has been remarkably different from what we have ever witnessed. As the world was forced into complete shutdown, it's safe to say that e-commerce was the economy savior, helping millions of people stay home and procure what they wanted at their doorstep. "Customers want to avoid stepping out unless it's very critical. We are helping customers who are stuck in that situation, and we are able to play a small part in helping (cater) to their needs," - Gopul Pillai, Vice President for Seller Services at Amazon India. Business data platform Statista stated that the consumer retail segment is expected to see an increase in losses ranging from 3-23%, depending on the market. The report even included that the average retail e-commerce revenue per user in the nation was \$50 as of 2018, and is expected to go up till \$75 by 2024. In the difficulty of things, lack of output during the countrywide lockdown resulted in the loss of jobs, pay cuts, and finances. Shutting down of shops and family-based businesses has made many people influence towards online retail to meet their financial requirements.

### Objectives of the study

1. To the study of digital payment system.
2. To examine the impact of Covid-19 on digital payments.

### Research Methodology

The present study is based on secondary data. This is collected from books, journals and websites.

### Digital Payment in India





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**Ajanta Prakashan**



## १२. कोरोना आणि भारतीय शेती : वास्तव आणि उपाययोजना

**डॉ. अमोल गोवर्धन सोनवले**

सहाय्यक प्राध्यापक आणि विभाग प्रमुख, पद्मभूषण डॉ. बसंतदास फटील महाविद्यालय, तारगाव, ता. तारगाव, जि. सांगली,  
(संलग्नित शिवाजी विद्यापीठ, कोल्हापूर.)

**डॉ. बंधू चव्हाण कदम**

सहाय्यक प्राध्यापक, अर्थशास्त्र विभाग, पद्मभूषण बसंतदास फटील महाविद्यालय, तारगाव, ता. तारगाव, जि. सांगली,  
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### धोषधारा

चीनमध्ये आलेल्या कोरोना विषाणूच्या साथीने हाहाकार उडवला होता. बघता बघता जगभरात कोरोना या महामारीने धैमान घातले. जागतिक आरोग्य संघटनेने या विषाणूमुळे होणाऱ्या आजाराचे अधिकृत नामकरण COVID-19 असे केले आहे. या रोगाने जगांमधील सुमारे 2,97,765 बळी घेतले आहेत. मार्च 2020 पासून हा रोग भारतात संक्रमित झाला होता. बघता बघता संपूर्ण भारतामध्ये या रोगाने धैमान घातले. परिणामी वाढता प्रसार रोखण्यासाठी भारतात जनता कर्फ्यू घोषित करावा लागला. त्यानंतर लगेच लॉकडाऊन, बाजारपेठा बंद झाल्या, वाहतूक बंद करण्यात आली, प्रवास करण्यावर निर्बंध घालण्यात आले. या सर्वांचा परिणाम कृषीप्रधान अर्थव्यवस्थेवर झाला. याचे विवेचन सदर शोधनिबंधामध्ये करण्याचा प्रयत्न केला आहे.

### 1. प्रस्तावना

चीनमध्ये आलेल्या कोरोना विषाणूच्या साथीने हाहाकार उडवला होता. बघता बघता जगभरात कोरोना या महामारीने धैमान घातले. जागतिक आरोग्य संघटनेने या विषाणूमुळे होणा-या आजाराचे अधिकृत नामकरण COVID-19 असे केले आहे. या रोगाने जगांमधील सुमारे 2,97,765 बळी घेतले आहेत. मार्च 2020 पासून हा रोग भारतात संक्रमित झाला होता. बघता बघता संपूर्ण भारतामध्ये या रोगाने धैमान घातले. परिणामी वाढता प्रसार रोखण्यासाठी भारतात जनता कर्फ्यू घोषित करावा लागला. त्यानंतर लगेच लॉकडाऊन, बाजारपेठा बंद झाल्या, वाहतूक बंद करण्यात आली, प्रवास करण्यावर निर्बंध घालण्यात आले. या सर्वांचा परिणाम कृषीप्रधान अर्थव्यवस्थेवर झाला. याचे विवेचन सदर लेखामध्ये करण्याचा प्रयत्न केला आहे.

शेती आणि शेतीशी संबंधित कामे याचा विचार केला तर शेती आणि शेतकरी अनेक स्थितींत राहून जाला आहे. नोटबंदी, जीएसटीमुळे शेतीविषयक सहाय्यता खरेदी करताना शेतकऱ्यांवर पडलेला आर्थिक ताण आणि आता लॉकडाऊन यामुळे शेती आणि शेतकरी हतबल झालेला दिसून येत आहे. या लॉकडाऊनच्या काळात सरकारने शेतीशी निपटीत जगण्याकरीता कामांना मुभा दिली असली तरी शेतकऱ्यांच्या खरीपाच्या शेतीसाठी शेतकऱ्यांच्या हताहत पैसा कोटे शिस्तक आहे.



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## The Study of Pomegranate Supply Chain Management in Pandharpur Taluka

**Dr. Anil Gowardhan Sonawale**

P.D.V.P. Mahavidyalaya, Tergaon

[anildcsonawale@gmail.com](mailto:anildcsonawale@gmail.com)

### Introduction :

India is one of the leading countries in pomegranate production and more than 1.32 lakh hectares area is under cultivation presently. Out of this, nearly 94,000 hectares area is covered in Maharashtra, which produces fruits of over one lakh metric tonnes worth about Rs. 400 crores. Pomegranate is the most important fruit crop of the tropical and subtropical region. High yielding, better keeping quality and possibilities to thrive the plant into rest period when irrigation potential is low, pomegranate is commercially cultivated in Solapur, Sangli, Nashik, Ahmednagar, Pune, Dhule, Aurangabad, Satara, Osmanabad and Latur districts (Maharashtra), Bijapur, Bagalkot, Koppal, Chitradurga and Tumkur Districts ( Karnataka) and to a smaller extent in Gujarat, Rajasthan, Uttar Pradesh, Andhra Pradesh and Tamil Nadu. At the global level, India is the world's largest producer of pomegranates followed by Iran. Other countries like Turkey, France, Armenia, Cyprus, Egypt, Italy and Palestine also cultivate this product. At present good quality pomegranates come from turkey, Iran, Afghanistan, Syria, Morocco and Spain. India exports pomegranates to the Gulf countries, the European Union, Asian countries, Pacific-Rim countries, China, USA and Canada. As far as country-wise export of pomegranates for 2009-10 is concerned, UAE is the major buyer followed by Bangladesh, the Netherlands and Saudi Arabia. Even though there appears to be an increase in the volume of exports from India over these years, the country export is only 4 percent of its production while Spain exports about 75 percent of its estimated production. This is in spite of the fact that India is the largest producer of pomegranate.

In India, Maharashtra is the leading producer of pomegranates followed by Karnataka, Andhra Pradesh, Gujarat and Tamilnadu. To a smaller extent, it is also grown in Rajasthan and Himachal Pradesh. It is cultivated commercially in Solapur, Sangli, Nashik, Ahmednagar, Pune, Dhule, Aurangabad, Satara, Osmanabad and Latur district of Maharashtra.

### Objectives :

Keeping the above aspects in consideration the study have been carried out with the following objectives

1. To examine and evaluate supply chain management of pomegranate at farm level in the study area.
2. To examine price spread of pomegranate.

### Research Methodology and Research Design :

This section explains about sample design, data collection methods, data analysis, instruments used for data collection, framework and analysis.

### Data Collection :

The present study is concerned with the study of pomegranate supply chain management in Pandharpur Taluka. So the required data for the study were collected from Primary and Secondary Sources.



## **Development of Rural Entrepreneurship In India**

**Dr. Amol Gowardhan Sonawale**

PDVP Mahavidyalaya,

Tasgaon

[amolcommerce@gmail.com](mailto:amolcommerce@gmail.com)

2020

### **1.1 Introduction**

The term entrepreneur is a relatively new term and concept used in economic study. Because of its increasing significance in economic subject over the period it has become the catchphrase in the economic literature. However it has been defined differently by different writers and thinkers. An entrepreneur is an individual who, rather than working as an employee, founds and runs a small business, assuming all the risks and plunder of the venture. The entrepreneur is commonly seen as an innovator, a source of new ideas, goods, services and business or actions. Rural entrepreneurs are those who carry out entrepreneurial activities by establishing industrial and business units in the rural sector of the economy. In other words, establishing industrial and business units in the rural areas refers to rural entrepreneurship. In simple words, rural entrepreneurship implies entrepreneurship emerging in rural areas. Or, say, rural entrepreneurship implies rural industrialization. Thus, we can say, entrepreneurship precedes industrialization.

### **1.2 Objectives**

1. To study the concept of rural development.
2. To study the development need of rural entrepreneurship in India.

### **1.3 Research Methodology:**

The present study is based on secondary data. This is collected from books, journals and websites.

### **1.4 Rural Development**



## SPORTS TRAINING METHODS

Prof. Ajit Kalgonda Patil

Director Physical Education, Padmabhushan Dr. Vasantaoada Patil Mahavidyalaya, Tasgaon

Email Id: [ajitp7734@gmail.com](mailto:ajitp7734@gmail.com) Contact No: 9860290142

### ABSTRACT:

*Training is extremely important and should form an integral part of all elite athlete's daily routines. Training allows the body to gradually build up strength and endurance, improve skill levels and build motivation, ambition and confidence. Training also allows athletes to gain more knowledge of their sport as well as enabling them to learn about the importance of having a healthy mind and body. In terms of physical effects of training, regular exercise increases muscle tone, facilitates good circulation training, improves strength, agility and flexibility and improves the rate of waste product disposal. Regular training also speeds up recovery time following physical exercise; this enables the body to cope with the demands of training more effectively and makes it more resistant to injury and illness. Training also has benefits for mental health as it improves concentration and increases self-esteem. Experts recommend training is varied and tailored to specific individual or team needs; this helps to keep players motivated, establish individual and team goals and improve cohesion. Athletes should take care to rest fully between training sessions; this will help to prevent overtraining, which can have negative effects on performance and contributes to injuries. Training should be serious and demanding but it should also be enjoyable; this will boost morale and help to keep players interested and relaxed. Sessions should not be too easy or too demanding; they should be pitched at the appropriate level to facilitate improvement but prevent injury and a lack of self-confidence.*

### 1. Introduction

Training in this way combines extreme, vigorous periods of fast running or aerobic exercise with periods of slower running, allowing the athlete to recover a bit before resuming fast running. When an athlete trains in the hard, fast run, oxygen deprivation occurs and lactic acid builds up in the muscle tissues. During the slower running, or recovery, the heart and lungs work hard to provide oxygen, which helps break down the lactic acid. The stresses of interval training help to strengthen the heart, improve uptake of oxygen and get rid of lactic acid more efficiently.



# Design, synthesis and Pharmacological investigation of pyridine-4-yl triphenyl pyrazol-4-yl-thio-1,3,4-oxadiazole derivatives

Ajay N. Ambhore<sup>1</sup>, Arjun S. Kumbhar<sup>1</sup>, Vishwas D. Suryawanshi<sup>1</sup>, Bhaskar S. Dawane<sup>2</sup>

<sup>1</sup>Department of Chemistry, PDVP College, Tasgaon, Sangli (MS)

<sup>2</sup>School of Chemical Science, SRTMU Nanded (MS)

## Abstract

Synthesis of heterocyclic compounds incorporating pyrazole and 1,3,4 oxadiazole nucleus have provoked interest because of its extensive range of pharmacological properties. In molecular hybridization, two pharmacophore units having varied mode of action are incorporated in a single molecule. Such type of technique enhances the activity of that molecule. By keeping this prospective in mind numerous heterocycles are synthesized by various methods.

In this section we report the synthesis of triphenyl pyrazolyl-thio-1,3,4-oxadiazole derivatives (7a-s) by using Bleaching Earth Clay (pH 12.5) and PEG-400 as a green reaction media. All these synthesized compounds were characterized by spectral data and screened for their antibacterial and antioxidant activity. Most of the synthesized compounds display remarkable activity.

**Keywords:** pyrazole 1,3,4 oxadiazole, PEG-400, BEC, Antibacterial, Antioxidant activity

## 1. Introduction and Review of Literature

During the past years several extensive evidences have been collected which prove the emergence of microorganism resistance. Generally, bacteria have a power to transmit and acquire resistance to drug genetically<sup>1</sup>. The development of resistance is shown in nearly all class of bacterial strain and become major public health concern worldwide<sup>2</sup>. Therefore, to design new class of antibacterial agents is a growing need and very important task for the researcher.

# Design, synthesis and Pharmacological investigation of pyridine-4-yl triphenyl pyrazol-4-yl-thio-1,3,4-oxadiazole derivatives

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# Polymer supported reagent as a reusable catalyst for an efficient acid catalyzed cyclisation ✓

Vishwas D. Suryawanshi, Arjun Kumbhar, Ajay Ambhore

Post Graduate Department of Chemistry, PDVP Mahavidyalaya Tasgaon, Maharashtra, India

## Abstract

The acid catalyzed cyclisation reactions were carried out in the presence of catalytic amount of cation exchange resins; the reaction conditions were mild and the yields of the target products were good. The polymeric catalyst was easily recovered, purified and regenerated, ready to be used in further reactions. This protocol offers several advantages including high yield, short reaction time, easy work-up and use of relatively moderate acidic and safe catalyst. It also allows a greener process, since no waste generation and resins are reused repeatedly. Some reusable polymeric SO<sub>3</sub>H-functionalized cation exchange resins like Amberlite IR-120 have been used as catalysts. The products could simply be separated from the catalyst by filtration and the catalyst could be regenerated and reused for several times without noticeably decreasing the catalytic activity and yield.

Keywords: polymeric catalyst, cation exchange resins, greener process

## Introduction:

In the field of polymer chemistry great process has been made over last two decades. Polymer chemistry has become famous since synthetic organic chemical reaction give a byproduct which can sometimes be difficult to isolate from the desired product. On the other hand if a polymer reagent is used in the organic synthesis, then the by-product will remain attached to the insoluble polymer and can be separated from the desired product by simple filtration. In electrophilic aromatic substitutions, non-generable catalysts such as metal chlorides and mineral acids are generally applied. Substitution of these by cation exchange resins result in simplified product recovery and reduction of undesirable waste stream [1-5]. We are especially interested in developing the potential use of simple, inexpensive catalysts. In recent years, organic reactions on solid phase have received considerable interest in organic synthesis because of their ease of handling, enhanced reaction rate, greater selectivity, and simple work-up.

Heterocyclic compounds particularly five or six membered ring compounds have occupied the first place among various classes of organic compounds for their biological and pharmacological activities. [6,7] Quinoline moiety is an important class of N-containing heterocyclic compound widely used as key building blocks for pharmaceutical agents.

Quinolines, quinolones and its derivatives are important classes of compounds. The development of new efficient synthetic strategies for the synthesis of quinolones has considerable interest. Quinoline and its derivatives have attracted great interest because of their importance in the synthetic organic and medicinal chemistry. Arylamines condenses with the ketonic carbonyl group to isomeric 2-quinolones [8]. Most of the quinolone derivatives are prepared by the ring formation reactions. Knorr [9] discovered that the



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## Accepted Manuscript

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Authors: Ajay N. Ambhore, Sonali S. Kamble, Shuddhodan N. Kadam, Rahul D. Kamble, Madhav J. Hebade, Shrikant V. Hese, Milind V. Gaikwad, Rohan J. Meshram, Rajesh N. Gacche, Bhaskar S. Dawane



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# GREEN AND EFFICIENT SYNTHESIS OF TETRAHYDROBENZO[b]PYRAN DERIVATIVES USING NATURAL CATALYST

S. D. Jadhav, S. A. Damate and M. U. Patil

Department of Chemistry, Padmabhushan Dr. Vasanttraodada Patil Mahavidyalaya, Tasgaon.

**Keywords:** Tetrahydrobenzo[b] pyran, *Limonia acidissima* ash, natural catalyst

## Abstract:

A short and simple synthesis of Tetrahydrobenzo[b]pyran derivatives was accomplished in good yields by the reaction of dimedone, malononitrile or *b*-naphthol and aldehydes by using *Limonia acidissima* ash as a natural efficient catalyst. The remarkable advantages offered by this method include green inexpensive catalyst, mild reaction conditions, fast reaction rate and good to excellent yield of products. Use of catalyst obtained from natural resources makes the method greener without formation of any hazardous waste materials.

The novel methodology maintains atom economy and an environmentally friendly approach.

## Introduction:

The discovery of new synthetic methodologies to facilitate the preparation of organic compounds is necessary for the research activities in the field of modern organic, bioorganic and medicinal chemistry. For this, it is necessary to perform efficient chemical transformations, multicomponent condensations by catalytic processes avoiding use of excess of solvents and expensive purification techniques.

Tetrahydrobenzo(*b*)pyran derivatives are an important class of heterocyclic compound having important pharmaceutical and biological activities. These compounds are potential biodegradable agrochemicals<sup>1</sup>, photoactive materials<sup>2</sup>, cosmetics and pigments<sup>3</sup>. These derivatives can be used as potent antibacterial such as rhodomyrtone pigments, photoactive materials<sup>4</sup>. The derivatives of tetrahydrobenzo[*b*]pyran show biological properties as antioxidant<sup>5</sup>, spasmolytic and anti-HIV<sup>6</sup>, anticancer<sup>7</sup>, diuretic<sup>8</sup> and anti-anaphylactic activities<sup>9</sup>.

Various synthetic methods have been reported for the synthesis of tetrahydrobenzo[*b*]pyran derivatives using different catalysts such as (NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub><sup>10</sup>, K<sub>3</sub>PO<sub>4</sub><sup>11</sup>, Ru(II) complex<sup>12</sup>, L-proline<sup>13</sup>, phenylboronic acid<sup>14</sup> and cerium(III) chloride<sup>15</sup> 1,4-diazabicyclo [2,2,2] octain<sup>16</sup>, silica nanoparticles<sup>17</sup>, sulfonic acid functionalized silica<sup>18</sup>, amino functionalized silica gel<sup>19</sup> and ionic liquids<sup>20</sup>.

Various parts of *Limonia acidissima* are prescribed as medicine for the treatment of various ailments.<sup>21</sup> Fruits are refrigerant, stomachic, stimulant, astringent, diuretic, cardio tonic, good for asthma. Leaves extract has phytochemical and anti microbial activity<sup>22</sup>. *Limonia acidissima* is a moderate sized tree grown throughout India. It is an aromatic, slow growing plant grows all over India in dry and warm areas.

## EXPERIMENTAL METHODS

### Preparation of CLAS Catalyst:



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# A lemon juice catalysed synthesis of quinoxaline derivatives: as a green approach

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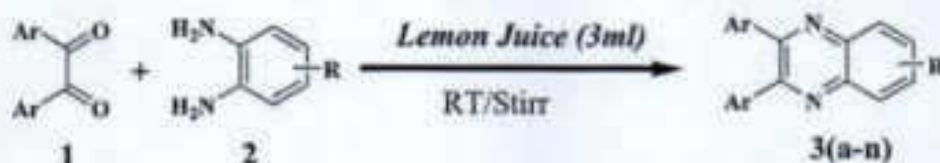
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**Keywords:** Natural Catalyst, Solvent free approach, Non-chromatographic Technique, Quinoxalines.

## I. Introduction

Family of quinoxaline skeleton exhibit the source of some bactericides,<sup>1</sup> antitumor agents,<sup>2</sup> herbicides,<sup>3</sup> insecticides,<sup>4</sup> fungicides.<sup>5</sup> Also, they are used in dyes,<sup>6</sup> building blocks for the synthesis of organic semiconductors,<sup>7</sup> cavitands,<sup>8</sup> DNA cleaving agents,<sup>9</sup> dehydroannulenes,<sup>10</sup> and electrical-photochemical materials.<sup>11</sup> Literature data reveals that various catalytic systems were employed for the synthesis of substituted quinoxalines. Most common method relies on the condensation of 1,2-diamines with  $\alpha$ -diketones under microwave irradiation,<sup>12</sup> and the use of zeolites,<sup>13</sup>  $H_6P_2W_{18}O_{62} \cdot 24H_2O$ , and ionic liquids<sup>14</sup> as a catalyst. Conversely, most of the traditional processes have no agreement with the green chemistry protocols which limit their use under the aspect of environmentally benign processes<sup>15</sup>.

Considering these facts and in continuation of our interest in application of naturally sourced material for organic transformation<sup>16</sup>. Herein we wish to report environmentally benign protocol for the synthesis quinoxalines using *Citrus limon* juice as green catalyst (**Scheme 1**). *Citrus aurantium*, *Citrus indica*, *Citrus limonum* are some important species of citrus family commonly known as lemon. The juice is highly soluble in water and thus acts as a homogeneous catalysis on solvent free synthesis of quinoxaline.



**Scheme 1**

The main ingredients of the extract of *Citrus limon* species of lemon are minerals (0.3%), ascorbic acid or vitamin-C (0.5%), fat (0.9%), protein (1%), fibres (1.6%), citric acid (5-7%), carbohydrates (11.2%), moisture (85%) and some other organic acids<sup>16</sup>. The juice is soluble in water. Due to presence of ascorbic acid and citric acid, lemon juice is acidic (pH= 2-3) in nature, and thus it works as acid catalyst in organic reactions. Conventional uses of lemon juice are cooking, industrial and medicinal. Nowadays the lemon juice plays important role of catalyst in organic synthesis.

## II. RESULTS AND DISSUSION

Fresh lemon was collected from home garden in Tasgaon area, washed with water cut by using knife and then pieces were pressed in a fruit juice to get the juice extract. Then the juice was filtered through filter paper to remove solid material and to get clear juice which is used as a catalyst.

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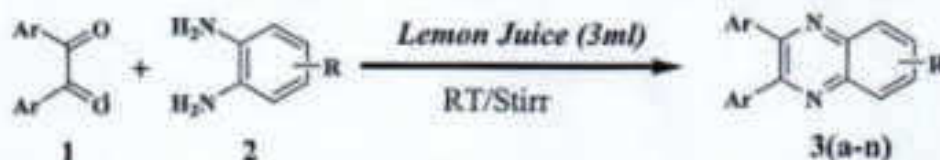
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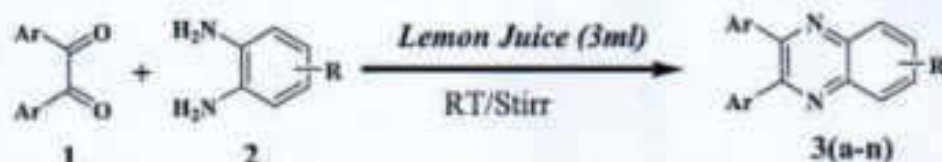
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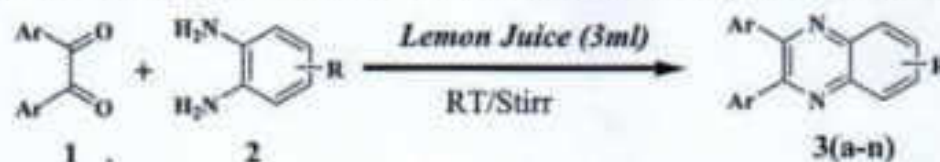
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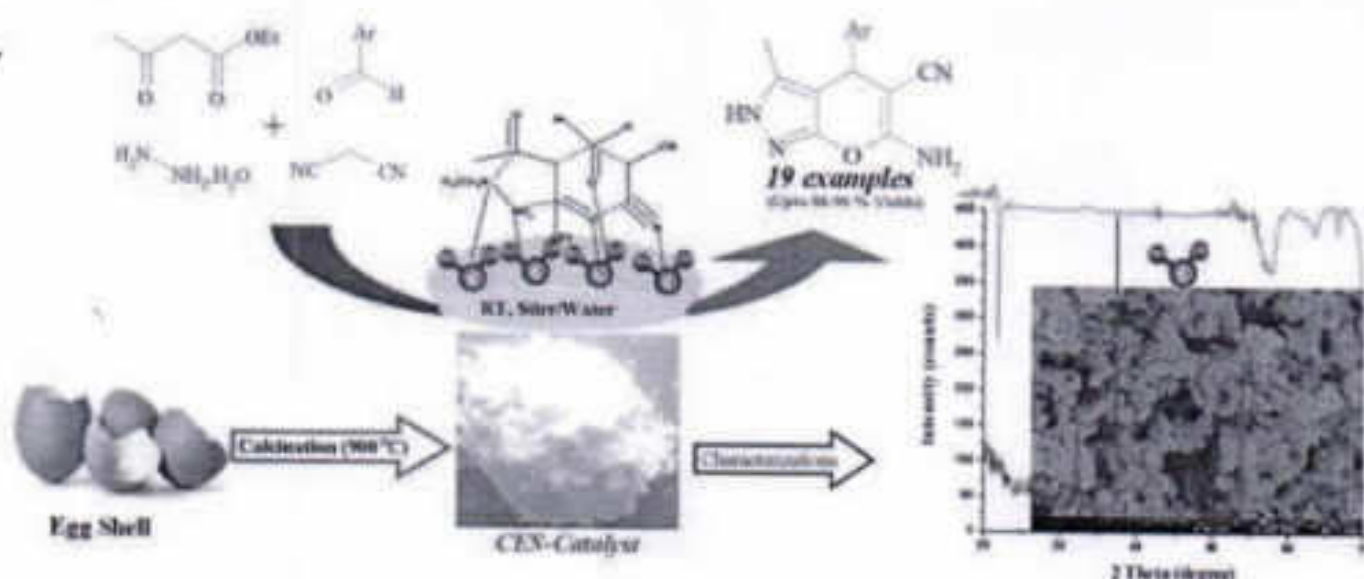
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Sachinkumar K. Shinde<sup>a\*</sup>, Megha U. Patil<sup>a</sup>, and Suresh S. Patil<sup>b\*</sup>

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## GRAPHICAL ABSTRACT



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**KEYWORDS:** Waste derived catalyst; Eggshell; Pyrano[2,3-c]pyrazoles; Aqueous condition; Green chemistry.

## 1. Introduction

From the perspective of green chemistry; it is the necessity to develop chemical process methodologies in water as a media under mild reaction conditions using safe, cheap and nontoxic reagents selectively using natural feedstock. However, in most of the catalytic transformations, organic solvents are preferably employed as the reaction media, usually creating a great deal of safety, adverse

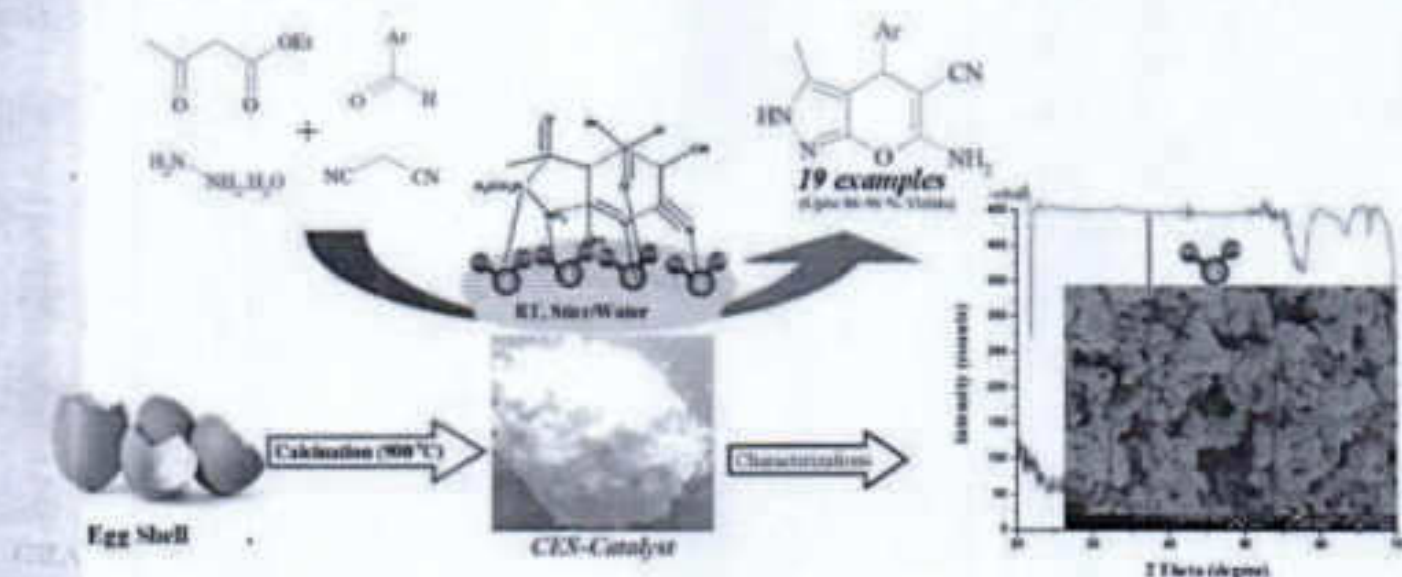
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From the perspective of green chemistry; it is the necessity to develop chemical process or methodologies in water as a media under mild reaction conditions using safe, cheap and nontoxic reagents selectively using natural feedstock. However, in most of the catalytic transformations, organic solvents are preferably employed as the reaction media, usually creating a great deal of safety, adverse



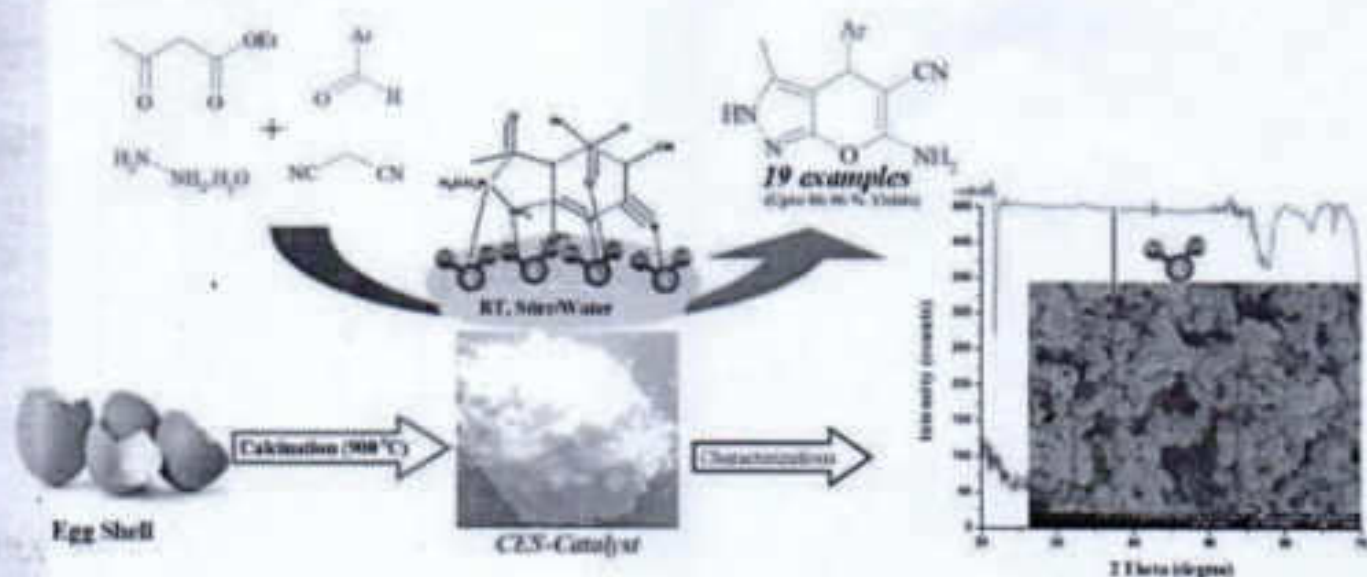
# Eggshell derived catalyst: An environmentally benign approach for versatile synthesis of pyrano[2,3-c]pyrazole derivatives

Sachinkumar K. Shinde<sup>a\*</sup>, Megha U. Patil<sup>a</sup>, and Suresh S. Patil<sup>b\*</sup>

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## GRAPHICAL ABSTRACT



## ABSTRACT

A green protocol for the synthesis of pyrano[2,3-c]pyrazoles has been carried out using calcined eggshell (CES) as a non-conventional base catalyst in aqueous condition at ambient temperature. The catalyst was obtained from renewable resources by simple calcinations of waste eggshell and formation of its active phase was confirmed by DSC-TGA, XRD, FT-IR, and SEM techniques. The CES-catalyst was found to be a green, highly active, easily biodegradable, recyclable natural base.

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# Calotropis gigantea leaf derived ZnO nanoparticles: A green protocol for rapid synthesis of 2-amino-4H-chromene derivatives

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## Abstract

A simple, clean and environmentally benign route for multi-component synthesis of 2-amino-4H-chromenes between aromatic aldehydes, malononitrile and  $\alpha/\beta$ -naphthols was described using ZnO nanoparticles as a catalyst in water: ethanol (1:1) as a green solvent system at 80 °C. The ZnO catalyst was prepared in aqueous leaf extract of *Calotropis gigantea* plant and found to be green, inexpensive, non-toxic, and highly efficient solid heterogeneous base catalyst obtained by simple methods. The use of plant extracts avoids the usage of harmful and toxic reducing and stabilizing agents.

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2-amino-4H-chromenes *Calotropis gigantea*, ZnO nanoparticle, heterogeneous base catalyst, green protocols.

## Introduction

In nanotechnology, a particle is defined as a small object that behaves as a whole unit with respect to its transport and properties. Particles are further classified according to diameter. Coarse particles cover a range between 2,500 and 10,000 nanometers. Fine particles are sized between 100 and 2,500 nanometers.<sup>1</sup>

Nanoparticles may or may not exhibit size-related properties that differ significantly from those observed in fine particles or bulk materials. Although the size of most molecules would fit into the above outline, individual molecules are usually not referred to as nanoparticles. Nanoparticle research is currently an area of intense scientific interest due to a wide variety of potential applications in biomedical, optical and electronic fields. Nanotechnology involves manipulating properties and structures at the nanoscale, often involving dimensions that are just tiny fractions of the width of a human hair. Nanotechnology is already being used in products in its passive form, such as cosmetics and sunscreens, and it is expected that in the coming decades, new phases of products, such as better batteries and improved electronics equipment, will be developed and have far-reaching implications.<sup>2-5</sup>



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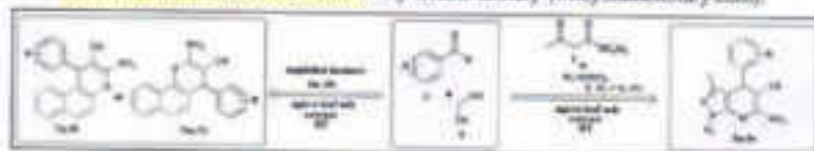
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An external base-free, efficient, cost-effective, and environmentally benign protocol has been developed for the one-pot multicomponent synthesis of highly functionalized pyranopyrazoles and benzochromenes using water extract of *Agave americana* (century plant) leaf ash, a waste-derived catalyst, at room temperature. Mild reaction conditions, high yield, easy isolation of products, eco-friendly standards, and no chromatographic separation are the salient features of this protocol.

*J. Heterocyclic Chem.*, 56, 1898 (2019).

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Pyrano[2,3-*c*]pyrazoles exhibit significant biological activities such as anticancer [1], anti-inflammatory [2], and analgesic [3] and also serve as potential inhibitors of the human *chk1* kinase [4]. They also find applications as pharmaceutical ingredients and biodegradable agrochemicals [5–8]. The benzochromene heterocyclic compounds also show significant biological and pharmacological activities such as antimicrobial [9], antiviral [10], anti-inflammatory [11], antioxidant [12], antitubercular [13], antitumor [14], anticonvulsant agents [15], and central nervous system activity [16]. Figure 1 represents a glimpse of some bioactive pyrano[2,3-*c*]pyrazoles [3,4,17,18] and benzochromenes [19–22] exhibiting a diverse kind of pharmaceutical potentials.

The synthesis of this heterocyclic system involves four-component coupling of ethyl acetoacetate with hydrazine hydrate or phenylhydrazine, aldehydes, and malononitrile in the presence of homogeneous and heterogeneous catalysts such as *L*-proline [23], amberlist A21 [24],  $\gamma$ -alumina [25], piperidine [26], triethylamine [27], cocamidopropyl betaine [28], basic ionic liquids [29], sodium benzoate [30], meglumine [31], silica-supported tetramethylguanidine [32], choline chloride-urea [33], capreine [34], visible light irradiation [35], and supported molybdenum on graphene oxide/ $\text{Fe}_3\text{O}_4$  [36]. Although these methods have their own merits, the implication of hazardous reagents and solvents, lengthy process, energy investment for heating purpose, and complications in the separation of products are the problems associated with these methods.

Owing to the numerous applications and bioactivity, the development of efficient, environmentally benign synthetic methodology for the preparation of these heterocyclic compounds using cost-effective, safe reagents, and solvents is highly desirable. Considering these aspects, herein, we wish to report a simple, efficient, eco-friendly process for the room temperature synthesis of pyranopyrazole and benzochromene derivatives using water extract of agave leaf ash, a waste-derived catalyst (Scheme 1). In our previously reported work, baell fruit rind ash extract was used as a catalyst for the synthesis of heterocycles in ethanol at room temperature [37]. We employed this catalytic system for the synthesis of pyranopyrazoles and benzochromenes in the absence of ethanol solvent; however, expected results were not obtained. Continuing our ongoing research with the aim to develop the novel catalytic system from the natural feedstock material, we turned our attention to agave leaf ash extract.

In this process, water extract of *Agave americana* leaf ash acts as both the catalyst and the solvent. This catalytic system provides an alkaline medium (pH = 12.9) and promotes the reaction efficiently. An *A. americana* L. (century plant, family: Agavaceae) is native to Mexico and the United States and naturalized in the West Indies, India, Africa, China, Australia, and Thailand [38]. Nowadays, it is cultivated worldwide as an ornamental plant [39]. It has numerous medicinal applications [40]. The fibers of leaves are used for the production of the fabrics and paper [41,42]. Literature report showed that there is a higher concentration of K and Ca elements while a lower concentration of Mg, Na, Zn, and P elements



Month 2019 An Eco-friendly Catalytic System for One-pot Multicomponent Synthesis of Diverse and Densely Functionalized Pyranopyrazole and Benzochromene Derivatives

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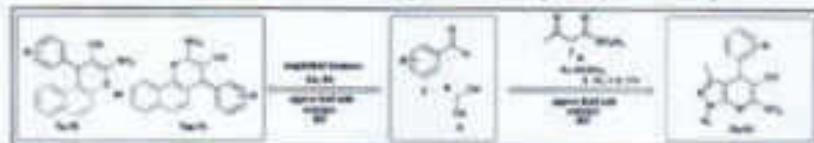
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# Mizoroki–Heck cross-coupling reactions using palladium immobilized on DABCO-functionalized silica

Sanjay Jadhav<sup>1</sup> · Seema Patil<sup>2</sup> · Arjun Kumbhar<sup>2</sup> · Santosh Kamble<sup>3</sup> · Rajashri Salunkhe<sup>1</sup>

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## Abstract

A heterogeneous palladium catalyst supported on silica modified by DABCO has been prepared by post-synthetic modification of silica gel. This heterogeneous catalytic system exhibits high activity and stability in the Mizoroki–Heck cross-coupling reaction of various aryl halides with olefins. The reaction proceeds efficiently under mild reaction conditions and high yield, with the formation of *E*-isomers selectively. Moreover, we successfully established a gram-scale synthesis, and the catalyst was reused for up to ten catalytic cycles.

## Introduction

An important part of modern chemistry is based on the use of precious platinum group metal (PGM) catalysts [1–9]. In particular, Pd, which is an active metal with high demand, has been most widely used for the fabrication of carbon–carbon and carbon–heteroatom bonds for the production of intermediates of biologically active compounds, natural products and fine chemicals [10–13]. The Pd-catalyzed coupling of olefins with aryl or vinyl halides [14] to form a C–C bond is known as the Mizoroki–Heck cross-coupling reaction and has been widely used for the synthesis of important compounds like flavoring agents, pharmaceuticals, agrochemicals and UV absorbents [15, 16].

Though the Mizoroki–Heck cross-coupling reaction has been most widely applied with homogeneous catalysts [17–20], it suffers from various disadvantages such as tedious workup procedures, lack of reusability and contamination of residual metals in the desired product. These disadvantages can be overcome by using heterogeneous catalysts, via immobilization of Pd on various solid supports such as polymers [21], activated carbons [22], metal oxides [23],

biopolymers and zeolites [24]. Recently, it has been found that Pd complexes with various ligands supported on silica have considerable utility in various cross-coupling reactions including Mizoroki–Heck cross-coupling reaction [25, 26], as silica displays many advantageous properties such as excellent chemical and thermal stability, good accessibility and porosity. In addition, the organic groups can be easily grafted on the silica surface by simple post-synthetic modifications [27].

As amines are less toxic, inexpensive, easy to handle and less air sensitive, catalytic systems based on DABCO might be ideal to carry out the Mizoroki–Heck cross-coupling reaction under phosphine-free conditions [28–31]. DABCO is a cage-like, small diazabicyclic molecule with medium steric hindrance and has received considerable attention as an organocatalyst for various organic transformations [32–35]. In 2014, Li et al. [36] reported the first use of DABCO as a ligand in Pd-catalyzed phosphine-free cross-coupling reactions, while our research group reported [37] Pd-DABCO supported on SiO<sub>2</sub> as an effective reusable catalyst system for Suzuki–Miyaura cross-coupling in aqueous ethanol using K<sub>2</sub>CO<sub>3</sub> as a base at 80 °C. The results showed that the catalyst could be used to convert a variety of aryl bromides and boronic acids to the desired coupling products in good-to-excellent yields, which encouraged us to use this catalytic system for Mizoroki–Heck cross-coupling reactions. As a matter of fact, we succeeded in obtaining a very rapid and quantitative conversion of various aryl bromides with different olefins into a variety of coupling products in DMF using K<sub>2</sub>CO<sub>3</sub> as a base at 100 °C temperature and with high selectivity.

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# Green protocol for the synthesis of 1,8-dioxo-decahydroacridines by Hantzsch condensation using citric acid as organocatalyst

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Herein we describe a clean and sustainable, one-pot, multi-component protocol for the synthesis of 1,8-dioxo-decahydroacridines by Hantzsch condensation of cyclic 1,3-dicarbonyl compound and NH<sub>4</sub>OAc with diverse aryl aldehydes using citric acid as an inexpensive green additive in ecological safe solvent. Utilization of cheaper and safer catalyst, cleaner reaction profile, straightforward work-up procedure and good to excellent yields of the desired product are the noteworthy aspects of this method.

**Keywords:** Acridines, citric acid, organocatalysts, green protocol, multi-component reactions.

OUR environment needs to be protected from the growing amounts of waste and toxic by-products that sequentially lead to chemical pollution. Therefore, synthetic chemists are interested to develop relatively safer technologies which play a vital role in green chemistry. Establishing newer chemical transformations should satisfy the green principles such as non-toxic, non-flammability, eco-friendly medium, and separation as well as recycling of the catalysts. Since the last decade, efforts have been made towards the design and synthesis of an environment-friendly method with respect to reagents, catalysts and solvents that could be easily biodegradable<sup>1,2</sup>. Multi-component reaction (MCR) strategies have been widely used in the convergent synthesis of complex organic entities. The MCRs uses simple and easily available starting materials and provide high atom economy and selectivity. It is one of the important synthetic tools available to achieve both economic and environment-friendly goals. Therefore, the synthesis of heterocyclic compounds using significant bioactivities with MCR support is an important pursuit in organic synthesis.

Synthesis of acridines is a growing area of interest due to polyfunctionalized groups with a wide range of bio-

logical activities<sup>3</sup>. Among them, 1,8-dioxo-decahydroacridines is an important class of aza-heterocycles in which a phenyl-substituted pyridine ring is fused with two cyclohexanone rings. These structures contain 1,4-dihydropyridine (1,4-DHP) as a parent core, which acts as fluorescent probes in bioanalytical chemistry<sup>4</sup> and also used as potential drug candidates for the treatment of cardiovascular diseases. Some of these compounds are used in dye-sensitized solar cells and in the preparation of blue light-emitting devices<sup>5,6</sup>. In addition, 1,8-dioxo-decahydroacridines have been widely employed as DNA intercalators, SIRT1 inhibitors, and calcium and potassium channel modulators<sup>7,8</sup>. Several studies have revealed that these heterocycles exhibit numerous medicinal applications which include antitumour, calcium-channel blockers, antileukemic, antifungal, anticancer, anti-atherosclerotic and bronchodilator<sup>9-12</sup>. They are also used as laser dyes, chemosensors and initiators in the photopolymerization process. These derivatives are highly important due to their structural similarities with coenzyme nicotinamide adenine dinucleotide (NADH), which plays an important role in biological systems.

The most common route for the synthesis of 1,8-dioxo-decahydroacridines is the condensation of a diverse range of aryl aldehydes, dimedone or cyclic 1,3-dicarbonyl compounds with various nitrogen sources such as ammonium acetate, urea, ammonium hydroxide, ammonium bicarbonate and hydroxylamine<sup>14-18</sup>. A variety of catalysts such as sulphonated polyethylene glycol (PEG-OSO<sub>3</sub>H), silicic (SiO<sub>2</sub>-ZnCl<sub>2</sub>), silica boron-sulphuric acid, proline, Zn(OAc)<sub>2</sub>, nano nickel cobalt ferrite (Ni<sub>0.5</sub>Co<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>), carbon-based solid acid, Bronsted acidic imidazolium salts, ascorbic acid, acetic acid, tris(pentafluorophenyl) borane/B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>, silica-supported polyphosphoric acid, ammonium chloride, silica-supported Preyssler nanoparticles have been employed in this reaction<sup>19-32</sup>. However, most of these reported methods have certain drawbacks such as use of toxic and corrosive solvents, expensive reagents, tedious preparation of catalyst, prolonged reaction times, complicated work-up procedure, harsh reaction

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4  
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12 <sup>1,2 & 3</sup> Affiliated to Shivaji University, Kolhapur.

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5 **Megha U. Patil,<sup>2</sup> Sachin K. Shinde,<sup>2</sup> Rajendra V. Shejwal,<sup>3</sup> Suresh S. Patil<sup>1\*</sup>**

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## X-RAY DIFFRACTION ANALYSIS OF Ni-Cu-Zn NANO-FERRITE SYNTHESIZED BY WET CHEMICAL ROUTE

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**ABSTRACT:** Ni-Cu-Zn nano-ferrite with composition  $Ni_{0.7}Cu_{0.1}Zn_{0.2}Fe_2O_4$  was synthesized by wet chemical route. The structural parameters such as lattice constant ( $a$ ), crystallite size ( $D$ ), bond lengths (A-O, B-O), ionic radii ( $r_A$ ,  $r_B$ ), X-ray density ( $\rho_x$ ), hopping lengths ( $L_A$ ,  $L_B$ ) were obtained from X-ray diffraction analysis. The presence of allowed planes in the X-ray diffraction pattern confirms the formation of single phase cubic spinel structure. It was found that the values of lattice constant and X-ray density of the ferrite are similar than that reported for ferrite prepared by citrate precursor method followed by microwave sintered technique. Crystallite size of the ferrite lies in nano-size range and which is much lower than that reported for ferrites prepared by ceramic as well as citrate precursor methods. Bond length (B-O) and ionic radii ( $r_B$ ) on octahedral site are higher than that of observed for tetrahedral site. Hopping length of ferrite on tetrahedral [A] site is higher than that of octahedral [B] site.

**Keywords:** nano-ferrite; wet chemical route; Ni-Cu-Zn ferrite; X-ray diffraction

### 1. Introduction

Recently researchers in different fields are engaged in the development of nano-materials in the form of nano-ferrites. A nano-ferrite material has excellent and improved properties as compared to that reported for bulk materials. These materials are technologically important and used in many applications such as including magnetic recording media and magnetic fluids for the storage and or retrieval of information, magnetic resonance imaging (MRI) enhancement, magnetically guided drug delivery, catalysis, sensors and pigments [1-3]. Recently instead of Ni-Zn and Mg-Zn nano-ferrites, there is a growing interest on the synthesis of copper substituted nano-ferrites because of its growing applications. Various chemical methods such as reverse micelle method, auto-combustion method, oxalate based precursor method, microwave sintering method, sol-gel method etc were used to prepare Ni-Cu-Zn nano ferrites. Ghasemi et al. [4] prepared copper substituted Ni-Zn nano-crystalline ferrites by reverse micelle process. They reported that the saturation magnetization of Ni-Zn ferrites decreases with increasing copper content. Ni-Cu-Zn nano-ferrites prepared by auto-combustion method utilized for the fabrication of multilayer chip inductor [5]. Raghavender et al. [6] studied structural and dielectric properties of Ni-Cu-Zn ferrites synthesized by oxalate precursor method. They reported that the dielectric constant and loss of these ferrites are lower than that of reported by other synthesis methods. The structural, magnetic and electrical properties of Ni-Cu-Zn ferrites followed by microwave sintering technique have been reported by Reddy et al. [7]. They revealed that ferrite material obtained by microwave technique has improved electro-magnetic properties. They also suggested that these ferrite materials are suitable for the fabrication of multilayer chip inductors used in the electronic devices. In present communication, we discuss structural parameters of Ni-Cu-Zn ferrite prepared by wet chemical method.

### 2. Experimental

#### 2.1 Synthesis of Ni-Cu-Zn ferrite.

Ni-Cu-Zn nano-ferrite with composition  $Ni_{0.7}Cu_{0.1}Zn_{0.2}Fe_2O_4$  was prepared by wet chemical method using sulphates as the starting materials. AR grade ammonium oxalate was used as a precipitating reagent. The required sulphates were weighed in desired proportion with the help of higher accuracy digital micro-balance and poured in the double distilled water. The dropwise conc. sulphuric acid was added in the solution of mixture with continuous stirring. The magnetic stirrer was used for stirring. Ammonium oxalate solution was added in the solution until precipitation process was completed. The precipitated solution was filtered and washed several times. The precipitate was dried and pre-sintered at 400°C for 2 hours. The pre-



# PERMEABILITY AND MICROWAVE ABSORPTION PROPERTIES OF DYSPROSIUM SUBSTITUTED MAGNESIUM FERRITE

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**Abstract:**  $MgDy_{0.03}Fe_{1.97}O_4$  ferrite material prepared by chemical combustion method. Frequency and thermal variation of complex permeability and loss tangent of the prepared ferrite materials was studied by using a Hioki LCR-Q meter. The real part of initial permeability increases where as imaginary part of initial permeability and loss factor of the ferrites material decreases with increasing frequency. Also the permeability of the resulting ferrites increases while loss factor decreases with increasing sintering temperature. The microwave absorption properties of dysprosium substituted magnesium ferrite have been carried out by using Field Fox vector network analyzer in frequency range 2MHz to 6GHz. The prepared ferrite material shows reflection loss of -17.15dB and voltage standing wave ratio (VSWR) is 1.37 at 4.08 GHz.

**Keywords:** Dy-Mg ferrite, Combustion, Permeability

## 1. Introduction

Magnesium ferrite is soft magnetic semiconducting materials have number of applications in magnetic technology, adsorption sensors and catalysis [1]. The performance of magnesium ferrites at higher frequencies is good due to its high resistivity, low magnetic and electric losses [2, 3]. Effect of rare earth ion doping into spinel structure produces structural distortions which induces strains and hence modifies its magnetic as well as electrical properties [4-7]. Recently researchers have synthesized nano-sized ferrite material due to its important structural, electrical and magnetic properties for different applications in sensors, magnetic storage, electronic and microwave devices.

V. Naidu et al [8, 9] have been reported physical properties of metal ion substitutions such as Sm-Gd, Ce-Gd on magnesium ferrite. The structural and magnetic properties of dysprosium substituted magnesium ferrite were reported by Bamzai et al [10]. They have studied magnetic hysteresis loop and explain the ferromagnetic nature of dysprosium doped magnesium ferrite. Rezlescu et al [11] have studied the effect of rare earth ions on magnetic and electrical properties of nickel zinc ferrite. They have showed that the substitutions of iron ions by rare earth ions provide clearly improved temperature characteristics of the initial permeability. A. Loganathan et al [12] prepared pure and Sr-substituted  $MgFe_2O_4$  by co-precipitation method and showed that structural, optical and magnetic properties of prepared ferrite strongly dependent on calcination temperature. Juhua Luo et al [13] studied magnetic and microwave absorption properties of rare earth ions doped strontium ferrite. They have shown that Er doped strontium ferrite got better microwave absorption performance at frequency 13.8GHz. Alagarasamy et al [14] synthesized Mg doped ferrite with Samarium, Dysprosium through sol-gel method. They have showed that prepared ferrite material used for microstrip patch antenna had an acceptable microwave performance with VSWR  $\leq 2$ , return loss of 9.799 dB at frequency 3.5 GHz. The main objective of present work to study frequency and thermal variation of permeability as well as microwave absorption performance of dysprosium substituted magnesium ferrite material.

## 2. Experimental

The composition  $MgDy_{0.03}Fe_{1.97}O_4$  was synthesized by chemical auto combustion route, in which metal nitrates are used as an oxidizing agent and fuel glycine as a reducing agent [15]. The as-burnt powder was mixed with small amount of polyvinyl alcohol and uniaxially pressed at 6 tones/inch to form torroid shaped sample with inner diameter 1cm, outer diameter 2cm and thickness 15mm. The samples were sintered at 950°C and 1050°C for 1hour respectively. Powders acquired after combustion and sintering were characterized by X-ray powder diffraction using an X-ray diffractometer. The microstructural aspects were studied with a scanning electron microscope. The initial permeability and complex permeability with temperature and frequency variation were calculated by using Ls and Q factor values obtained from Hioki





## Effect of $\text{La}^{3+}$ substitution on structural and magnetic parameters of Ni-Cu-Zn nano-ferrites

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### Abstract

The ferrite material with compositions  $\text{Ni}_{0.5}\text{Cu}_{0.5}\text{Zn}_{0.2}\text{La}_x\text{Fe}_{2-x}\text{O}_4$  (where  $x=0, 0.015, 0.025, \text{ and } 0.035$ ) was synthesized by oxalate co-precipitation method. The ferrite samples were characterized by thermo-gravimetric and differential temperature analysis (TG-DTA), energy-dispersive X-ray analysis (EDAX), X-ray diffraction (XRD), Fourier transform infrared spectroscopy (FTIR), field-emission scanning electron microscopy (FE-SEM), and vibrating sample magnetometer (VSM) techniques. The EDAX analysis confirmed the formation of required stoichiometric ferrite samples. The formation of cubic spinel structure with the presence of weak ortho-ferrite phases was confirmed from X-ray diffraction analysis. The lattice constant of all the ferrites was found to be increase with increase in  $\text{La}^{3+}$  content. The presence of main two recognized strong absorption bands in the frequency range  $400\text{--}600\text{ cm}^{-1}$  in the FTIR spectra shows the formation of well spinel ferrite. Morphological study shows that grain size of the ferrites lies in the range  $16.23\text{--}24.21\text{ nm}$ . It is observed that the saturation magnetization and magnetic moment of Ni-Cu-Zn ferrites decrease with  $\text{La}^{3+}$  content.

**Keywords** Ni-Cu-Zn nano-ferrite · XRD · FTIR · FE-SEM · VSM

### Introduction

Soft-ferrite materials are mostly useful material because of its technological and industrial applications. These applications are depending on their properties such as high

resistivity, moderate permeability, low dielectric loss, low permittivity, etc. These properties play an important role in the fabrication of components such as a transformer core, antenna rods, multi-layer chip inductor, micro-inductors, electromagnetic filters, etc. [1–4]

Recently, researchers synthesized ferrites in the form of nanoscale range because of its growing applications such as production of bio-diesel [5], nano-catalyst [6], humidity sensor [7], gas sensor [8], super-capacitor [9], electrode material for Li-ion battery [10], etc. Various methods such as sol-gel auto-combustion, co-precipitation, citrate precursor, wet chemical route, hydrothermal [11–15], etc. were used for the preparation of nano-ferrite materials.

In the last decade, researchers investigated various properties of Ni-Zn ferrites due to their interesting properties such as high resistivity, high permeability, and low eddy current losses. Recently, Ni-Zn ferrite material was used in high-frequency applications such as multi-layer chip inductors and electromagnetic interference filters. Das and Singh [16] investigated the structural, magnetic, and dielectric properties of Cu-substituted Ni-Zn ferrites. They reported that the coercivity and saturation magnetization of Ni-Zn ferrites improved by substituting Cu content. Avati et al. [17] illustrated that the poor

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# Thermal and Frequency Variation of Permeability for Samarium–Dysprosium–Magnesium Ferrite

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Samarium–dysprosium–magnesium ferrite materials have been prepared by chemical combustion method. The effect of samarium–dysprosium rare earth ions on loss factor, real and imaginary part of permeability has been studied for  $\text{Mg}(\text{Sm})_{0.4}(\text{Dy})_{0.4}\text{Fe}_{2-x}\text{O}_4$  ( $x = 0.01$  and  $x = 0.03$ ) ferrite materials with temperature and frequency by using a Hioki LCR-Q meter. From thermal variation of loss factor of prepared ferrite materials, it is revealed that ferrite must be used below Curie temperature for low loss factor. The real part of initial permeability initially increases with frequency and for higher frequency its value almost remains constant. The loss factor and an imaginary part of permeability of the ferrite materials decreases with increasing frequency.

ferrites become lower. They observed higher permeability and lower magnetization for Nd doped Cu–Zn ferrites as compared to undoped ferrites. Loganathan et al.<sup>10</sup> showed that structural, optical, and magnetic properties of Sr-substituted magnesium ferrites strongly depend on calcination temperature. Effect of thermal processing on the tribological of nanocrystalline Ni/TiO<sub>2</sub> coatings have been reported Cooke and Khan.<sup>11</sup>

The aim of present work is to investigate magnetic properties of rare earth substituted Mg ferrites in the form of permeability and loss factor with thermal and frequency variation.

## 1. Introduction

Magnesium ion plays an important role in the densification and grain growth during the formation of ferrite material.<sup>12</sup> With rare earth ion substitution electrical as well as magnetic properties of ferrites are influenced.<sup>13</sup> Due to larger ionic radii, rare earth ions have limited solubility and hence there will be limitations on their concentration of substitution/doping into the spinel of the ferrite.<sup>14</sup> Several researchers<sup>15–21</sup> observed secondary phase formation in addition to cubic spinel structure of rare earth substituted ferrites. They reported that secondary phase formation in the spinel structure is may be due to Re–Fe interaction. It is found that, for smaller percentage of rare earth, secondary phase does not exist. But substitutions of large amount of rare earth ions into the spinel structure form the orthoferrite phase, producing structural distortion and thereby induce strain, which modifies structural, magnetic, and electrical properties.<sup>22</sup> Reddy et al.<sup>23</sup> studied XRD pattern of composite materials and confirmed the biphasic nature of materials. Saitar et al.<sup>24</sup> synthesized rare earth ions (Sm, Dy, La, Nd, Gd) doped Cu–Zn ferrites by ceramic technique and found that magnetization and permeability of Sm and La doped ferrites become higher, whereas Dy and Gd doped

## 2. Experimental Section

### 2.1. Materials

Magnesium, ferrous, samarium, and dysprosium nitrates were used as oxidizing agents and fuel glycine as a reducing agent.

### 2.2. Synthesis

Ferrite with composition  $\text{Mg}(\text{Sm})_{0.4}(\text{Dy})_{0.4}\text{Fe}_{2-x}\text{O}_4$  for  $x = 0.01$  and  $0.03$  were synthesized by chemical combustion route. The magnesium nitrate ( $\text{Mg}(\text{NO}_3)_2$ ), ferrous nitrate ( $\text{Fe}(\text{NO}_3)_2$ ), samarium nitrate ( $\text{Sm}(\text{NO}_3)_3$ ), and dysprosium nitrate ( $\text{Dy}(\text{NO}_3)_3$ ) were weighed in required proportion and dissolved in double distilled water. The solution was heated until ignition process of the material is completed.<sup>25</sup> The resulting powder was decomposed in air at 600 °C and finally sintered at 1000 °C for 1 h. The toroidal shaped samples were prepared by using dye with the help of hydrolic press. Toroidal samples were sintered at 1000 °C for 1 h.

### 2.3. Characterization and Magnetic Properties

X-Ray diffractometer was used to characterize the ferrites. The thermal and frequency variation permeability and loss factor parameters of magnetic properties were obtained by measuring L<sub>s</sub> and Q-factor values by using LCR-Q meter (42 Hz to 5 MHz).

## 3. Results and Discussion

The typical X-ray diffraction pattern of the  $\text{Mg}(\text{Sm})_{0.4}(\text{Dy})_{0.4}\text{Fe}_{2-x}\text{O}_4$  system is shown in Figure 1. The presence

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# CORRELATION ANALYSIS OF ATPADI RESERVOIR OF SANGLI DISTRICT, MAHARASHTRA

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## ABSTRACT

This paper describes the physico- chemical profile and correlation matrix of Atpadi perennial reservoir of Sangli in Maharashtra where limnological studies were conducted from August 2016 to July 2018. The physico-chemical parameters varied seasonally. The Secchi disc values varied from 11.4 to 66.9 cm. The pH remained alkaline between 7.9 to 8.8 in both years. The dissolved oxygen varied from 4.2 to 8.2 mg/l during both years. The total alkalinity values ranged between 114.6 and 247.6 mg/l. The total hardness values varied from 111.3 to 365.6 mg/l for both reservoirs. Calcium content was fluctuated from 41.6 to 65.0 mg/l. The magnesium values are ranged between 29.6 to 36.5 mg/l. The values of total dissolved solids were observed from 210.3 to 521. Chlorides and total dissolved solids were maximum during summer and minimum in winter season. The reservoir may be placed under the category of oligotrophic in winter season. In correlation matrix free carbon di-oxide is negatively correlated with all parameters.

Key words: Physico-chemical parameters, Correlation coefficient, Perennial reservoirs.

## INTRODUCTION

India has vast fresh water resources in the form of both lentic and lotic ecosystems. The lentic ecosystems include ponds, lakes, tanks and reservoirs. The perennial reservoirs play an important role as a valuable water resource for domestic, agriculture and aquaculture. The lentic ecosystems have long attracted attention of ecologists, both for their importance as a source of drinking water and the development of fisheries.

Several limnological studies have been carried out in this region, notable among these are of Kamat (1965), Goel *et al* (1988) and Bhosale *et al* (1994). Most of the studies were carried out in water bodies of urban area. Few of studies from rural area are reported by Hujare (2008) and Jadhav *et al* (2009).

The study has been designed to understand the hydrobiological features of reservoir, to assess water quality which will state the potability, suitability for fish culture and irrigation purpose.

## Water Quality Status Of Fresh Water Of Bhakuchi Wadi From Sangli District Of Maharashtra (India)

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### Abstract:

The study represents on influence of environmental parameters on water quality at Bhakuchi wadi reservoir in Khanapur tahsil of Sangli district on the basis of water quality (WQI). WQI was determined on the basis of various parameters like pH, dissolved oxygen, total alkalinity, total hardness, calcium, magnesium, chlorides, total dissolved solids (TDS) and biological oxygen demand (BOD) for which no earlier reports are available on this water body.

During this investigation, it was observed that some parameters are within the range prescribed by WHO, KCMR BIS etc. But some parameters are beyond the permissible limit.

**Key Words:** Bhakuchi wadi reservoir, WQI, Sangli district, Maharashtra.

### Introduction:

**F**resh water has become a scarce commodity due to over exploitation and pollution of water. Increasing population and its necessities has lead to the deterioration of surface and subsurface water.

Water is the prime natural resource, a basic human need and a precious national asset. The quality of water is of vital concern for mankind since it is directly linked with human welfare. Water is utilized for domestic purpose, for industrial applications, agriculture purpose, as well as for inland fishery.

Water and life are two sides of the same coin. Life initiates and grows in the lap of water. Water is very vital to all forms of lives from very small organisms to very complex systems of plants, animals and human being. The purity of water varies from place to place in nature.

Water Quality Index (WQI) is one of the most effective tools to communicate information on the quality of water to concerned citizens and policy makers (WHO 1993, APHA 1992, ICMR 1975).

The WQI evaluates the values to each water quality parameter relative to its objective value. WQI is based on some important parameters that can provide a simple indicator of water quality. It gives the public a general idea of the possible problems with water in a particular region. Nine parameters were taken for WQI calculations namely, pH, dissolved oxygen, total alkalinity, total hardness,

calcium, magnesium, chlorides, total dissolved solids and biological oxygen demand. The water quality index is unit less single dimensional number between 0 and 100.

### Material And Methods:

#### Study Area:

The Bhakuchi wadi is small village located at northern part of Khanapur tahsil and northern part of district 70 km away from district place. The village is known for its minor reservoir. In 1988-91 Irrigation Department has constructed earthen dam riveted with stones. The water is used for irrigation also for washing, bathing and fishing activities. The reservoir is much influenced by human activities and weeds.

The total catchment area is 261.24 sq. miles, the total capacity of storage is 680.33 Mcft and dead storage is 59.96 Mcft. Length of dam including slipway is 150 meter having clear overflow type of slipway. The height of dam is 19.70 meter and is of earthen type. The submergence area is 108.80 hectare. The bottom of reservoir is rocky. Hence reservoir shows very less macrophytes.

During rainy season i.e. from mid June, July, August and September the farmers allow their buffalows grazing on lush green grasses in catchment area. Very less macrophyte occur in the reservoir.

The reservoir stores rain water received from adjoining catchment area and is much influenced by anthropogenic activities.

The sampling sites were selected by considering the inflow, outflow and anthropogenic





## Awareness of Health in College Girls

Alka P. Inamdr

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### Abstract:

Health is an asset to human being, his community and has come to be regarded as prerequisite to socio economic development. The health of Indian women is intrinsically linked to their status in society. There is a strong male child preference in India, as sons are expected to care for parents as they age. The son preference, high dowry costs for daughter, low level of education, under the control of first their father, then husband, and finally sons. All these exert the negative impact on health status of Indian women. Women in poor health affect household, economic wellbeing, less productive in labour force and gynaecological problems.

The study was conducted from June 2016 to June 2017 in our college (B.Sc. girl's students) to analyze the haemoglobin count and associated their health problems. The data was collected from 100 girls with the help of questionnaires for same. The identify problems are weakness, anaemic condition, low Hb count, menses problem, vertigo and gynaecological problems.

**Key Words:** Hb Count, Health problems.

### Introduction

Health is an asset to human being. The health care in rural areas is low as compared to urban areas. Under these circumstances, it is considered worthwhile to take a stock of health status of rural girls in the age of 16 to 22 years. The haemoglobin concentration of the blood is widely used as a tool in assessment of health. In these respect children from 6 years and women provides much attention. The state of knowledge concerning haemoglobin level in this age group is still unsatisfactory because majority of girls are suffered from number of deficiency systems and anaemia. Undoubtedly, this may shows adverse effect on growth of body and create future problems. They ignore the nutrition necessities of the girls even when they are married, pregnant and need most. The household responsibilities of female and lack of nutritious food causes no. of health hazards to rise among them.

The iron needs are highest in growing girls because of increased requirements for expansion of blood volume associated with growth spurts and onset of menstruation. (Beard JL, 2000). Thus growth spurts, menarche, poor diet, no added iron supplementation puts them into the high risk category of iron deficiency anaemia. These girls after marriage subjected to added demands for iron during pregnancy hence they need to have better status of haemoglobin. Regulation of iron balance occurs mainly in the gastrointestinal tract through absorption. Iron in diet is present in heme and non heme forms. These two forms are absorbed differently. Heme form is present in meat, chicken and is absorbed two to three times faster than the non heme form which is found in plant based foods and iron fortified foods. (Mangels R, 2000) Enhancers of iron absorption are heme iron and vitamin C; inhibitors of iron absorption include polyphenols, tannin and calcium. (Siengenber D et al, 1991)



# EFFECT OF BIOFERTILIZERS ON PHENOLOGY OF MAIZE (*ZEA MAYS* L.) VARIETY - GANGA

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## ABSTRACT

An attempt has been made to study the effect of *Azotobacter* and *phosphate solubilizing bacteria (PSB)* on Phenology of Maize (*Zea mays* L). variety -Ganga at farmland of Dhavali Dist.Sangli, Maharashtra. The experiment was carried out in a randomized complete block design with three replications. The phenological parameters like plant height, number of leaves per plant, length of leaves, stem and cob diameter and length of cob are measured. It is revealed from the experiment that, there is considerable enhancement in Phenological parameters. The value of 'treatment means' were compared using least significance difference ( $p < 0.05$ ). It is evident from the results biofertilizer treatment producing high yield in maize variety Ganga.

**KEYWORDS** – Maize (*Zea mays* L.) variety –Ganga, Phenology, etc.

## INTRODUCTION –

Maize (*Zea mays* L.) is a most important cereal crop after wheat and rice. Every part of the maize plant has economic value which the grain, leaves, stalk, tassel and cob can all be used to produce large variety of food and non food production (IITA, 2006). Apart from this, corn is an important industrial raw material and provides large opportunity (Paroda, 2000). Maize is a  $C_4$  mode of carbon fixation plant efficiently utilizes inputs because of its rapid growth and high biomass (Miller *et al.* 2010). Beyranvand *et al* 2013 suggested that effect of nitrogen and phosphate biofertilizers were evaluated positively, there were an increase in plant height, ear weight, ear length and grain yield. The productivity of maize is dependent on its nutrient requirement and management particularly that of nitrogen, phosphorus and potassium (Arunkumar, 2007). The extensive research programme over the years on beneficial bacteria and fungi has resulted in the development of a wide range biofertilizer which not only fulfill the nutrient requirement of various crop species but increase the crop yield and nutrient composition. *Azotobacter* species besides playing a role in nitrogen fixation, it has the capacity to synthesize and secrete considerable amounts of biological active substances like vitamins, gibberellins and auxins (Suhag, 2016)

Maize seeds used for human food and animal fodder. Selected and applied methods of biofertilizer increasing integration in production and also coexist environment free from pollution.



# Effect of Biofertilizers on Chlorophyll contents of Maize (*Zea mays* L.) Variety Eco-92

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**Abstract:** An attempt has been made to study the effect of different biofertilizers such as Azotobacter and Phosphate solubilizing bacteria, (PSB) on chlorophyll content on maize (*Zea mays* L.) variety Eco-92. The experiments were carried out in a randomized complete block design with three replications. The biofertilizers used were Azotobacter (A), phosphate solubilizing bacteria (P) and combine treatment Azotobacter + phosphate solubilizing bacteria (A +P), without treatment was control. The comparative extraction of chlorophylls (Chlorophyll a, chlorophyll b and total chlorophyll) And carotenoids from Eco-92 by 80% acetone as extraction method (Arnon, 1949) was studied. The study relates to the amount of concentration of chlorophyll and carotenoids between the control and treated of maize crop. Investigation revealed that method of Arnon (1949) [1], is simpler method for extracting the pigment molecules along with other methods used for extraction and results showed higher content of chlorophyll-a, Chlorophyll-b, total chlorophyll and Carotenoids in the treated plants in comparison with the control plants. By the application of biofertilizers treatment levels were corresponding to (TA<sub>1</sub>), (TP<sub>1</sub>), (TA+P<sub>1</sub>) respectively to the treated fodders, little amount of differences were observed in the concentrations of pigments between treated and control plants selected for present study.

**Keywords:** Chlorophyll, carotenoids Azotobacter, PSB, Eco-92 etc.

## 1. INTRODUCTION

Maize is an important staple food crop, occupies a prominent place among cereals and first rank in terms of productivity and third in total area and production after wheat and rice, while in India it stands fourth ranks next to rice, wheat and Jowar in terms of area and production. Total pigment molecules present in the leaf, are chlorophyll-a, chlorophyll-b and total chlorophyll, carotenoids which are essential for photosynthesis [10], [11] reported that the chlorophyll coloration is related to the amount of nutrients absorbed by the plant from soil, This crucial Pigment also plays role as an index of plant growth and production of organic matter. Biofertilizers contain micro-organism that increases or promotes the important nutrients crucial for overall production the soil [9]. Biofertilizers applied to the soil supply of plant nutrients for crop growth and serve as important instruments in yield development and physiological processes. Moreover, they play important roles in photosynthesis capturing light energy which is converted into chemical energy [3], [15]. Most plants possess chlorophyll a and chlorophyll b which are the main photosynthetic pigments. Chlorophylls and carotenoids are essential pigments of higher plant assimilatory tissues and responsible for variations of color from dark-green to yellow. Carotenoids provide bright coloration, serve as antioxidants, and can be a source for vitamin A activity [4]. N is a key element in chlorophyll, therefore is usually a high correlation between them [13]. Positive correlation of nitrogen and chlorophyll is previously reported by some researchers [7]. The distribution of chlorophyll is the key indicator of crop



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## RESEARCH ARTICLE

### EFFECT OF BIOFERTILIZERS ON YIELD AND YIELD COMPONENTS OF MAIZE (*ZEA MAYS* L.) VARIETIES ECO-92 AND AFRICAN TALL

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##### Key Words:

Azotobacter,  
PSB, Eco-92,  
African tall,  
Maize yield etc.

#### ABSTRACT

An attempt has been made of study the effect of different biofertilizers such as *Azotobacter* and *Phosphate Solubilizing Bacteria (PSB)* on yield and yield components of Maize (*Zea mays* L.) varieties viz. Eco-92 and African tall. The experiments were carried out in a randomized complete block design with three replications. The yield parameters like weight of cob, diameter of cob, length of cob, number of rows per cob, weight of grains, number of grains per cob, weight of 100 grains, grain yield Kg/ha. Result showed that, maize yield and yield components were significantly different at ( $p < 0.05$ ) higher in application of biofertilizers treatments. However, treatment with combined application of *Azotobacter*+*PSB* biofertilizer (A+P) biofertilizers had the highest weight of cob and grain yield Kg/ha as compared to control. Overall, *Azotobacter* and *PSB* biofertilizers improved the quality and quantity of yield.

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## INTRODUCTION

Maize (*Zea mays* L.) being an important staple food crop after Rice and Wheat throughout the world (FAO, 2002), Maize originated from Mexico. Every part of the maize plant has economic value and cob can all be used to produce a large variety of food and non-food production (IITA 2006). Apart from the soil the fertility and productivity issues, use of chemical fertilizers are also becoming more and more difficult for the farmers due to their high costs. Large amount of chemical fertilizers and pesticides are being used for its higher yield production, but the problem is, they influence human and environmental health. To get rid off from the problems, we required to alter ways of increasing yield production by applying biofertilizers (Shevananda, 2008). Nitrogen and phosphorus are essential nutrients for plant growth and development in Maize. *N<sub>2</sub>-fixing* and *P-solubilizing bacteria* are important for plant nutrition by increasing N and P uptake by the plants and playing a significant role as that like biofertilizer, so *Azotobacter* and *Phosphate solubilizing bacteria* are used in this study.

Though nitrogen and phosphorous are essential nutrient for plant growth and development in corn, biofertilizers are able to fix atmospheric nitrogen in the available form of plants (Chen, J.2006). For highest grain yield in agriculture in addition to both, the nitrogen and phosphate fertilizer are very important (Shahin, 2013 a,b). Biofertilizers include mainly the nitrogen fixing, phosphate solubilizing and growth promoting microorganisms (Goel et al., 1999). Among biofertilizers benefiting the crop production are *Azotobacter*, *Acetivibrium*, Blue green algae, *Azolla* (Hegade et al., 1999) Application of biofertilizer provides effective implementation of biological mechanisms of plant nutrition, growth promotion and protection (Bashan and Levanony, 1990; Doberziner, 1995). In Maize the present positive effect of biofertilizers on growth, yield and yield component was revealed because of the increasing demand for food and livestock feed. The similar results are observed in case of barley (Azimi et al. 2013). *Azotobacter* species besides playing a role in nitrogen fixation it has the capacity to synthesize and secrete considerable amounts of biological active substances like vitamins, gibberellins and auxins (Subag, 2016).



# Allelopathic Influence of *Celosia argentea* L. on Photosynthetic Pigments of Wheat (*Triticum aestivum* L.)

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## ABSTRACT

*Celosia argentea* L. is dominant alien weed reported from crop field of Islampur in Walwa taluka of Sangli district of Maharashtra, India. It has been scrutinized for its allelopathic potentiality of *C. argentea* against photosynthetic pigments such as chlorophyll- a, b and carotenoids in wheat. The laboratory pot assay experiments were conducted to assess photosynthetic pigments. The healthy seeds of wheat were soaked in different concentrations of leachates of *C. argentea* L. separately. The concentrations of leachate were, 5, 20, 40, 60, and 80%. The seed were sown in earthen pots containing the mixture of garden soil and manure (3:1). The seeds supplied with distilled water were used as control. The aqueous leachates of *C. argentea* L. were applied with respective concentrations regularly up to 25<sup>th</sup> day of growth to both plants. Analysis photosynthetic pigments were carried out on the 25<sup>th</sup> day of growth. The amounts of chlorophyll a and b were enhanced after leaf leachate treatments in wheat while inhibited after inflorescence and root leachates of *C. argentea*. It was recorded that the amounts of total chlorophyll and carotenoids were enhanced only after leaf leachate treatments in wheat but after 5 to 60% treatments. The photosynthetic pigments were increased after treatment of leachates of *C. argentea* showed significance in crop productivity. The present study indicated that the allelochemicals are present in weed, *C. argentea*. It needs further screening of allelochemicals and their characterization for detailed study.

**KEY WORDS:** Allelochemicals, *Celosia argentea* L., Photosynthetic pigment, Wheat (*Triticum aestivum* L.)

## INTRODUCTION:

Weeds are unplanted, unwanted and redundant plant that hampers the growth of main crop through releasing chemical substances, called as allelochemicals (Batish *et al.*, 2007). They often affect growth and development of crop plants (Kadiolgue *et al.*, 2005). They released allelochemicals that affects on metabolic functions including mineral nutrition, photosynthesis, respiration, and many others (Saxena *et al.*, 2004) through allelopathic mechanism (Benyas *et al.*, 2010). Allelopathy is the complex phenomenon concerns with the effects of neighboring life on plants through breakdown products of their metabolites. Biochemical compounds were released from the neighboring plants / weed plants by the various biological and



RESEARCH ARTICLE

## Phytochemical Analysis of Selected Medicinal Plants of India

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### ABSTRACT

The present study has revealed the presence of phytochemicals considered as active medicinal chemical constituents. Important medicinal phytochemicals such as terpenoids, flavonoids, phenols, tannins, steroids, glycosides were studied in the collected samples. Plant *Aegle marmelos* Corr. having all these phytochemicals. Saponin was found only in two plants out of nine plants i.e. *Achyrocline saturei* Lam. and *Sonchispes amarus* Lam. Terpenoids was found in *Aegle marmelos* Corr., *Calotropis gigantea* Lam. K.Br., *Mimosa pudica* Lam. Terpenoids are reported to have anti-inflammatory, anti-viral, antimicrobial, inhibition of cholesterol synthesis and antitubercular. Cardiac glycosides content was found in *Achyrocline saturei* Lam., *Aegle marmelos* Corr., *Mimosa pudica* Lam., *Trichilia hirtella* Lam., *Calotropis gigantea* Lam. K.Br., *Ricinus communis* Lam. Cardiac glycosides have been used for over two centuries as stimulant in case of cardiac failure. The flavonoids was found in *Achyrocline saturei* Lam., *Aegle marmelos* Corr., *Calotropis gigantea* Lam., *Mimosa pudica* Lam., *Cissampelos glabra* Lam. Mart., *Trichilia hirtella* Lam. The biological functions of flavonoids apart from its antioxidant properties include protection against allergies, inflammation, free radicals, platelet aggregation, microbes, ulcers, hepatocarcinoma, viruses and tumours.

**Keywords:** Medicinal plants, Phytochemicals, Secondary metabolites, Anti-inflammatory drug plants.



**BIOCHEMICAL CHANGES IN BENOMYL SENSITIVE AND RESISTANT ISOLATES OF *FUSARIUM SOLANI* (MART.) SACC CAUSING ROOT ROT OF CHICKPEA (*CICER ARIETINUM* L.)**

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**ABSTRACT**

chickpea (*Cicer arietinum* L.) is an important pulse crop grown for its vegetable, fodder and medicinal value. It was infected by *Fusarium solani* (Mart.) causing root rot disease to chickpea. Benomyl was used for management of the disease. The benomyl sensitive and resistant isolates show biochemical variation when assessed against untreated healthy ones. Biochemical constituents like Carbohydrates, starch, reducing sugar, DNA, RNA as well as Iron, Zinc, Copper, Manganese, and Magnesium contents were seen to be reduced due to infection of *Fusarium solani* in sensitive and resistant isolates as compared to healthy plant, while Calcium, total ash and polyphenol contents were increased in both of the isolates.

**KEYWORDS:** Root rot chickpea (*Cicer arietinum* L.), *Fusarium solani* (Mart.) Sacc sensitive and resistant, biochemical constituents.

**INTRODUCTION**

Pulses are an important part of the daily diet for most Indians as they contain 2 to 3 times more protein than cereals. Chickpea (*Cicer arietinum* L.) is the most important pulse food crop among major rabi pulses of India and belongs to family Leguminosae. Chickpea is not only important human food but also used in traditional farming systems. According to (Chiranjeevi *et al.*, 2002) in the dry land it fixes atmospheric nitrogen in the soil and increases soil fertility. It has very great nutritional value. According to (Cook, 1967) after dehulling chickpea is valued for its nutritive seeds with protein content 25.3 to 28.9 percent.







## पु. ल. देशपांडे यांचे वाङ्मयीन व्यक्तिमत्त्व

डॉ. तातोबा घदामे

साहित्यिक :

मराठी वाङ्मयाच्या क्षेत्रात लोकप्रियतेच्या शिखरावर पोहोचलेले, 'मलाख्य' अशी मराठी मित्रांकरे व्यक्तिमत्त्व म्हणजे पु. ल. देशपांडे. 'मलाख्य' म्हणजे 'महाराष्ट्राचे लोक व्यक्तिमत्त्व.' ही चिरुदावली त्यांना महाराष्ट्रातील जन्मते दिली. शासन स्तरावरील कार्य, पत्रभूषण, साहित्य अकादमी, महाराष्ट्र भूषण असे नामांकित पुरस्कार त्यांना मिळाले. जन्मते पुलंसारख्या लेखकाला इतकी लोकप्रियता आणि प्रेम दिले त्याचे कारण म्हणजे पुलंनी निरागस नजरेने समाजाचे निरीक्षण करून विनोदी शैलीत व्यक्त केले हे होय.

उत्पत्ती असलेले पु. ल. हे साहित्याबरोबरच, संगीत, नाटक, चित्रपट अशा विविध क्षेत्रात लीलया विहार करणारे, विदग्ध वाङ्मयीन व्यक्तिमत्त्व होते. त्यांच्या उत्पत्ती व्यक्तिमत्त्वातील विविध पैलूंचे दर्शन त्यांच्या साहित्यातून व त्यांच्याबरोबरच्या लेखातून घडते.

पुलंकी वाङ्मयीन जडणघडण :

पुलंका जन्म मुंबईतील गावदेवी भागातील गोरेगावकर रस्त्यावरील कृपाळ हेमराज घाटते रनिवार दि. ८ नोव्हेंबर १९१९ साली झाला. आई लक्ष्मीबाई ही वामन मंगेश कुर्णो उर्फ ऋग्वेदी यांची कन्या. ऋग्वेदींचे पूर्वज मूळचे गोव्याचे नंतर ते कारवारला गेले ते कारवारून उपजीविकेसाठी मुंबईला आले. ते शिक्षक, समाजसुधारक आणि स्वैच्छिक होते. त्यांना मराठी, हिंदी गुजराती, कन्नड, संस्कृत, बंगाली इत्यादी बरेच केंद्र होत्या. टागोरंच्या 'गीतांजली'चा मराठी अनुवाद त्यांनी केला होता. पुलंका लक्ष्मीबाई वारसा ऋग्वेदींकडून मिळाला. वडील लक्ष्मणराव देशपांडे मूळचे कोल्हापूर जिल्ह्यातील चंदगड जवळील जंगमहट्टीचे वतनदार घराण्यातील होते. जंगमहट्टीच्या स्वतंत्रपणे वतनदारी या देशपांडेकडे होती. लक्ष्मणराव मॅट्रिकची परीक्षा पास झि. बी. अडवानी या कागद कंपनीत सेल्समन म्हणून नोकरीस लागले. वडिलांना लक्ष्मीबाईची मनापासून आवड होती, ते बालगंधर्वांच्या गायकीचे चाहते होते.

पुलंका विनोदबुद्धीची देणगी मिळाली ती त्यांच्या 'बाय'कडून. बाय ही पुलंकाच्या आई (आजी) होय. या बायला नकला करायची भारी हीस होती. मंदिरात नकलीनाला जाऊन आल्यानंतर घरी कधेकरी बुवांची ती हुबेहुब नकल करी. लक्ष्मीबाईची बरीच नाटके तिने पाहिल्यामुळे तिची अभिनयाची जाण वाढली होती.









**RACISM IN JEWISH AMERICAN LITERATURE  
IN THE CONTEXT OF SELECTED SHORT STORIES OF  
BERNARD MALAMUD****DR. D. B. THORBOLE**Assistant Professor,  
Department of English,  
P. D. V. P. College,  
Tasgaon.**ABSTRACT**

*The present paper tries to analyze, interpret and discuss in details the term of racism in Jewish American literature in the context of selected short stories of Bernard Malamud. The American English literary tradition is wide range in the history of English literature. Jewish racism is the most prominent topic reflected in their writing as they face many problems in it. The American literature demands separate world in the main stream of literature, which at the same time is the part and parcel of the culture and a separate and distinct identity in it. This illustrious identity is maintained as the handle the problem and prospects of the Jewish community. Jewish literature deals with the problems and frustration of American cultural and problems of racism. In a view of this significance study, the present paper seeks to provide a vital statement on racism in Jewish American literature in the context of selected short stories of Bernard Malamud. So, the present paper will help to understand the racism in Jewish American literature in the context of selected short stories of Bernard Malamud for all researchers as well as to all community of the society.*

**Key-words:**-Racism, Jewish American Literature, Identity, Culture, Discussion, Etc.

**1. Introduction**

Bernard Malamud was one of the most promising writers of the mid-twentieth century in American literature. He was the author of eight novels and fifty-five short-stories. He was the recipient of the National Book Award for his short stories collection *The Magic Barrel* in 1952 and also won both of Pulitzer Prize and National Book Award for his fourth novel *The Fixer* in 1967. The present paper is an attempt to analyze the racism in Jewish American literature in the selected short stories of Bernard Malamud's first short story collection *The Magic Barrel*. His short stories touch lightly upon mystic elements and explore themes like racism, rootlessness, search for identity, social realism, ethnic identity, political ideology, national identity, orthodox social system, religious, love, sex and struggle of individual. Malamud always depicts his heroes in his short stories a general quality of human being. His characters always represent the common men who have lived and are now living. It is found that his heroes suffer from racism, discrimination, ethnic identity, national identity, orthodox social system, religious, love, sex and struggle of individual.

**2. Scope of the study**

His short stories hold out tremendous appeal to several generation of reader in different literary (cultures) traditions. Bernard Malamud is major writer not only in the history of the





## Environment and Literature

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Environment and literature studies commonly called ecocriticism or environmental criticism. Ecocriticism is the study of literature and literature from an interdisciplinary point of view where literature scholars analyze texts that illustrate environmental concerns and examine the various ways literature react the subject of nature. Environment is everything that is around us it can be living and non- living things. It includes physical, chemical and other natural forces. Living things live in their environment. They constantly interact with it and adopt themselves to condition in their environment. Environment plays an important role in the healthy living of human beings. Healthy ecosystems clean our water, purify our air, maintain our soil, regulate our climate, recycle nutrients and provide us with food. They provide raw material and resources for medicines and other purposes. They are at foundation of all civilization and sustain our economies. Literature and the arts have been drawn to portrayals of physical environment and human - environment interactions. The environmentalist movement as it emerged in the nineteenth century. It gave rise to reach array of fictional and non-fictional writing concerned with human changing relationship to the natural world.

Environment and literature studies commonly called ecocriticism or environmental criticism in analogy to the more general term literary criticism- comprise an eclectic, pluriform and cross-disciplinary initiative that aim to explore the environmental dimensions of literature and other creative media in a spirit of environmental concern not limited to any one method or commitment. The art of imagination and the study thereof- by virtue of their grasp of the power of word, story and image to reinforce, enliven and direct environmental problems. Literature and environment has become a more worldwide movement with chapters throughout Europe east and south Asia and Australia, New Zealand, The United states and United Kingdom.

Wordsworth and Coleridge had consciously decided to write poetry of a particular kind. Wordsworth chose to write about themes from "common life" and in "a selection of a language really used by men" that lived in the company of nature. Love of nature is an important quality. The poet not only sing of the sensuous beauty of nature, but also see into the heart of things and reveal the soul that lies behind. Poetry from nineteenth century stands for simplicity in theme and treatment. Wordsworth's poem 'The Education of Nature' shows to us how a child is certain to grow into a perfect specimen of humanity, if it is left to the care of Nature. It shows Wordsworth love for nature.

Three years she grew in sun and shower;  
Then, Nature said, "A lovelier flower  
On earth has never sown:  
This child I to myself will take;  
She shall be mine and I will make  
A lady of my own".



## Global Environmental Problems And Commercial Societal Responsibility

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**Abstract:**

*This Research paper dresses the concerned relationship between the concept of commercial societal responsibility (CSR) and global environmental change. By way of mapping the drivers of global environmental turn down, we highlight the problems associated with devising effective management responses under the poster of commercial societal responsibility. We present a critical discussion on the ecological efficacy of contemporary commercial societal responsibility (CSR) approach, addressing also broader theoretical questions about the suitability of commercial societal responsibility for commerce with confused and increasingly difficult environmental problems*

**KEY WORD:** Sustainability, commercial, Societal Responsibility, Global Environment, CSR

**Introduction:**

The world is changing at an increasing. The acceleration of globalization, innovation and development has transformed the market place but also affected the work of government, social dynamics and environmental integrity. In this sense, the commerce environment has become more varied and difficult. Particularly, non-economic issue creates a difficult challenge for commercial managers who are charged with the invidious responsibility to achieve high financial returns whilst needing to demonstrate civic virtue by being law-abiding, ethical, good corporate citizens. Not only is company probable to be beneficial but also to be sensitive to the societal, cultural and environmental aspects of their operation.

Global environmental changes which have become more in evidence and critical in recent decades, are the focal point of this Research paper. We will explore current attempts to address global environmental problems under the poster of CSR and judge their effectiveness.

**Objectives:**

- To identify global environment problems.
- To study global Commercial Societal Responsibility.

**Globalization:**

Since nineteen seventy globalization has been the subject of greatly dispute and contestation, financial Commission for Latin America and the Caribbean, although a excess of definitions seeking to describe globalization, much debate continues to be had in the literature about its dimensions and character. Broadly speaking, globalization reflects a complex process towards a widening, increasing and increasingly faster world-wide inter connectedness.

Financial globalization has been the engine of this development, characterized by the global expansion of multinational and transnational firms. Global institutions such as the the *World Bank (WB)*, and the *World Trade Organization (WTO)* *International Monetary Fund (IMF)*, have been in key actors in shaping today's global economic system. The interplay of these institutions over the last decades has brought about the coalescence of many economical markets the humanity we live in today entails a progressive march towards the development of a global economy – that is, what happens in Tokyo today impacts markets in London tomorrow. Multinational corporations have expanded their operations to include every angle in the world, with few limitations on how they go about defining new, undiscovered markets.

**Global Environmental Problems:**

The global environmental governance, however, is problematical as the general reevaluation of the international and local tier often seems to create a political blankness. This is because the necessary political structures and processes needed to function effectively on these global and limited stages are not yet in position. The need to clear competences and political powers, for instance in dealing with environmental



## Global Environmental Problems And Commercial Societal Responsibility

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# Environmental Issues

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## Abstract

In this attempt researcher tried well to highlight the different environmental issues caused by lot of different interference of human being. In the world of modernization many activities had done by human being leads to imbalance in the environment such as industrialization, Urbanization, Desertification, Deforestation use of green house, over-exploitation of resources. Some of the solutions also mentioned to control the negative of Environment.

**Key Words:** environmental issues, imbalance, depletion.

## Objectives

1. To know the environmental issues
2. To understand the environmental issues

## Methodology

The present research paper is informative the required information collected through various secondary sources of information.

The list of environmental problems has grown to a great extent in the past few years. It has become very important to get these problems fixed before it is too late.

Following are some of the major and grave problems being faced by the world.

## Global Warming

Global warming is directly connected to the increase in percentage of CO<sub>2</sub> here in the earth's environment. The earth gets its warmth from the green house effect. But due to the increasing percentage of greenhouse gases, the temperature of the earth is increasing day by day. This has resulted in the collapse of glaciers which in turn are responsible for the rising sea level. If the temperature keeps increasing at such a rate, eventually the entire land will be go under water very shortly.

## Deforestation

Forests are an important part of the ecological cycle, but if it continuously destroyed for agricultural settlement, roads, railway tracks reservoir and huge industries, they are a good source of oxygen, rainfall, moisture, etc. But deforestation has brought about a drastic change in the ecological balance of the earth. It takes years for a tree to grow and every year approximately 16 million hectares of forests are cut down for various purposes.

It leads to a climate shift, less rainfall, soil erosion and very dangerous to wild animals.

## Energy Crisis

Today, there are many options of energy sources such as petroleum, bio-fuel, coal etc. But all these sources are non-renewable sources and will get depleted in the coming years if their consumption is not the less. Apart from the energy crisis, resources such as coal and petroleum are contributing to the emission of greenhouse gases. Due to the excess usage of these energy sources, not only are the sources getting depleted, but they are also adding to the greenhouse gases which in turn are adding to the global warming conditions.

So, many countries are searching for alternative energy sources such as wind energy, solar energy, nuclear energy, etc., which they help in the future. But to get totally dependent on these resources and ensure their proper functioning may take some time.

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### A Quantitative Analysis of Rural Settlements in Una Taluka of Junagadh District (G.J) - A Remote Sensing and GIS Approach

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**Dr. A. K. Hange**  
Research Guide,  
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**Abstract:**

The spacing distribution of rural settlements was studied for 156 settlements in the Una taluk of Junagadh district in central India using high declaration satellite imageries available in 'Google Earth'. Spatial statistical technique of 'nearest neighbor analysis' was used to study the randomness in the delivery of settlements. The methodology used in the study demonstrates cost useful and correct means to study the spacing of settlements in rural surrounding area. The results of the study provide essential inputs for growing a development model for rural settlements by the local developmental establishment.

The investigative study of rural settlements with respect to spacing of settlement has large significance in terms of regional development and spatial included arrangement inputs.

**Introduction:**

Rural settlements are the mainly feature form of the cultural landscape. It is artificial habitation on the earth's surface and study of the distribution of rural settlements has taken an important situation in the historical growth of geography. It is important that judgment makers concerned in rural development have at their disposal particular information to identify impact locations for concentration of services, nodes of transportation outline, development centers, etc. which mostly control the cost of services.

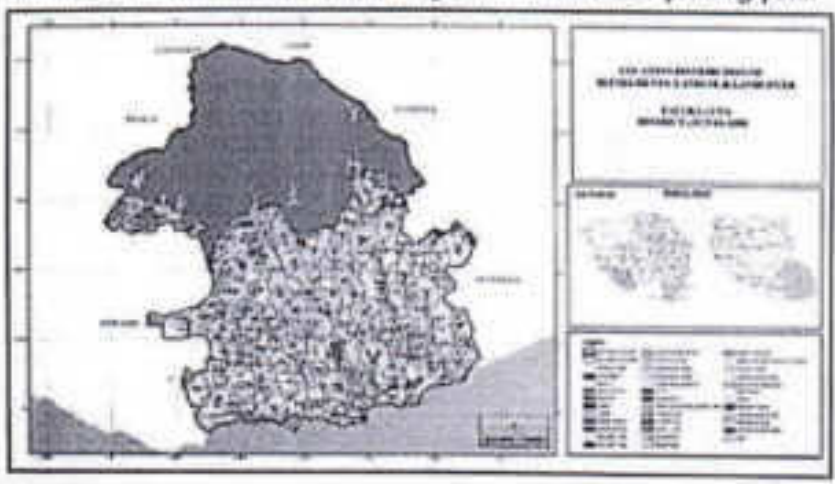
Una is located on the bank of Machhundriver. It has an average elevation of 14 meters (46 feet). Kavlina is located on the west, Diu is on the south. Una has the highest number of villages of all the Talukas in Gujarat state. The study area cover 156 settlements is located inside the Una taluk of Junagadh district and covering an area of 775 sq. km. The area is fundamentally an agrarian, thickly populated and well connected with major roads and railway. Though there are big portions of forested areas and a few water bodies in the study area. (Fig.1). The general topography in the area is represented by an undulating plateau typical of the Deccan traps with altitude unstable from about 600m to 260m above msl.

The word distribution refers to the way in which human being settlements are extending over the landscape. The pattern may be individual of isolated homes, each divided by big distances, and the pattern can be random, regular or clustered. There are a variety of factors and situation responsible for different types of rural settlements. These are: physical features nature of topography, height above sea level, type of weather and accessibility of water, cultural and ethnic factors societal structure, caste and religious conviction, and defense factors, defense against theft and robberies. Once formed, settlements may continue for centuries, long after the original advantages of the situated have become unrelated. However, it is particularly improbable that the pattern of distribution of settlements will stay behind the same settlement disappear and grow up, some disappear completely even as completely fresh ones are recreated.

Five major types of spacing patterns can be easily identified as clustered, agglomerated or nucleated, semi-clustered or fragmented, helmeted, and dispersed or isolated. A statistical technique i.e. quantitative technique of 'Nearest- neighbor statistics' is used for influential the randomness of distributional pattern of rural settlements. Its principle is based on a assessment of the in a straight line distances separating point from their nearest neighbor points with the distances which strength be expected if these points be scattered in a random manner within the similar area.

**Objective:**

The main objective of this study is first of all to identify the spatial distribution randomness of rural settlement and factor influence it and secondly demonstrate the effectiveness method used in related studies of rural settlements.





# A Geographical Study of Rurality In Sangli District Using Selected Demographic Parameters

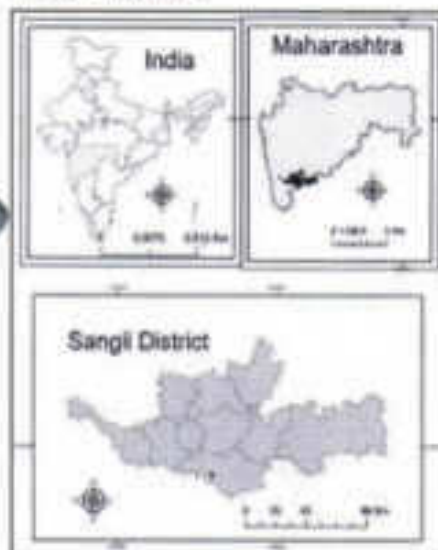
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**Abstract:** Rurality is an indistinct concept, rurality is an index of agricultural rural economy, more working population engage in agricultural activities as well as high female population, low literacy rate, population density etc, these demographic parameters helps to measure the rurality in particular geographic area. In 2009 United Nation declared that in 2007 majority of people were not living in rural areas. Some scholars define "rural" in socio-cultural terms, while others suppose there are no differences between rural and urban. In spite of this, there are researchers trying to create a rurality index, which delineate the term "rural". In the study area rurality causes to increases disparity among the region in this context the present study examines the level of rurality in Sangli district using some demographic parameters. For this purpose, population data of 2011 is taken as base and use Z score method and composite index (statistical methods) for to measure level of rurality. The present research work totally focuses on rural demographic environment and its relation to regional rurality.

**Index Terms – Rurality, Demography, Rural.**

**I. Introduction:** 'India lives in villages' the village in India holds a distinctive place, both in the social and economic spheres. There were 212.6 million people living in rural areas in 1901, in 2001 rural population has increased to 721.1 million naturally the density of population has increased, land under agriculture has diminished, affected the forests and evacuation to urban areas accelerated agricultural labor continued to be exploited. It deserves mentioning that 2 percentage of rural population in comparison to total population has been gradually declining. Due to this regional disparity among the region has been increased. The working agricultural population, female population as well as literate population has indicated that rurality of particular geographic area. There are many scholars are try to define rurality but it's very complicated concept to explain because it changes country to country. In rural country like India, the census of India defines rural as 'An area which is marked by non-urban style of life, occupational structure, social organization which is noticeably agricultural, its settlement system consists of villages.' The Cloke (1977) paper represents the first effort at creating a rurality index; Cloke developed the index for England and Wales in the United Kingdom (Cloke, 1977). Sangli district has 10 thesils which more predominate of rural activities. The rural demographic environment is mainly depending on their local economical activities. Among the 10 thesils there were 5 thesils has more rural based environment.



**II. Study Area:** The Sangli district located in west of Deccan plateau of Maharashtra Nearly 75.49 percent in rural and 24.51 percent people live in urban area It is situated between 16°43' and 17°38' north latitude and 73° 41' and 75° 41' east longitude. It has an area of 8,572 sq. Km. and population of 28, 20,575 according to the 2011 census. There are 735 villages and 07 urban locations in Sangli district.

**III. Objectives:** The objectives of the present study are:

To analyze the level of rurality in study region.

To study the variation in rurality among the thesils in study region.

**IV. Database and Methodology:**

The present study is descriptive research. The data is gathered through secondary sources like the table of socio-economic abstract of Sangli district, census of India and other sources related to population. Collected data calculated with the help of simple statistical techniques. Z score method and composite index has been used for to measure level of rurality. The analyzed data presented in tables and maps.

**V. Results and Discussion:**

Traditionally, the number of inhabitants in a geographical area or population density has been considered variable in attempt to measure rurality. Both these indicators, however, have been considered as inappropriate to measure such a complex, multidimensional concept as the rural setting (Martin, 2000) Population

density in rural area of Sangli district is varies considerably, ranging between 146 inhabitant /km<sup>2</sup> and 573.05 inhabitant /km<sup>2</sup>. The means is 293.89 inhabitant /km<sup>2</sup> with a high standard deviation (Table. 1). The literacy among the rural population ranging from 61.17 to 77.39 person per 100 inhabitants.



## Performance Evaluation of IQAC: The Responsibility of The Principal And Coordinator

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### ABSTRACT

Quality assurance and enrichment is the continuous process for which Internal Quality Assurance Cell (IQAC) has been constituted in many colleges. The functions of IQAC and the sufficiency of college administrations being interconnected, depend on the degree of transference of power and authority with high-level interest through division of work via the participatory and positive association of every member in the institution. It is expected that the Principal should implement the innovative ideas suggested by IQAC. But, in some cases it may be difficult for the Principal to work on any other's orders though they have come from a independent organized mechanism of IQAC. The coordinator keeps on ahead of you for the orders of the Principal even for conducting the meetings of the IQAC and writing the AQAR. Academic superiority is a result of democratic, unidirectional targeted team work of all the stakeholders together.

**Key Words:** IQAC, Quality Culture, Stakeholders, Innovation ideas, benchmarks.

### Introduction:

In November 1956, The University Grants Commission was established as a statutory body of the Government of India through an Act of Parliament. University Grants Commission is the only grants giving agency in our country. Main two responsibilities of University Grants Commission are providing and co-ordinating finances, and maintaining the standards in institutions of higher education. The university Grants Commission's mandate involves Promoting and coordinating university level education, influencing and maintaining standards of teaching, examination and research in Universities, framing regulations on minimum standards of higher education. In the field of college and university education monitoring is a necessity. UGC disburses available grants to the universities and affiliated colleges and also serves as a link way between the Union and State Government and institutions of higher learning. UGC advises the Central and State Government on the procedure necessary for enhancement of academic standards of universities.

To scrutinize values of the higher educational institutions, it established the National Assessment and Accreditation Council as an autonomous body in September 1994 under the Act Section 12(oc), National Assessment and Accreditation Council is entrusted with the task of performance evaluation, assessment and accreditation of all Universities and affiliated Colleges in the Country. The philosophy of National Assessment and Accreditation Council is inquisitive and enabling rather than corrective or critical, so that all constituents of institutions of higher learning are empowered to maximize their resources, opportunities and capabilities. National Assessment and Accreditation Council has been instilling a force of quality consciousness amongst institutions of higher education aiming for constant upgrading. National Assessment

and Accreditation Council is triggering a quality culture between the various constituents of the higher educational institutions as well as enhancing the awareness of Institutional Quality with all stakeholders. The main outline of National Assessment and Accreditation Council is to Assess and Accreditate Institutions of higher learning with an objective of helping them to work constantly to improve the quality of education.

Assessment is a performance evaluation of an HEI and/or its units and is accomplished through a process based on self-study and peer review using defined criteria. Accreditation refers to the certification given by NAAC which is valid for a period of five years. NAAC accredits UGC 20B & 12B as well as non 20B & 12B HEIs. All stakeholders have to be fully engaged in the endeavour of quality assurance of the HEIs. Therefore, it is essential that higher educational institutions are forced to establish their individual internal mechanisms for maintenance, assurance and enhancement of the quality culture of education imparted by them. The efficacy of external quality assessment would therefore be determined by the effectiveness of such institutional internal quality systems and processes.

### Objective:

1. To understand the role of Internal Quality Assurance Cell in maintaining overall excellence standards in a college.
2. To examine the role of Principal and coordinator of IQAC in quality culture.

**Research Methodology:** The present study is totally based on secondary data. This is collected from journals, books and various websites.

**Internal Quality Assurance Cell (IQAC):** Many institutions have established the Internal Quality Assurance Cell as a post accreditation quality provisions activity. The practice of National Assessment and Accreditation Council





## Self Employment Opportunities in Food Processing Sector

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### Abstract:

Today this movement for sustainable agro base industries development is garnering increasing support and acceptance within mainstream agriculture. Agro based enterprises contribute extremely to the socioeconomic development of Maharashtra. The sector accounts for more than 95% of the industrial units and contributes 45% of the manufacturing output and 40% of the export (Ministry of MSME, 2014). As a result sustainable agriculture address many environmental and social concerns, but it offers innovative and economically viable opportunities for growers, laborers, consumers, policymakers and many others in the entire food system. So consequently, small enterprises play a vital role in creating employment and helping in the industrialization of rural and backward areas.

**Key words:** Agro processing, Employment, Government

### Introduction:

The food-processing sector in India has a significant presence in the country's industrial scene. The sector contributed 12.5% share of manufacturing GDP during 2000-01 at 1993-94 prices and 26.9% of the total employment in manufacturing sector during 2000-01. The estimate of employment in different food processing sub-sectors is given at Table no. 1.1. The share of number of enterprises in food processing sector, as percentage of total number of enterprises in manufacturing sector is 30% during 2000-01. Food Processing constitutes a high share of unorganized sector and also has a high rural share.

### Expansion of food processing sector

1. Creating new employment opportunities in quantitative terms.
2. Improving the quality of employment so that traditional low quality, low income, employment opportunities is gradually replaced by higher income, better quality employment.

### Government support to promote growth of food processing sector

Various measures taken by the government to promote growth in food processing industry and initiate modernization in it during the nineties include

- ❖ No government permission is now required for setting up of rice mills
- ❖ All food processing industries, except beer, potable alcohol and wines and reserved items for SSIs have been exempted from the purview of licensing.
- ❖ Most food processing industries, which were hitherto considered as luxury industries have been, accorded priority industry status.
- ❖ Automatic approval for foreign investment up to 51 per cent has been allowed practically in all sectors of food processing except for those that are reserved for small-scale sector and also for which an industrial license is required.
- ❖ Fiscal relief provided to a large number of processed food items by reducing custom duties on various plants and equipment.
- ❖ Removal of the requirement of specific approvals for labels for every packed food product is an additional incentive.

## DEVELOPMENT OF RURAL ENTREPRENEURSHIP IN INDIA

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### Introduction:

The term entrepreneur is a relatively new term and concept used in economic subject. Because of its increasing relevance in economic subject over the period it has become the buzzword in the economic literature. However it has been defined differently by different writers and thinkers. An entrepreneur is an individual who, rather than working as an employee, founds and runs a small business, assuming all the risks and rewards of the venture. The entrepreneur is commonly seen as an innovator, a source of new ideas, goods, services and business or procedures. Rural entrepreneurs are those who carry out entrepreneurial activities by establishing industrial and business units in the rural sector of the economy. In other words, establishing industrial and business units in the rural areas refers to rural entrepreneurship. In simple words, rural entrepreneurship implies entrepreneurship emerging in rural areas. Or, say, rural entrepreneurship implies rural industrialization. Thus, we can say, entrepreneurship precedes industrialization.

### Objectives

1. To study the concept of rural development.
2. To study the development of rural entrepreneurship in India.
3. To study the need for rural entrepreneurship.
4. Methodology: The present study is based on secondary data. The data is collected from books, journals and websites.
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**Research Methodology:** The present study is based on secondary data. This is collected from books, journals and websites.

### Rural Development

The term is used to mean 'organizing things' so as to change existing conditions in favour of a better state. There may be many variants of development drawing their nomenclature from the sphere of activity where the change is managed or the type of change or the 'method' how the desired change is attained. For several decades the term was used, solely, for economic change, inclusive of the conditions which affect betterment. The concept was later extended to its wider meaning to embrace 'changes' of political, social, cultural, technological, economic and also the psychological frame of society. In its current meaning 'development' is used to express animated change for reaping utmost human potential. Technically, development is the name of a 'Policy' and its 'Consequent programmes', designed to bring about a desired change' in social, economic, political, or technological spheres of life. It is concerned with the promotion of human capacities - Physical or mental, to attain the cherished social goals. Development is potential-related, and it can be attained to the extent of the existing development potential, which is measured by the 5 un-exploited resources, talents, margin of sophistication and the 'will power' which implements development policy. Development is the conditioning of progress, and when efforts are laid towards the use of Growth potentials in rural economy and Society, it is rural development.



### Religious Tourist Centre Oriented Rural Settlement Pattern

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S. R. T. M. U. Nanded

\*\* Dr. A. K. Hange (Research Guide)  
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#### Abstract:

Tourism is one of the new emerging activities not only in India's well developed destinations but also some districts and tahsils completely depend upon tourism. It is possible only because of reality of Indian physiographic, Culture and Historical factors. Navapur tahsil is one of them this tahsil well known for the large Uhal Dam is near the city of Navapur.

Amongst the temples in the areas are the Rokadia Hanumaan at Wankipada Bridge, Dutt mandir and Rang Avdhoot Paduka Mandir near the Juni post office, Ramji Mandir in Sardar Chawk, Aashapuri Mandir in Shroff Falia, Sai Baba temple in the Prabhakar colony and Shabri Mata Mandir, located in Subir village. Mission Tekdi and Tulsyo donger are place of interest for many.

Therefore present challenge is made here to study distribution and spacing of new rising tourism centers. Calculation is complete by using primary as well as secondary data. Collected data will be analyzed by using nearest neighbor technique of Evans and Clark. As per this method the all rural tourist centers spacing clustered in pattern and has vast scope for development.

**Keywords:** Tourism, Nearest Neighbor Technique, Demogra mata yatra. Etc.

#### Introduction:

Today, tourism is known as the fast developing activity of the world. The world accepted the significance of tourism in the economy of that place, so day by day various tourist places are immersing all the way through the world. To preserve and protect the tourist centers are necessary for the tourism development. In Navapur tahsil there are various rural tourist places are situated this all places have its own historical, cultural, geographical as well as religious importance. These all destination are not uniformly distributed all over the tahsil. And to study of these tourist destinations and its circulation is very necessary for the future planning.

Surrounded by the temples in the areas are the Rokadia Hanumaan at Wankipada Bridge, Dutt mandir and Rang Avdhoot Paduka Mandir near the Juni post office, Ramji Mandir in Sardar Chawk, Aashapuri Mandir in Shroff Falia, Sai Baba temple in the Prabhakar colony and Shabri Mata Mandir, located in Subir village. Mission tekdi and Tulsyo donger are place of interest for many.

Nandurbar district is rich socio-cultural establishment and religious historical background. Also it is bounded by religious centers; such as Prakash, one of the famous religious places, also known as Dakshin Kashi, temples of God Shree Ganesh (Heramb), Shri Datta temple, Umaj Mata temple, Ashwathama and Shaninanda, Dandapaneshwar Ganesh Mandir, Devi Dev Mogra Mata (Yahamogi mata) is mother goddess of Acivajis community. Toranmal, Gaumakha, Aakuvai mata. The weekly bazaar is called Shanivari (Navapuryo) i.e. held on each Saturday.

#### Objectives:

- To study the sorting and division of rural tourist centers.
- To study the spacing of rural tourist Centers.
- To introduce the new rising tourist destination.

#### Methodology:

This study is based on primary as well as secondary data sources. Primary data regarding the distribution and classification of tourist spot obtained through participatory field visit while secondary data is collected by various sources like book, journals, maps, news papers etc. For the analysis of data nearest neighbor technique has been used.

#### Study Region:

Navapur tahsil is the south most tahsil of the Nandurbar district. Navapur has its history of It was earlier on the Mughal trade route going to Agra and a few ruins of the Serai and Caravan sentry forts still survive. This tahsil bounded from south by Rangavali River and Dang district Gujarat state to the north Uchal tahsil, the east sakri, to the west songadh. Tahsil bounds this tahsil. It lies between the 21 10 12North and 73 46 48East longitudes. This tahsil covers area about 976.68sq.km, some of





## Irrigation System in Nandurbar District

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(18)

## Introduction

Water is the most important factors for the growth of crops. Irrigation is the application of controlled amounts of water to plants at needed intervals. Irrigation helps grow agricultural crops. If water is available in adequate quantities crops can be grown successfully water supply is available an adequate quantity than the increases security of life and yields of crops but also compare states for uncertainty and induct of normal rainfall.

Irrigation is an artificial application of water to land by human effort to assist the growth of crops. Irrigation has assumed an increasing importance of india agricultural in the context of few technology. Where high yielding varieties and multiple cropping is being practical.

Irrigation can do more than just support farming activities the efficient use of water permits the applications of modern agricultural altogether, use in right combination can lead to very successful agriculture as demonstrated by the success achieved by the used of high yielding varieties, with helps of irrigation farmers can change cropping pattern, increase per hectares yield maximum agriculture irrigation can bring prosperity in socio- economic change that state motion the productive forces in the sectors of agriculture

## Objectives:

- To study irrigation sources in the study region.
- To study irrigated area under irrigation projects in the study region.

## Methodology:

The present study is based on Secondary data which is collected from various department like department of irrigation of Jilha Parishad, Dhumi Abhilekh Office, Nandurbar, Socio-economic abstract and district census handbook of Nandurbar district.

## Study Region:

Akrani Tehsil lies in the North Western part of Nandurbar district. Akrani Tehsil extends between 21°49'27" to 21° 82' North latitude and 74°13'01" to 74°21' East longitude. The Satpura Mountain and piedmont plain stretches from east to west, Northern part of the study area is occupied by Satpura Mountain and central part of the area is occupied by piedmont plain. Satpura hills, the Narmada Valley Region.

## Location Map: Nandurbar District



## Result and discussion:

Table No. 1: Irrigation Sources in Nandurbar District

Sr. No.	Tahsil	Medium project	Small project	Open wells	Tub/bore lift irrigation	Kolhapuri bandhare
1	Akkalkuva	01	10	1240		
2	AKRANI	-	12	225	114	10
3	Taloda	-	01	2610	142	12
4	Shahade	03	04	4505	25	-
5	Nandurbar	01	08	12675	29	04
					07	07





## Synthesis of Novel Acidic Ionic Liquid [BBSA-DBU][HSO<sub>4</sub>] and Its Catalytic Activities for Synthesis of Pyrazolopyranopyrimidine Derivatives

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A novel Brønsted acid ionic liquid 1,8-bis(butanesulphonic acid)diazabicyclo[5.4.0]undec-7-enium hydrogen sulphate [BBSA-DBU][HSO<sub>4</sub>] has been synthesized from 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU). The synthesized ionic liquid was characterized by <sup>1</sup>H and <sup>13</sup>C NMR spectroscopic techniques. The room-temperature derived ionic liquid is highly acidic due to presence of two -SO<sub>3</sub>H groups and two -HSO<sub>4</sub><sup>-</sup> anions. The ionic liquid [BBSA-DBU][HSO<sub>4</sub>] showed high catalytic activity (5 mol %) for the synthesis pyrazolopyranopyrimidine derivatives with good to excellent yields in short reaction time at 60 °C under solvent-free conditions. Moreover, ionic liquid could be easily recovered and reused at least five times without change in its catalytic activity.

**Keywords:** Brønsted acid, SO<sub>3</sub>-IL, Bifunctionalized ionic liquid, Pyrazolopyranopyrimidine, Reusable catalyst.

### INTRODUCTION

Ionic liquids (ILs), being familiar as environmentally benign media and widely used as solvent as well as catalysts for many reactions [1-6]. The great number of functional ionic liquids has been designed for different purposes [7,8]. Recently development of alternative synthetic tools for organic synthesis using ionic liquids have attracted significant attention, due to their distinctive properties like low vapour pressure, high thermal stability, excellent solvation ability, various liquid temperature range, better chemical stability, recyclability and solubility [9,10]. Especially, they shown efficient catalytic activities for many organic reactions like Diels-Alder [11], Aldol [12], Knoevenagel condensation [13], Michael addition [14], oxidation [15], etc.

Pyrazolopyranopyrimidines are a nitrogen and oxygen containing heterocyclic compounds and are useful in organic synthesis and medicinal chemistry because pyrazolopyranopyrimidines contain both pyranopyrimidine and pyranopyrazole as biological active nucleus [16]. Pyranopyrazoles derivatives have occupied a unique position in medicinal chemistry because of their biological and pharmacological activities [17], analgesic, anti-inflammatory activity and act as vasodilators as well as hypotensive and hypoglycemic agents [18], antidepressant [19] and antitumor agents [20]. In addition, fused heterocycles systems like pyrazolopyrimidines, pyranopyrazoles and pyrazolopyrimidines present interesting biological properties such as anticancer [21], cytotoxic [22] and antimicrobial activities [23].

However, these methods show varying degrees of success as well as limitations such as lower yields, use of expensive catalysts, prolonged reaction times, use of toxic organic solvents, and harsh reaction conditions. Therefore, we developed a new protocol for the synthesis of pyrazolopyranopyrimidine using -SO<sub>3</sub>H bifunctionalized Brønsted acidic ionic liquids. Herein, we wish to report a synthesis of series of novel -SO<sub>3</sub>H bifunctionalized Brønsted acidic ionic liquids [BBSA-DBU][X] in aqueous solution and their application in organic synthesis. The Brønsted acidity strengths were determined by Hammett acidity function method performed on UV/visible spectra. This prepared ionic liquid used as catalyst for the pyrazolopyranopyrimidine synthesis in high yields (Scheme-1).

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Research



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# Synergistic effect of natural chickpea leaf exudates acids in heterocyclization: a greener protocol for benzopyran synthesis

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Without using any toxic or hazardous reagent, ligand, acid, transition metal catalyst, additives/promoters and organic solvent, green Knoevenagel condensation and tandem Knoevenagel-Michael reactions have been successfully carried out by using *chickpea leaf exudates* as a naturally sourced Brønsted acid type bio-catalyst. The reaction proceeds in neat *chickpea leaf exudates* at room temperature in aqueous conditions in very short reaction times, and therefore, it is an evergreen and environmentally sound alternative to the existing protocols for benzopyran synthesis. In comparison to the conventional methods, this synthetic pathway complies with several key requirements of green chemistry principles such as the utilization of biodegradable catalyst obtained from renewable feedstock, auxiliary aqueous conditions, along with waste prevention. The same protocol was also extended to the synthesis of 2*H*-xanthone-1,8-diones by condensation of aromatic aldehydes with dimedone achieving excellent yields. Thus, the reported protocol offers an attractive option because of its ecological safety, environmental acceptance, sustainability, low-cost straightforward work-up procedure and with excellent values of green chemistry metrics as compared with other reported methods.

## 1. Introduction

While considering the increasing environmental pollution and its intensive impact on living systems, developing chemical processes using more environmentally acceptable chemicals, catalysts, solvents, atom-efficient methods and energy-efficient

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**Keywords:**

benzopyran, *Cicer arietinum*, chickpea  
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# Synergistic effect of natural chickpea leaf exudates acids in heterocyclization: a greener protocol for benzopyran synthesis

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Without using any toxic or hazardous reagent, ligand, acid, transition metal catalyst, additives/promoters and organic solvent, green Knoevenagel condensation and tandem Knoevenagel-Michael reactions have been successfully carried out by using chickpea leaf exudates as a naturally sourced Brønsted acid type bio-catalyst. The reaction proceeds in neat chickpea leaf exudates at room temperature in aqueous conditions in very short reaction times, and therefore, it is an overgreen and environmentally sound alternative to the existing protocols for benzopyran synthesis. In comparison to the conventional methods, this synthetic pathway complies with several key requirements of green chemistry principles such as the utilization of biodegradable catalyst obtained from renewable feedstock, auxiliary aqueous conditions, along with waste prevention. The same protocol was also extended to the synthesis of 2H-xanthone-1,8-diones by condensation of aromatic aldehydes with dimedone achieving excellent yields. Thus, the reported protocol offers an attractive option because of its ecological safety, environmental acceptance, sustainability, low-cost straightforward work-up procedure and with excellent values of green chemistry metrics as compared with other reported methods.

## 1. Introduction

While considering the increasing environmental pollution and its intensive impact on living systems, developing chemical processes using more environmentally acceptable chemicals, catalysts, solvents, atom-efficient methods and energy-efficient





## Review

## Functionalized nitrogen ligands (C–N) for palladium catalyzed cross-coupling reactions (part II)

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## ABSTRACT

In recent years, considerable effort has been focused in Pd catalyzed cross-coupling reactions, especially the use of less reactive and economically viable substrates like aryl chlorides. Unfortunately, Pd complexes containing the ligands having only N as a donor atom has some limitations, as it couples, mostly aryl iodides and bromides with different nucleophiles, and shows less activity towards aryl chlorides. This restriction can overwhelm by the use of Pd complexes containing N in combination with the C as a donor atom such as palladacycles, pinners, PEPPSI and carbene ligands. The advantages of these ligands include high activity with enhanced selectivity, less toxicity, moisture, air as well as thermal stability. Most importantly, such complexes have broad applications in catalysis under ambient conditions. This part of compressive review highlights the results of the highly active C–N based Pd complexes and their applications in cross-coupling reactions. In the next part, we will cover all ligands and complexes containing N in combination with P, O and S as a donor atoms (Pd catalysts based on C–P, C–O and C–S ligands). Though, the number of C–N based Pd complexes containing Ferrocene and Buchwald ligands were reported for Pd catalyzed cross-coupling reaction, these complexes will be covered in the next part of the article.

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# Synthesis and characterization of new quaternary ammonium surfactant [C<sub>18</sub>-Dabco][Br] and its catalytic application in the synthesis of spirocarbocycles under ultrasonic condition

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## Abstract

A novel DABCO-based cationic surfactant [C<sub>18</sub>-Dabco][Br] has been easily synthesized by the reaction of DABCO and octadecyl bromide in acetonitrile at room temperature in excellent yield. The synthesized surfactant was fully characterized by various techniques like FT-IR, <sup>1</sup>H NMR, <sup>13</sup>C NMR, LC-MS and TGA-DTA analysis. Furthermore, the critical micelle concentration of the surfactant was determined by the conductivity measurement method. The activity of the [C<sub>18</sub>-Dabco][Br] has been demonstrated for the one-pot synthesis of spirocarbocycles under ultrasonic conditions in water. The presence of the long alkyl chain acts as the hydrophobic part while the free tertiary nitrogen site in the surfactant acts as a base and enhances the overall catalytic activity.

**Keywords** DABCO-based cationic surfactants · [C<sub>18</sub>-Dabco][Br] · Spirocarbocycles · Water medium · Ultrasound

## Introduction

The development of novel synthetic routes, especially cleaner ones that satisfy increasingly stringent environmental constraints, are in great demand by the pharmaceutical and chemical industries [1]. Multi-component reactions (MCRs) are one

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## ATRAZINE MEDIATED HEPATHOLOGICAL DISABILITIES IN FRESH WATER FISH *AMEIURUS MELAS*

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### ABSTRACT:

In present investigation the fish *Ameiurus melas* was exposed to the acute(96hours) toxicity of Atrazine. The LC50 was found to be 120µg/L. The control group was run simultaneously. After 96hrs the fish were dissected and the liver tissue was taken out and processed for routine HE technique. It was found that Atrazine is hepatotoxic to *Ameiurus melas*. In the liver of control fish, no pathological alteration and no vacuolation of the hepatic cell was recorded. The liver shows vacuolar degeneration of hepatocytes and disintegration of the sinusoids and ruptured veins are also reported.

**Keywords:** *Ameiurus melas*, Atrazine, Liver.

### INTRODUCTION:

In the agricultural fields the use of herbicides to protect the crops from the attack of unwanted plants has been considered as an integral part of modern agricultural practice in the World. But indiscriminate use of this is dangerous to aquatic ecosystems as well as fish farm which are close to agricultural field. They ultimately reach to aquatic bodies and cause harmful effect on non target aquatic animals such as fishes. Herbicides are most commonly used pesticides in agriculture. Thus it causes adverse impact on aquatic biota. A high concentration of herbicides reduces the survival, growth and reproduction rate of fishes and produces many adverse effects (Rahman et.al2002).

Atrazine is a widely used herbicide in many countries for controlling grassy weeds in agricultural crop. Prolonged use of Atrazine and its persistence involves the risk of its retention in crop and soil. This compound also passes from surface to ground water (Mundiamet.al, 2011). Atrazine (2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine) is a herbicide first approved for use in US in 1958, where it is used primarily in the field of corn, sorghum and sugarcane(Solomon et.al; 1996). Atrazine inhibit electron transport in photosynthesis

II which result in disruption of photosynthesis and in turn leads to death from starvation in broad leaf plant (Gidding et.al2004).

Several recent laboratory studies have shown that environmentally realistic concentration of Atrazine have significant toxic effect on fish. For example - low concentration of Atrazine (1µg/l) altered olfactory mediated endocrine function in male Atlantic Salmon (Moore and Lower, 2001). At 100µg/l Atrazine altered the Na, K and ATP activity in common carp held in fresh water, indicating osmoregulatory disturbances (Hanke et.al, 1983). In recent years considerable histopathological studies have been conducted on fish exposed to sub lethal concentration of different pesticides and herbicides (Alazemi B.M., Lewis J.W. and Andrews.E.B., 1996). As a result the tissue changes are the functional responses of organisms which provide information on the nature of toxicant. Fishes are the most useful bio-indicator of environmental quality because of their close contact with water (De flora et.al, 1993). Thus toxicity studies are essential for determining sensitivity of animals to toxicants and also useful for evaluating the degree of damage to target organs and the consequent physiological, biochemical and



RESEARCH ARTICLE

## Carbon Sequestration by Standing Trees at the Amrai Park of Sangli City (Maharashtra) - India

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### ABSTRACT

Plants are known to absorb the atmospheric carbon by photosynthesis. This absorbed carbon is stored in various organic forms and helps to produce the biomass. The absorption of the atmospheric carbon is depend on the structure and life form of the plants. Trees dominate this process. Greater and taller is the size of the tree more is the amount of carbon fixed. Hence trees are the major plant forms to absorb maximum atmospheric carbon and biomass production. Thus, the present investigation was carried out to calculate the carbon sequestration of 22 standing tree species in Amrai Park of Sangli city. The biomass and total organic carbon of standing trees is estimated by the non-destructive method. The population of *Swartzia maderaspatana* (C) Jacq is main in the campus and it sequesters the 77500.25 lbs carbon/year.

**Keywords:** Carbon sequestration, Amrai Park Sangli, Standing trees





## Effect of Biofertilizers on seed germination of Maize (*Zea mays* L.) varieties Eco-92 and African tall

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### Abstract :

An attempt has been made of study the effect of biofertilizers (Azotobacter and Phosphate Solubilizing Bacteria) on the seed germination of Maize (*Zea mays* L.) varieties Eco-92 and African tall. The biofertilizers were applied in concentration of [100gm each packet per 10Kg of seeds]. Seed and Filter paper treatments were used in the experiments, completed with autoclaves biofertilizers treatment. The seed and filter paper treatment of biofertilizers were applied to seeds of Eco-92 and African tall. It is revealed from the experiment that, there is considerable enhancement of seed germination and also in length of root and shoot of Eco-92 as compared to control. These biofertilizers treatments are found to be stimulate the seed germination and growth performance of root and shoot.

**Keywords**– Biofertilizers, Maize seed, filter paper, germination

### Introduction:

Maize originated from Mexico .Maize is one of the three most important cereal crops in the world. Every part of the maize plant has economic value and cob can all be used to produce a large variety of food and non-food production (IITA 2006).It is cultivated on over 13% of world's croplands (Leff *et al.*,2004). Seed germination is a basic growing skill that involves causing a seed to sprout. It is the process of reactivation of metabolic machinery of the seed resulting in the emergence of radical and plumule .Various sources of biofertilizer include nitrogen fixers, Phosphate solubilizing bacteria, plant growth promoting rhizobacteria (shekh,2006) Application of biofertilizer became a great necessity to get a yield of high quality and to avoid the environmental pollution(Shevananda,2008).

Though nitrogen and phosphorous are essential nutrient for plant growth and development in corn, biofertilizers are able to fix atmospheric nitrogen in the available form of plants (Chen, J.2006). Positive response to maize to nitrogen fertilizer has been reported by (Aflakpui *et al.*). Biofertilizer contain micro-organism, that increases or promotes the important nutrients crucial for overall production the soil (Karthick *et al* 2014) .In maize application nitrogen and phosphate biofertilizer increased yield components of maize (Beyranvanv and *et al* 2013) .It has been revealed that ,the effect of nitrogen fixation induced by nitrogen fixers is not only significant for legumes, but also non-legumes (Doebereiner and Pedrosa, 1987).One of the ways to improve germination is 'to use seed priming'. A major aim of seed priming is to partially hydrate the seed to a point where germination process starts but does not end. Several ways to seed priming exists, such as hydro priming, solid matrix priming and biopriming (Ashraf, M. *et al* 2005). Various priming treatments have been developed to increase the seed and synchrony of seed germination.

### Material and Methods –

In present study the healthy seeds of Maize (*Zea mays* L.) variety Eco-92 and African tall, procured from Eco Agriseeds pvt.Ltd.Hyderabad and Biofertilizers Azotobacter and phosphate solubilizing bacteria respectively from Mahatma Phule krishi vidyapeeth, Rahuri. In these experiments direct seed treatment method was used. Germination was tested in filter paper. Filter

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**An Account of Desmid Diversity from Kolhapur Distric(Maharashtra),  
India.**

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**ABSTRACT:**

Desmids are the most beautiful conjugal members of Chlorophyceae as they represent the unicellular conjugales among the green algae. Desmids have played an important role in the phytoplankton biodiversity of major and minor water bodies. Present survey is the outcome of thorough screening of water bodies from Kolhapur district. During the systematic investigations on the desmid biodiversity of Kolhapur district, Maharashtra, authors recorded 86 taxa belonging to 13 genera viz., *Actinotaenium* (Nageli) Teiling, *Clasterium* Nitzsch ex Ralfs, *Cosmarium* Ralfs, *Desmidium* C. Agardh, *Euastrum* C.G. Ehrenberg ex Ralfs, *Micrasterias* C. Agardh, *Netrium* (Nageli) Itzigsohn & Rothe, *Pleurotaenium* Nageli, *Spondylosium* Brebisson ex Kutzing, *Staurastrum* (Meyen) Ralfs, *Staurodesmus*, *Triploceras* J.W. Bailey, *Xanthidium* C.G. Ehrenberg ex Ralfs. The survey revealed the dominance of *Cosmarium* in the study area.

**KEYWORDS:** Desmids, Kolhapur, Conjugales, diversity.

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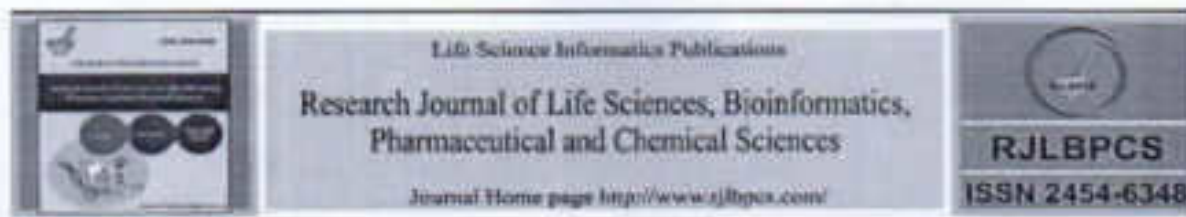
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**Original Research Article****OCCURENCE OF MYCOFLORA ON ONION (*ALLIUM CEPA* L.) BULBS****P.M. Chougule and Y.S. Andoji**

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**Abstract**

For present investigation onion (*Allium cepa* L.) red and white varieties were selected to study occurrence of mycoflora in fields and storage conditions, because onion bulbs are highly damaged due to number of fungal pathogens in field as well as in storage condition. For isolation of fungi dilution plate and humid chamber methods were applied. Total twelve fungal species were isolated from onion bulbs. *Botrytis cinerea*, *Rhizoctonia solani*, *Cladosporium alli*, *Botrytis allii*, *Sclerotium rolfsii*, *Colletotrichum circinans* and *Urocystis cepulae* showed high frequency occurrence on the bulbs from fields where as fungi like *Aspergillus niger*, *Aspergillus flavus*, *Curvularia lunata*, *Fusarium oxysporum* and *Rhizopus stolonifer* were showed high frequency occurrence on bulbs from storage condition. *Colletotrichum circinans* and *Sclerotium rolfsii* were not found on red variety of onion.

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**Introduction**

Onion (*Allium cepa* L.) is very important bulb crop cultivated in irrigated conditions all over India. The crop is affected by various fungal pathogens causes yield loss both in field as well as storage conditions. Due to rough handling, wrong agricultural practices and poor storage bulbs are infected by number of fungal pathogens. The present investigation deals with identification of mycoflora associated with onion bulbs from field as well as storage.





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Original Article

## Effect of passage on the development of Benomyl resistance in *Fusarium udum* (Butler) causing wilt in Pigeon pea

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### Abstract

By culturing the sensitive *Fusarium udum* (Butler) isolate on fungicide Benomyl, continuously for eight consecutive passages significantly showed increase in resistance. Whereas use of Benomyl altering fungicide Blitox and Kocide reduced the resistance while fungicides Kavach and Roko helped in complete inhibition of the pathogen. When fungicides were used in mixture there was complete inhibition of radial mycelial growth, hence effect of all fungicides together will prove to be promising for inducing resistance in Pigeon pea.

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**Key words:** Pigeon pea wilt, *Fusarium udum*, Benomyl, Fungicides.

### 1. Introduction

Pigeon pea (*Cajanus cajan* L.) Millsp. a member belonging to family Fabaceae is one of the most essential leguminous food crop cultivated in tropical and subtropical countries like, Madagascar, India, Myanmar, Philippines, Australia, India, Myanmar, Malawi, Tanzania and Kenya are the top 5 producers of this crop. Amongst them India holds a major contribution of 90% of total world production. India engages an area of 3.85 million hectare with an annual production of 2.68 million tonnes (Anonymous, 2002). The plant helps in re-establishing soil productivity by atmospheric nitrogen fixation (Reddy et al., 1990). Pigeon pea is a commercially important nutraceutical crop as it contains high level of amino acids like methionine, lysine tryptophan, vitamin B and proteins. The content of protein in seeds is almost similar to Soybean (*Glycine max*) which ranges from 21-28 % (Phatak et al., 1993). In spite of this, *Cajanus cajan* is affected by various serious diseases and leads to heavy destruction. Pigeon pea is bombarded by numerous bacteria, viruses, fungi but amongst them just a few of them cause a negative impact on the plant. The wilt caused by *Fusarium udum*, is the most destructive disease (Kannaiyan et al., 1984). Genus *Fusarium* account to the most significant group of ascomycetous fungi, whose members are liable for enormous economic loss due to depletion in yield, quality and quantity of pea (Nelson et al., 1983; Leslie and Summerell, 2006). Many members of *Fusarium* produces type A and B trichothecene mycotoxins that cause toxicosis

in humans and animals (Mali et al., 2015). Several *Fusarium* species cause catastrophic diseases on cereal grains (White, 1980; Parry et al., 1995; Nyvall et al., 1999; Goswami and Kistler, 2004), some are responsible for vascular wilts or root rots on many important vegetable, ornamental and field crops (Kraft et al., 1981; Linderman, 1981) while cankers are produced by others on soft and hardwood trees (Bloomberg, 1981; Dwinell et al., 1981, 2001; Wingfield et al., 2008).

### 2. Material and Methods

#### Collection of material

Fifteen isolates of infected pigeon pea plants were collected from Kolhapur, Sangli districts of Maharashtra and Dharwad, Vijapura (Bijapur) and, Belgavi (Belgaum) districts of Karnataka. The infected plant materials were brought to the laboratory and were cut into small pieces (0.5-1.0cm length) along the symptomatic region of stem, root, leaves and subsequently surface sterilized by sequential dipping in 70% ethanol for 30 s and in 0.1% HgCl<sub>2</sub> for 1 min., rinsed in sterilized distilled water, and then cultured on Czapek Dox agar (CDAY) Potato dextrose agar (PDA) amended with 25 mg/L of streptomycin sulphate (Patil et al. 2012; Jadhav et al., 2010). Plates were incubated at 25± 2°C for 6 days. A *Fusarium* sp. was consistently isolated from infected tissues, and was purified by single-spore culture (Mali et al., 2015). The plates were observed for fungal outgrowth through the symptomatic parts of plants. After 5-6 days of culture, white cottony fungal mass was observed. On the basis of visual





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## Full Length Research Article

### ISOLATION AND IDENTIFICATION OF *PENICILLIUM* SPP., FROM KRISHNA RIVER, DISTRICT- SANGLI

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*Penicillium* Spp.

#### ABSTRACT

The mycoflora from the bed of river Krishna at Sangli was studied at three different locations viz., Right Bank, Center and Left Bank from January 2014 to December 2015. Twenty six soil samples were collected from surface, 10, 15, and 25 cm depth. The mycoflora were isolated by using soil dilution and soil plate method. Out of the 75 strains of fungi isolated 10 species of *Penicillium* viz., *Penicillium funiculatum* (32.66%) and *P. renitectum* (03.88%), *P. expansum* (2.33%), *P. chrysogenum* (16.33%), *P. lilacinum* (09.63%), *P. notatum* (15.66%), *P. roseum* (1.62%), *P. tarshon* (23.67%), *P. citrinum* (09.66%) and *P. rubrum* (2.67%), were identified. Greater number of species were isolated on soil plate technique as compared to dilution plate technique. Higher number of species were obtained from right bank as compared to left bank and very low frequency were obtained from centre.

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#### INTRODUCTION

Soil is a very complex environment in which the biological activity is mostly influenced by microorganisms. There are number of beneficial effects of soil microbes which includes nitrogen fixation and organic matter decomposition to breakdown of metabolic by-products and agrochemical, enhancing the bioavailability of nitrates, sulphates, phosphates and essential metals (Bridge & Spooner, 2001). Mycoflora is an important constituent of the soil microbiota typically constituting more of the soil biomass as compared to bacteria, depending upon the soil depth and nutrient conditions (Ainsworth & Bisby, 1995). The role of fungi in the soil is much complex one and fundamental to the soil ecosystem. They perform ecological services that highly impact on the quality of human welfare and give enormous potential for providing economic benefits, e.g., the isolation and identification of the soil fungus *Penicillium* led to a large pharmaceutical industry of antibiotics (Diuna, 1994). It is recorded that there are 1.5 million fungal species on earth and out of which only about 70,000 have been described up to now (Hawksworth and Rossman, 1997). The present investigation is an attempt to study the variability of mycoflora from different depths at three locations of river Krishna at Sangli.

Apparently no report is available for fungi recorded from this site. This paper concentrates only on species of *Penicillium*.

**Description of the research site:** The study area is located at longitude 58.°21'E, latitude 21.°21'N. Air temperature ranges between 11°C to 44.7°C. There are significant variations in rainfall in the basin. The rainy months are from June to September end and the driest months are November to March end, during which the average monthly rainfall rarely exceeds 25 mm. The soil texture ranges from coarse to fine which is mostly favourable for irrigated agriculture. The pH value normally ranges from 7.5 to 8.30.

#### MATERIALS AND METHODS

The analysis of soil samples done in this study were collected from three different sites viz Left Bank, Right Bank and Center from the bed of river Krishna. Vertical samples were collected from surface, 10, 15 and 25cm depths with presterilized screw-cap vials. Vials were dipped perpendicularly to the vertical surface of the water. Three samples were collected from each depth. The samples were kept in pre-sterilized polyethylene bags surrounded by ice crystals until they brought to the laboratory. The samples were analysed by using the soil dilution plate (Waksman, 1922) and soil plate method (Warcup, 1950).

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## Nonparametric Moving Average Control Charts Using Sign and Signed-Rank Statistics

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**Abstract-** In this paper, we provide two nonparametric moving average control charts based on well-known nonparametric statistics namely sign and signed-rank statistic. These control charts are useful in detecting shifts in the median of the symmetric process distributions. Average run length of these control charts has been studied for various symmetric process distributions. These include the normal, double exponential and Cauchy distributions. Performance of the proposed nonparametric moving average control chart based on the sign statistic is compared with the nonparametric sign chart and the Shewhart X-bar chart. Also, the performance of the proposed nonparametric control chart based on signed-rank statistic is compared with the Shewhart X-bar chart and the 2-of-2 control chart based on the signed-rank statistic. The study reveals that the proposed nonparametric moving average control chart based on sign statistic perform significantly better than the nonparametric sign chart and Shewhart X-bar chart. Also, the performance of the proposed nonparametric moving average control chart based on the signed-rank statistic perform significantly better than the Shewhart X-bar chart and the 2-of-2 chart based on the signed-rank statistics. The gain in the performance is substantial for heavy-tail distributions as compared to light-tail distribution. Robustness study against contamination by outliers for both the proposed charts show satisfactory performance. These charts can be used in practice, since they are simple to use and do not need any distributional assumptions, except symmetry.

**Keywords-** Nonparametric, Sign Statistic, Sign-Rank Statistic, Average Run Length.

### 1. INTRODUCTION

Control charts are useful tools for monitoring/controlling a manufacturing process. Nonparametric control charts are becoming important tools in the field of process control since their application does not require the assumption of any specific probability distribution for the underlying process. Nonparametric control charts are used for detecting the changes in the process median (or mean) or changes in the process variability. The nonparametric control charts are used for monitoring the process median (or mean). These nonparametric control charts are based on the signs computed within samples and used in place of sample means in the Shewhart chart. The chart is labeled to be the nonparametric chart if in-control average run length (ARL) does not depend on the underlying process distribution. In case of charts based on signs, the ARL will be the same for all distributions for which median equal to

the target value. In nonparametric control charts, the assumption of normality is not necessary for calculating the control limits. The nonparametric control charts are to be less impacted by outliers. Some of these are based on sign and/or signed-rank statistics by assuming a known in-control target value for process location.

In the literature review, Abid et al. presented an efficient nonparametric EWMA Wilcoxon signed-rank chart for monitoring location [1]. Amin and Searcy proposed a nonparametric EWMA control chart using the Wilcoxon signed-rank statistic [2]. Amin et al. proposed the control charts based on sign test statistic to monitor the process location and variability [3]. Bakir developed a distribution-free Shewhart control chart for monitoring process center based on the signed-ranks of grouped observations [4]. Bakir proposed the distribution-free quality control charts based on signed-rank-like statistics [5]. Bakir and Reynolds developed a nonparametric cumulative sum control chart



## A Nonparametric Control Chart for Process Variability Based on Quantiles

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### ABSTRACT

Most of the control charts are based on assumption of normality. Control charts for non-normal process distributions have also been reported in literature. In absence of any knowledge about the process distribution, nonparametric chart is a good alternative. In the recent past number of nonparametric control charts have been studied. In the present work we propose a control chart for monitoring process variability, which is based on in-control quantiles. The chart is motivated from a nonparametric control chart based on in-control quantiles due to Arvin et al. (1995). The proposed chart has been studied for its performance for various process distributions to monitor change in variability and has been compared with the existing nonparametric and parametric charts. It has attractive out-of-control Average Run Length performance and is very simple to use. We illustrate the chart through an example and recommend use of this chart to monitor process variability. Generalization of the chart will also be discussed in view to further improve its detection ability.

**Key-words:** Nonparametric, control chart, quantiles, process variability and average run length.

**Mathematical Subject Classification:** 62G06, 62P30

### 1. INTRODUCTION

In the course of process monitoring it is required to monitor variation in the process, in addition to monitor process location. It is likely that the location of the underlying process is not changed, but there is an increase in the process spread. In such situation quality characteristic will suffer and process output will have larger number of defectives. Thus quality of the production process will be hampered. In other words, the process capability will be decreased. Therefore it is required to monitor process spread over the time. In practice control charts based on sample range or sample variance are used to monitor process spread. These charts are based on some distributional assumption. The effects of non-normality are more severe for control charts for variability than in case of control charts for location. One of the limitations of the existing parametric control chart to monitor process variation is that these charts require estimating process standard deviation. An alternative to the parametric chart is a



## Analysis of Herbal Product: A Case study of Patanjali Product

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### ABSTRACT

A well-known yoga guru Baba Ramdev started an association Patanjali Ayurved in 2007. The main aim of the company is to bring awareness among Indian people towards swadeshi products. Also the profits earn by the company will be either plough back or profits will be used for social welfare. The firm, to increase its sales, also provides its products at discount. Patanjali is also said that it will be very beneficial for consumer to shift in their preferences towards herbal and Ayurveda products which are deemed to be healthy and also closer to nature. The Patanjali Products have rightly been placed at advantage by the very concept of Marketing through Spirituality. Considering the popularity of these products, in the present article researcher has analyzed the consumers those who are using these products by using different statistical tools. For this study a sample survey was conducted and information is collected from 200 respondents residing in Sangli City. The conclusions are drawn by using the statistical tests based on Normal and chi-square distribution.

**Key Words:** Patanjali, Product, Consumer, Analysis.

### 1. Introduction:

We know, India is a hub of herbal. In ancient time the people was using only herbal in medicine and other daily use products. Herbal products are medicines and are used as supplement to improve health and well being, and used for other therapeutic purposes. Herbal products are available in the form of tablet, capsule, powder, extract, tea and so on. Herbal medicines are considered safe as it is natural, but in fact it can cause serious adverse effects and dealings with other drugs and supplements. Now-a-days, we have too many products made by a chemical which affects the health. Herbal is a natural product which is made by plants and which doesn't have any side effects. Basically Word Ayurveda has been formed by "ayus" means life and "Veda" means knowledge. So we can say that Ayurveda is about to know more about life.

It is fact that, world is turning towards the herbal products. So, in the present paper one of the herbal, Patanjali products, are analysed and studied. The aim of the present study is to know the factors affecting consumer behavior and also to know about the satisfaction level of consumers regarding Patanjali products.

Patanjali Ayurved was formed in January, 2006 as a private limited company by yoga guru Baba Ramdev and his partner Sri Acharya Balkrishnaji. In June, 2007, it was converted to a Public Ltd. Company. It is registered under the Companies Act, 1956 and has its registered office in Bijwasan, New Delhi

and three other offices in Haridwar. The company was started with the vision of uplifting the life of Indian farmers by locally sourcing the raw materials from them and making their lives better while at the same time provide an opportunity to the Indian masses to move towards healthy lifestyle by promoting Ayurveda and herbal products. Baba Ramdev started as a yoga trainer and was promoted by Aastha and Sanskaar channels on TV. Hence, Indians realized that they have forgotten Indian tradition and art forms- one of them being yoga. He got wide acceptance and word of mouth publicity helped him to reach to a wider audience. He projected Yoga as a solution or remedy for all difficulties or diseases. Patanjali Ayurved in its first year of operations, 2008, generated revenue of over 60 crores. Almost 10 years later, the homegrown venture has grown to be a 5000 crore company and is posing a threat to the well-established companies in the Fast Moving Consumers goods domain.

Patanjali has a wide range of products with the theme of Ayurvedic/herbal being common across all categories. It has four business divisions: Food and Beverages, Cosmetics and Health, Health drinks and home care. The highest revenue grossing products are Patanjali Cow Ghee, Darit Kanti, Kesh Kanti, Patanjali Atta noodles and Patanjali Aloe Vera juice and gel. The customer base of Patanjali is very huge and day by day is going on increasing. A major ramp-up came when Patanjali was re-launched by Baba Ramdev in 2014. The company is finding it difficult to cater to the demand of all the customers. It has increased



## Steady-State Behavior of Nonparametric Synthetic Control Chart Using Signed-Rank Statistic

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### Abstract

The article studied the steady-state behaviour of the synthetic control chart using signed-rank statistic for shifts in the process median. The steady-state ATS (Average Time to Signal) values are computed using Markov chain approach. To compute steady-state ATS, the performance of the synthetic control chart and two-of-L+1 control chart can be made identical over all samples with head start features. When subgroup sample size  $n=10$ , the steady-state performance of the synthetic control chart is worth for small to moderate shifts under all considered symmetric distributions. When subgroup sample size  $n=5$ , steady-state ATS values are larger under normal and double exponential distributions only for small shifts. However, under the Cauchy distribution zero-state ATS values are larger but not significantly larger as compared to steady-state ATS values. Usefulness of proposed control chart explored using numerical example. Proposed control chart is simple and easy to use for practitioners.

**Keyword:** Nonparametric, signed-rank, synthetic, runs rule, steady-state and average time to signal.

### 1. Introduction

A control chart is one of the most useful tools for monitoring quality of the characteristic of an interest in a manufacturing process. Most of the control charts are based on the assumption that the process characteristic follows a normal distribution. Many researchers have pointed out that all the processes are not normally distributed; see for example (Chou et al. 2001) and the references cited therein. The standard control charts do not perform well, if the assumption of normality is not satisfied. The effects of non-normality on the  $\bar{X}$  chart have been studied in the literature and includes among others (Schilling and Nelson 1976, Bradley 1973). This demands the construction of nonparametric control charts. A chart is said to be nonparametric if the run length distribution of the chart does not depend on the underlying process distribution, when there is no shift in the process parameter under study. Hence, the in-control Average Time to Signal (ATS) of nonparametric control chart does not depend on the underlying process distribution.

In the review of literature related to the nonparametric control charts, (Bakir and Reynolds 1979) provided a control chart based on within group ranking. (Hackl and



## A Geographical Study Of Gaumukh Religious Tourist Center in Navapur (Mb), Songadh (Gj) Taluk.

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 Assistant Professor,  
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### Abstract :

*Today's the most important and fast growing industry is tourism. Tourism Mean the largest sector of international trade, earning, foreign currency and income source. Some countries and states economy totally depends upon tourism. In India importance of religious tourism in ancient period as well as modern period. The diversity of physical, social, cultural, historical and also religious factors is main attractions of the tourist's centers. In India as well as Maharashtra major scope for religious tourism because India has various background, history, magnificent culture and religious places as well as the Geographical condition is favorable for development of tourism. There are some problems face by tourist present study has view the real situation, condition, facilities and services related problems and its solution by the view of Geographical perspective.*

**Key Words:** Tourism industry, religious tourism, socio-cultural-historic aspects.

### Introduction:

Tapi district is one of the 33 districts of Gujarat state in western India. It has seven talukas Tapi, Songadh, Nuhar, Valod, Uchhal, Dolera and Kakramund. Vyara city is the district headquarters. Tapi district was formed in 2007 out of some Taluk that were separated from Surat district. Tapi(Vyara) District shares Purna Wildlife Sanctuary with the Districts of Dang and Nandubhar, the latter of which is in Maharashtra. Purna Wildlife sanctuary is a part of the Dang's Forest. Some of the important tourist center in Tapi(vyara) District are: Songadh Fort, Gaumukh Mahadev temple and waterfall, Hirabhan Bridge, Tapi River, and Ukai Dam. Songadh Fort. Other religious tourist destinations are: Rokadia Hanuman Mandir, Parsuramji and Suryatopeshwar Mandir, Kalyansoji Mandir, Gayatri Mata Mandir, Soibaba Mandir, Firangi Mataji - Jalaram Mandir, Mari Mata Mandir. Gaumukh 24km from navapur, around 13 km from songadh, about 33km from vyara(tapi) about 51 km from dang(dhwa) and near about 132km from Nandubhar

This is the oldest temple of Gaumukh mahadev. The place is surrounded by the forest. The atmosphere of this place is peaceful and pleasant. The temple is surrounded by forest.

Nandubhar district is rich socio-cultural establishment and religious historical background. Also it is bounded by religious centers; such as Prakash, one of the famous religious places, also known as Dakshin Kash, temples of God Shree Ganesha (Heramb), Shri Datta temple, Umaj Mata temple, Ashwaththama and Shanivanda, Dandapateshwar Ganesha Mandir, Devi Mogra Mata is mother goddess of Ashwaththama, Devi Mogra Mata is mother goddess of Ashwaththama. Gaumukh. The Gaumukh temple is situated near Don town in Navapur Songadh(Gujarat) border tapi district. The Gaumukh temple is oldest temple of shiva. The temple is surrounded by forest. So it's quite famous in people. For tourist it's the best place for hangout. The Gujarat government declare this place as a tourist place few years ago. Some renovation work also done there. Gaumukh is the oldest temple of Gaumukh mahadev. The place is surrounded by the forest. The atmosphere of this place is peaceful and pleasant. During month of shrawana its best time to visit any shiv temple.



## "A Geographical Study of Forest Settlement in Dhadgaon Tahsil" ( Nandurbar District )

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### Abstract:

The researcher article focuses at A Geographical Study of forest settlement in Dhadgaon (Akrani) Tehsil. Tribals are those people, who are living in forest. The Tribes are depending upon the resources obtained from forest. The geographical location of Dhadgaon particularly 73 forest villages' fails to provide proper educational facilities to running schools. The researcher has gone through forest settlement and surveyed of 10 villages of Dhadgaon tehsilat. A study region concern to the Satpura Mountain and Narmada River bank. Field observation of the study region. Relief is the chief constraint against the development the development of settlement.

The distribution of settlement is mainly governed by slope absolute relief, relative relief to understand the distributional pattern of forest settlements and their relationship with forest. The topsheet of the study area 1:50000 scale with contour interval 50 Meter have been consider.

**Keywords:** Akrani, forest villages, River bank, Relief, slope, Pattern.

### Introduction:

Mountainous region is a residence of tribal people. That is why they are called 'Vanvasi', or 'Girijan'. The Settlement of tribal's of hilly region are scattered or dispersed. Their festivals are celebrated in the company of nature. During these festivals the musical instrument and the objects made by handicraft artists are used. These instrument materials available by surrounding environment. Lifestyle of tribal people changes according to differences of regions. But their is similarity in culture, customs and tradition. Primary occupation of tribal people is totally depend upon forest. They collect frutes, edible roots and flowers form forest. They also do the occupation like cattle raising and farming. They spend their all life in the accompiment of nature. The tribal people building material using the forest. They make various items from wood, soil and bamboo. By this they get some economical benefits. Standard of education of tribal's has been lessed. Mostly it is so in the forest villages of hilly region. Forest villages are found in the thick forests of hilly region. That is why there is lack of educational facilities and means of transpiration. So they prefer the occupation depend on the forest. That is why many trees of forest are cut down. Satpura is a mountainous region in the Dhadgaon tahsil of Nandurbar district.

Their residency differs as per catchment area but their culture and tradition remains same. These people totally live on forest normally on different types of roots, fruits collection and hunting. Animal husbandry and farming are the major occupation of these people. Entire life they live in forest. They make different types of things by different types of wood. They sell these objects in the nearest market and get more economic output with it. The rating of education occurred lack of there tribal people mainly in forest area where the forest villages are located. The forest villages located in dence forest lack management,





## GOVERNMENTS STEPS FOR POVERTY ALLEVIATION IN INDIA

**Arjun Wagh and Rani Shinde**

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### ABSTRACT:

Alleviation of poverty remains a major challenge before the Government. While there has been a steady decline in rural poverty over the last two decades, there were 244 million rural poor in the country in 1993-94, as per the latest available estimates. Acceleration of economic growth, with a focus on sectors which are employment-intensive, facilitates the removal of poverty in the long run. However, this strategy needs to be complemented with a focus laid on provision of basic services for improving the quality of life of the people and direct State intervention in the form of targeted anti-poverty programmes. While growth will continue to be the prime mover, anti-poverty programmes supplement the growth effort and protect the poor from destitution, sharp fluctuations in employment and incomes and social insecurity. The specifically designed anti-poverty programmes for generation of both self-employment and wage-employment in rural areas have been redesigned and restructured in 1999-2000 in order to enhance their efficacy/impact on the poor and improve their sustainability. These schemes along with Area Development Programmes, Rural Housing, Land Reforms and institutional mechanisms of delivery mentioned.

**Keywords:** - Alleviation, poverty, Acceleration, employment, social insecurity

### Introduction

The poverty alleviation programmes in India can be categorized based on whether it is targeted for rural areas or urban areas. Most of the programmes are designed to target rural poverty as prevalence of poverty is high in rural areas. Also targeting poverty is challenging in rural areas due to various geographic and infrastructure limitations. The programmes can be mainly grouped into

1. Wage employment programmes
2. Self-employment programmes
3. Food security programmes
4. Social security programmes
5. Urban poverty alleviation programmes.

The five year plans immediately after independence tried to focus on poverty alleviation through sectoral programmes. The first five-year plan focused on agricultural production as a way of addressing poverty while second and third plans focused on massive state led investments for employment generation in public sector. While these policies did some policy generation, they did not have enough strength to have a sweeping effect.

### Objectives -

1. To understand the poverty alleviation programme of government.
2. To know the present scenario of poverty alleviation programme.

### Methodology -

The present research paper is informative the required information collected through various secondary sources.

### Jawahar Gram Samridhi Yojana

Jawahar Gram Samridhi Yojana (JGSY) is the restructured, streamlined and comprehensive version of the Jawahar Rozgar Yojana (JRY). It was started on 1 April 1999. The main aim of this programme was development of rural areas. Infrastructure like roads to connect the village to different areas, which made the village more accessible and also other social, educational (schools) and infrastructure like hospitals. Its secondary objective was to give out sustained wage employment. This was only given to BPL (below the poverty line) families and fund was to be spent for individual beneficiary schemes for SCs and STs and 3% for the establishment of barrier free infrastructure for the disabled people. The village panchayats were one of the main governing bodies of this programme. Rs. 1841.80 crore was used and they had a target of 8.57 lakh works. 5.07 lakh works were completed during 1999-2000.

### National old age pension Scheme

This scheme came into effect on 15 August 1995. The scheme provides pension to old people who were above the age of 65 (now 60) who could not find for themselves and did





## ENVIRONMENTAL SUSTAINABILITY AND ITS IMPORTANCE

**Arjun Wagh**

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### ABSTRACT

Sustainability is a broad discipline, giving students and graduates insights into most aspects of the human world from business to environment and the social sciences. The core skills with which a graduate leaves college or university are highly sought after, especially in a modern world looking to drastically reduce carbon emissions and discover and develop the technologies of the future. Sustainability draws on politics, economics and philosophy and other social sciences as well as the hard sciences. Sustainability skills and environmental awareness is a priority in many corporate jobs at graduate level and over as businesses seek to adhere to new legislation.

**Keywords:** Sustainability, technology, environment, awareness

### Introduction

Sustainability graduates will go into many fields but most commonly civic planning, environmental consultancy, agriculture, not for profit, corporate strategies, health assessment and planning, and even into law and decision making. Entry-level jobs are growing and over the coming years, bachelor's graduates can expect more and more options and opportunities.

Sustainability is one the newest degree subjects that attempts to bridge social science with civic engineering and environmental science with the technology of the future. When we hear the word "sustainability" we tend to think of renewable fuel sources, reducing carbon emissions, protecting environments and a way of keeping the delicate ecosystems of our planet in balance. In short, sustainability looks to protect our natural environment, human and ecological health, while driving innovation and not compromising our way of life. Because of this growing requirement, a master's will not necessarily be required for most jobs as bachelor's programs prepare people for a career in sustainability. Read more about the various sustainability degrees and education.

### Objectives

1. To know the concept Environmental Sustainability
2. To understand the importance of Environmental Sustainability

### Methodology

The present research paper is informative the required information collected through various secondary sources

### What is Sustainability?

The definition of "sustainability" is the study of how natural systems function, remain diverse and produce everything it needs for the ecology to remain in balance. It also acknowledges that human civilization takes resources to sustain our modern way of life. There are countless examples throughout human history where a civilization has damaged its own environment and seriously affected its own survival chances. Sustainability takes into account how we might live in harmony with the natural world around us, protecting it from damage and destruction.

We now live in a modern, consumerist and largely urban existence throughout the developed world and we consume a lot of natural resources every day. In our urban centres, we consume more power than those who live in rural settings and urban centres use a lot more power than average, keeping our streets and civic buildings lit, to power our appliances, our heating and other public and household power requirements. That's not to say that sustainable living should only focus on people who live in urban centres though, there are improvements to be made everywhere - it is estimated that we use about 40% more resources every year than we can put back and that needs to change. Sustainability and sustainable development focuses on balancing that fine line between

### An Impacts of Tourism in India

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Department of Geography

P.D.V.P. Mahavidyalaya, Tasgaon

**Ms. Rani Shinde**

Assistant Professor

Department of Economics

Y. C. College, Pachwad

#### Abstract:

*The present study makes an attempt to highlight the development of Tourism and initiatives taken by Government to promote Tourism in India and its impact. The main theme of paper is to analyze positive and negative impacts of Tourism Industry on the Economy. Tourism Industry in India is growing and it has vast potential for generating employment and earning large amount of foreign exchange besides giving a fillip to the country's overall economic and social development. Data were collected through the websites and various research articles. The study implies to the depth of social, economical and environmental effects of the tourism industry. Most of the works that are focused on tourism industry in India.*

**Keywords:** Foreign exchange, Tourism Industry, Development, Impact of Tourism, Constrains

#### Objectives

The following objectives are considered to highlight the theme

1. To know the tourism
2. To understand the Positive and Negative impact concern with various aspect

#### Data Collection and Methodology

Present research article is informative. The required information is collected through secondary sources of information.

#### Introduction

Tourism becomes the fastest growing service industry in the country with great potentials for its further expansion and diversification. Tourism is defined as the business of providing services for people who are travelling for their holiday. It is also defined as travel for recreational, leisure or business purposes. The statistical terms defined tourism as the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited. Over the decades, tourism has experienced continued growth. Tourism Industries is one of the fastest growing economic sectors in the world. Tourism has become a thriving global industry with the power to shape developing countries in both positive and negative ways. No doubt it has become the fourth largest industry in the global economy. Similarly, in developing countries like India tourism has become one of the major sectors of the economy, contributing to a large proportion of the National Income and generating huge employment opportunities.

#### Development of Tourism

The development of tourism was taken up in a planned manner in 1956 coinciding with the Second Five Year Plan. The approach has evolved from isolated planning of single unit facilities in the Second and Third Five Year Plans. The Sixth Plan marked the beginning of a new era when tourism began to be considered a major instrument for social integration and economic development. But it was only after the 80's that tourism activity gained momentum. The Government took several significant steps. A National Policy on tourism was announced in 1982. In 1988, the National Committee on Tourism formulated a comprehensive plan for achieving a sustainable growth in





## A Study of Indian Society and Changes in Social Institution

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Dept. of Sociology, P.D.V.P. College Tasgaon

<sup>2</sup>Mr. Amit M. Mali,

Research Student,

Shivaji University, Kolhapur.

### Introduction:

The first step in the expansion of western culture and modernization in India began, when East India Company established its rule in the beginning of the eighteenth century and later on the British rule was established in the country by the middle of the eighteenth century. India is a hierarchical civilization. Whether in north India or south India, Hindu or Muslim, urban or village, nearly all things, people, and social groups are ranked according to various necessary behaviors. Societal hierarchy is manifest in caste groups, amongst individuals, and in family and similarity groups.

In its basic sense, social change means change in social structure (Johnson) Social change occupies a dominant place in the consciousness of humanity. Change is the basic nature of society and change is universal. "Social change may be defined as the process which is discernible in the alteration of the structure and functioning of a particular social system". (Kuppuswamy, B.1979). Social patterns, social interaction within a social organization. Social changes and variations from the accepted modes of life, whether due to geographical conditions, in cultural equipment, composition of the population or ideologies and whether brought about by diffusions or inventions within the group. (Gillin&Gillin 1950.). The nature and pace of social change are not consistent in each age or period in the same society. There is no natural law in social change according to which it assumes definite forms. It is difficult to make any prediction about the exact forms of social change. An institution is an organized system of social relationship which embodies certain common values and procedures and meets certain basic needs of society (Horton and Hunt). The present research study focuses on changes in particular social institution like education, family and marriage etc.

### Objectives:

1. To study changes in education, family and marriage of Indian society

### Data Base and Methodology

The database has been arranged for the study from various sources. They include Governmental reports and records Newspaper, Magazine and other unpublished reports are the main source of the present study. The present work is fully theoretical manner and based on secondary data. The collected materials are fully studied and evaluate.

Society is the web of social relationship (Machlver and Page.) Indian society is very old, intricate and plural and it has a long history. It is composed of different religious groups, racial groups and groups having cultural differences. In the long span of Indian history various groups from different parts of the world entered into India with their own socio-cultural and racial features. The best example is Indus valley civilization

### Changes in the Institution of Education:

India has stand 34<sup>th</sup> rank in quality education (world Economic forum) Education is a sub-system of the society. It is related to other sub-systems. Various institutions or sub-systems are a





## A Study of Indian Society and Changes in Social Institution

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## कवठेएकंद गावातील दसरा : संस्कृती आणि परंपरा

विनोदकुमार कुंभार,

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Mob no - 9975564622

### प्रास्ताविक :

भारतामध्ये प्रत्येक सण विशिष्ट पद्धतीने साजरा केला जातो. तसेच सर्व सणांना काही शौराधिक जाग्यार असलेले दिसून येतात. यामध्ये विजयादशमी किंवा दसरा सणाचा विशेष महत्त्व आहे. भारतामध्ये प्रत्येक ठिकाणी विजयादशमी विविध पद्धतीने साजरी केली जाते. महाराष्ट्रातील कवठेएकंद (तासुका- तामगाव, जि -सांगली) या गावामध्ये विजयादशमीच्या रात्री शोभेची आतिथ्याची केली जाते. ग्रामदैवत श्री.सिद्धराज देवस्थानाची पालखीसमोर रावभर शोभेच्या आतिथ्याचीचा कार्यक्रम होत असतो. पावेळी आतिथ्याची पाहण्यासाठी संपूर्ण देशभरातून भाविक येत असतात. महाराष्ट्रातील शिवकाशी म्हणून कवठेएकंद गावाची ओळख आहे. दसऱ्या दिवशी सुमारे दोनशेहून अधिक मंडळ या शोभेच्या आतिथ्याचीमध्ये सहभाग घेतात आणि ग्रामदैवतेच्या पालखी समोर रावभर आतिथ्याची करतात. महाराष्ट्रातील सांगली जिल्ह्यातील कवठेएकंद हे गाव सांगली पासून बायीन किनोमीटर अंतरावर उत्तरेला आणि तामगाव पासून सहा किनोमीटर दक्षिणेला आहे. प्राचीन काळापासून या गावामध्ये दसऱ्यादिवशी शोभेची आतिथ्याची केली जाते कवठेएकंदला महाराष्ट्राचे म्हैसूर म्हणूनही ओळखले जाते.



### उद्दिष्टे :

कवठे एकंद गावातील दसरा सणाच्या आतिथ्याची स्वरूप आम्हासणे.

### संशोधन पद्धती :

प्रस्तुत संशोधनासाठी संशोधकाने वर्णनात्मक संशोधन पद्धतीचा अवलंब केलेला आहे. गावातील दसरा सण साजरा करण्याची परंपरा जाणून घेण्यासाठी विशेष आतिथ्याचीचे स्वरूप समजून घेण्यासाठी आतिथ्याची करण्याच्या मंडळाकडून माहिती घेण्यात आली. विशेष दसऱ्या दिवशी आतिथ्याचीचे प्रत्यक्ष निरीक्षण करण्यात आले.

### ऐतिहासिक पार्श्वभूमी :

कवठे एकंद गावातील ग्रामदैवत श्री.सिद्धराज मंदिर हे सुमारे १२५० वर्षांपूर्वी असल्याचे पुरावे पद्यपुराण केदारविजय या ग्रंथामध्ये आढळते. पूर्वी या सिद्धराज मंदिराभोवती दंडकारण्य होते. रात्रीचे वेळी श्रीच्या पालखीच्या मार्गावर जंगलातील प्राण्यांचा घोका होवा. असा प्राण्यांना हुसकून जावण्यासाठी आणि संरक्षणासाठी मशाली, दिवट्या तसेच आवाज आणि प्रकाश निर्माण करणारी आतिथ्याचीचि सुरवात झाली. ग्रामदैवत सिद्धराज देवस्थान म्हणजेच कपिलमुनीचे समाधी स्थळ मानले जाते. या समाधी स्थळावर महादेवाची पिंड आहे. विजयादशमीच्या दिवशी श्री.सिद्धराज महाराज आपल्या बहीनीची भेट घेण्यासाठी निघतात.

### आतिथ्याची चे स्वरूप :

- या आतिथ्याचीची पूर्ववर्ती घटस्थापनेपासून सुरु होते.

TRUE COPY

Principal

Manavdyava Talsamaj, Talasari, Dist. Sangli

## वस्तु आणि सेवाकर (जी.एस टी) : एक मूल्यमापन

प्रा.जे.ए.बाबू,

सहयोगी प्राध्यापक

अर्थशास्त्र विभाग,

पी.डी.जी.पी. महाविद्यालय, लासगांव

### प्रस्तावना :-

करप्रणाली सुधारण्याच्या दृष्टीकोनातून हे बिल पारच म्हात्वाचे आहे. २००६-०७ च्या अंदाजपत्रकात कोटेशनच्या रागवटीत प्रथम जी.एस.टी. चा उल्लेख केला गेला होता. जी.एस.टी हा एक अग्रपक्ष कराचा एक प्रकार आहे. हा कर गृहसंचे उत्पादन, विक्री, आयात आणि सेवा या संबंधीत राष्ट्रीय पातळीवरील सर्वसमावेशक अग्रपक्ष कर असेल. निर्यात-आयात कर आणि कार्बोरेट टॅक्स या कराच्या फळेत व्हाईल. केंद्र सरकार आणि राज्य सरकार जे निरनिराळे अग्रपक्ष कर लावतात त्या सर्व करांची जगा जी.एस.टी घेणार आहे. सध्या वॉट एक्साईज, आणि सर्व्हिस टॅक्स असे तीन कर लावण्यातली एकच जी.एस.टी हा कर लावला जाईल.

### GST (वस्तु आणि सेवाकर) म्हणजे काय ?

GST म्हणजे वस्तु व सेवा कर असून तो वस्तु किंवा सेवांचेर हा एकच कर लागू असेल (केंद्र सरकार व राज्य सरकार) .अस हा एक गंतव्य स्थान आधारित वस्तु आणि सेवा यांच्या उपभोगवरील कर आहे. यानुष्ये निर्मित/उत्पादनासमून ते अंतिम उपभोगपर्यंत प्रत्येक टप्प्यावर कर आकारणी करणाऱ्यांचे प्रस्तावित केले आहे. सारंगत असा को केवळ र्थित मूल्यावर कर आकारला जाईल आणि अंतिम उपभोगका/घाटकाला कर द्यावे लागणार. GST (वस्तु व सेवाकर) हा एक अग्रपक्ष कराचाच एक प्रकार आहे. हा कर म्हात्वाचे उत्पादन, विक्री, आयात आणि सेवा या संबंधीत राष्ट्रीय पातळीवरील सर्वसमावेशक अग्रपक्ष कर असेल. केंद्र सरकार आणि राज्य सरकार जे निरनिराळे अग्रपक्ष कर लावतात या सर्व करांची नाव GST घेणार आहे.

सध्या VAT (Value Added Tax) मूल्यावर्धित कर

उत्पादन शुल्क, सेवा कर असे तीन कर लावण्यातली एकच अस हा कर लावला जाईल.

### अभ्यासाची उद्दिष्टे

१. वस्तु आणि सेवा कर या संकल्पनेचा अभ्यास करणे.

२. विविध क्षेत्रातील कंपन्या न्यांना जी.एस.टी. मुळे पारच होणा-या अभ्यास करणे

### संशोधन पध्दती आणि तथ्य संकलन

प्रस्तुत शोधनिबंध तयार करण्यासाठी दुय्यम सामग्रीचा वापर करण्यात आला आहे. यानुष्ये प्रामुख्याने संदर्भग्रंथ,वर्तमान पत्रे,मसिकेइंटरनेट इत्यादींचा वापर करण्यात आला आहे.

### जी.एस.टी.चे फायदे :-

१) कर भरणे सोपे जाईल कर भरण्याच्या, आकारण्याच्या पध्दतीत सन्नता आणि सुलभात येईल.

२) देशचे ग्रॅस इमेक्टिक प्रॉडक्ट वॉलेज. प्रलोच वेग वॉलेज.

३) संपूर्ण देशात सामान खरेदी करणाऱ्यासाठी एकच कर आणि एकच दराने कर द्यावा लागेल. पूर्ण देशात एकाच किमतीला एक प्रकारचे सामान खरेदी करता येईल.

४) वेगवेगळ्या प्रकारचे कर भरण्यासमून सुटका होईल.

५) टॅक्स या रचनेत पारदर्शकता येईल. राज्यांचे मिळवण-या वॉट, करमणूक कर, लच्छरी कर, एन्टी कर सॉटरी कर, आणि राज्य आकारात असलेले विक्री कर बंद होतील. सामान खरेदी करताना किंवा कोणासाठी सेवेचा आस्वाद घेताना एकूण सर्वकर मिळून ३० टक्के ते २५ टक्के कर द्यावा लागतो तो २० ते २५ टक्के इतका द्यावा लागेल.

६) लावलेले घराच्या प्रलोच या १ ते १.५ टक्केने वॉलेज.

७) जी.एस.टी. कर वस्तु आणि सेवा व वेलेज लच्छत जाईल.

८) गृहस आणि सेवा ज्या वेळेला एकच पुरकला जातल त्यासाठी अला एकच जी.एस.टी. लावला जाईल.

९) जी.एस.टी. अंशगत विविध प्रकारच्या गृहसचे बर्गीकरण सोपे आणि सधे वेले आहे. त्यामुळे कर लावण्यासाठी कोणासाठी गृहसचे बर्गीकरण वारप्रसत ठरणार नाही.

१०) रिटेल सेक्टर याडी लिन रॅटल आणि इन्व्हेंटरी खर्च कमी होईल.

११) भरलेल्या जी.एस.टी. साठी सफलत घेन मधील घटकांस क्रेडीट देणे सोपे होईल.

१२) जी.एस.टी. मुळे असेघटीत कोणासाठी कराच्या जाळवता येईल. त्यामुळे सरकारचे उत्पन्न वॉलेज आणि संघटीत आणि असेघटीत क्षेत्रातील परी कमी होईल संघटीत सेवाला जास्त



## जी.एस.टी. आणि भारतीय शेतकरी

डा.के.एस.पाटील

विभाग प्रमुख

अर्थशास्त्र विभाग

पी. डी. व्ही. पी. महाविद्यालय, तामनांग

१५. कर वाचवण्यासाठी कंपन्या आपले उत्पादन रान्यातल्या रान्यातच विकता असता. रान्याबद्दल विकण्यास केंद्रीय विक्रीकर व प्रवेश कर लागत असो. कारण असो कर उत्पादनाच्या वेळेस लागले जात नाहीत. चांगली उत्पादने जी देशाच्या एक भागात मिळतात ती देशांत सर्वत्र मिळवता लागतात. त्यामुळे झाडकांना निवड करायला भाग्य वाच मिळेल. तसेच कंपन्यांचे मार्केटही सर्व देशांवर वाढेल.

१६. विविध राज्ये एकत्रच वस्तुचर वेगवेगळ्या दराने कर लावत असो, त्यामुळे एकत्रच वस्तुची वेगवेगळ्या रान्यात वेगवेगळी किंमत असो, असा तसो होणार नाही, सर्व रान्यांत एकच किंमत राहिल.

१७. व्यापारी व उद्योगधंद्यात विशेष ठेवणे सोपे होईल कारण अनेक कर कायदांपैकी एकच कर कायदा लागू राहणार आहे.

१८. GST जपण्या एकत्रच सर्वसमावेशक महिती तयार करून जपवण्यात आणतील आहे त्यामुळे करचालन सोपे व पारदर्शक होईल.

निष्कर्ष :-

GST म्हणजे वस्तुच्या अगि सोबेच्या पुरवठाव्यावर मूल्य घडित कर लावण्याची पध्दत आहे. १९७६ मध्ये केंद्रीय अर्थकारणी कानास तर २००५ मध्ये राज्य विक्री कराला घेत लागू करण्यत आला. असा घेत प्रणाली बदलेक अजपस कराला लागू करून GST हा एकत्र कर सुरू केला आहे. या पध्दती मध्ये मालाच्या उत्पादना पासून शेतध्या विक्रीच्यापर्यंत होणान्या पुरवठाव्याच्या मूल्यवर्धनावर कर लावण्यत घेतो. त्याचप्रमाणे सोबेच्या किंमतीवर कर अजकारणी होतो. या प्रक्रियेत कर लावताना वस्तु व सेवा प्राप्त कराला भारलेल्या कराली पूर्ण वस्तुघट देण्यत घेतो. म्हणजेच GST हा बद्दु विद्दु कर असल्याने कराला सर्वेभार झाडकांधर घडणार नाही.

बोडक्यात, करप्रणाली सुधारणयाच्या दृष्टीकोनातून वस्तु व सेवा कर हा पार म्हाण्याचा आहे. GST हा वस्तुचे उत्पादन, विक्री, आण्यत तसेच सेवा वासयांपरील राश्ट्रीय पातळीवरील सर्वसमावेशक अजपस कर आहे. केंद्र सरकार व राज्य सरकार जो निर्णयले अजपस कर लावतात त्या सर्व करलेवनी GST हा एकत्र कर आहे. उतः सेवा कर, उत्पादन शुल्क, घेत तीन कर लावण्यदेवनी एकत्र GST हा कर लावत नाहीत. १९४७ नंतरचे सवती म्हाण्याचे कससुधारण विधेयक म्हातून वस्तु व सेवा कर विधेयकचे म्हाय आहे.

संदर्भसुची :-

१. वस्तु व सेवा कर - एक दृष्टीवेध, वित्त विभाग, महाराश्ट्र शासन.
२. सुधीर हाण्यवडी, वस्तु व सेवा कर (हिन्दी) vol-१, E-BOOK सनसकन.
३. Satesh Bhandari, GST Preparation & Transition, Satesh Bhandari & Associates, Chennai. sept २०१६.
४. देसले विजय, वित्तसंग अर्थशास्त्र, २०१७.

प्रस्तावना :-

केंद्र सरकारने १ जुलै रोजी संपूर्ण देशात एक करप्रणाली अजिल्यात आणून वस्तु व सेवा कर अर्थात गुड्स अँड सर्विस टॅक्स किंवा जी.एस.टी.लागू केला. यावर अनेक तयारी म्हामलांतले आहेत. केंद्राने ५ टक्के पासून ते २८ टक्के पर्यंत अजपसित मालावर जी.एस.टी. लागू केला आहे. जी.एस.टी. कराली विधायणी (शुन्य टक्क्यापासून) पाच प्रकारांत करण्यत आली असून करमुक्ता वस्तु सेवापुढन्या पडिल्या प्रकारातील सेवांचा ५ टक्के दुसऱ्या प्रकारातील सेवांचा १२ टक्के तिसऱ्या प्रकारातील सेवांचा १८ टक्के तर चौथ्या प्रकारातील सेवांचा घेत २८ टक्के कर लावण्यत आला आहे. अजुन्ही अनेक लोक यावर संघम्यत आहेत. मुळात शेतवेर कोणत्याही कर लावलेला नाही. असा सरकारचा रज्य आहे. तो साह्यिकच आहे. कारण वधनुवधे देशातील शेतकरी तेंदयाची शेतवेर करत आले जवेल. त्यात सरकारी धंरण जव्याव्यत आहे. देशात आण्यतर तीन लाखांहून अधिक शेतकऱ्यांनी आश्याच्या केन्या आहेत. भारताची ९२ टक्के लोकसंख्या ही शेतवेर अजलवून आहे. हा जव्यसल सकल देशांतगत उत्पादनच्या (जोडोपी) सुमारे एक पंचप्यास योगदान होतो. आणि एकुण निर्यात उत्पादत सुमारे १० टक्के भागवतो अणि म्हेतव्य प्रमण्यत उद्येगंधे कजव्यसल पुरवेवतो. धाम्येन धाड्यातील अर्थव्यवस्था ही धाड्याने शेतवेर अजलवून आहे.

GST (वस्तु आणि सेवाकर) म्हणजे काय?

अज्य म्हणजे वस्तु व सेवा कर असून तो वस्तु किंवा सेवांचर हा एकत्र कर लागू असेल (केंद्र सरकार व राज्य सरकार) अज्य हा एक गंतव्य स्थान आधारीत वस्तु आणि सेवा वांध्या उपधेव्यवरील कर आहे. याचवे निमित्त/उत्पदव्यवसून ते अजिम उपधेव्यवरील प्रत्येक टक्क्यावर कर अजकारणी करण्यचे प्रस्तावित

## वस्तु आणि सेवा कर आणि स्थानिक सरकारे

**डॉ. बंधू जयसिंग कदम**

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**प्रस्तावना :-**

भारतात १ जुलै २०१७ पासून वस्तु व सेवा कर लागू झाल्यामुळे देशाच्या इतिहासात वस्तु व सेवा कर ही प्रगल्भी क्रांतीकारी पाऊल म्हणून ओळखली जात आहे. घेव्य कर घेवणे ही कोणाच्याही देशाच्या मजबूत प्रशासन आणि शांत विकासाचे निदर्शक मानली जाताना, यासाठी अगदी इतिहासकालीन दाखल देता येतील. उत्तम प्रशासक म्हणून ज्यांचे इतिहासात नाव घेतले जाते. वस्तु व सेवा करमध्ये मध्ये कर घेवणे ही स्थिती बदलणार आहे. संपूर्ण देशभरात आज कोणाच्याही वस्तु अथवा सेवेसाठी एकदाच कर भरण्या लागेल. इस्टिनेशन टॅक्स असे नाव देण्यात आलेल्या वस्तु व सेवा करामुळे आज वस्तु अथवा सेवा जिथे पुरविली जाणार आहे. अरुण ठिपणी कर आकारला जाईल. त्यामुळे सामान्य नागरीकांसाठी नवी कर लावण्याचे उद्देश्य आहे. या करघेवणेची रचना पारदर्शक असल्यामुळे सरकारला त्यावर देखरेख ठेवणे ही सुलभ होणार आहे.

कर हे सार्वजनिक महसुलाचे एक महत्वाचे आणि छातीचे साधन आहे. कारण एकूण सार्वजनिक उत्पादनातील करांचा हिस्सा अधिक असतो. त्या बरोबरच करांचे स्वरूप जसे कि प्रत्यक्ष आणि अप्रत्यक्ष यांमध्ये परिणाम अर्थव्यवस्थेच्या अर्थिक विकासाबरोबरच लोकसंख्या जीवनमानावर आणि सामाजिक कल्याणावर ही होत असते. लक्ष्यक्षेत्र भारतात स्वातंत्र्योत्तर काळात अनेक कर विषयक सुधारणा करण्यात आल्या. आणि त्यांची मती आणि त्यांची व्याप्ती १९९१ नंतर वेगाने वाढत आहे. केंद्र सरकारने १ जुलै २०१७ पासून वस्तु आणि सेवा कर लागू केला आहे. ही खूप महत्वाची किंबहुना क्रांतीकारक कर सुधारणा आहे. ती केंद्र आणि राज्य पातळीवर एकदाच राबविली जाणार आहे. या कराचा परिणाम सरकारच्या

उत्पादक आणि स्थानिक सरकारांच्या वित्तीय स्थायतेवर काय होईल ते पाहणे आवश्यक आहे.

**अभ्यासाची उद्दिष्टे**

१. वस्तु आणि सेवा कर या संस्थानेचा अभ्यास करणे.
  २. वस्तु आणि सेवा करामध्ये अंतर्भूत करांचा अभ्यास करणे.
  ३. वस्तु आणि सेवा करबद्दल घटनाचक्राचा अभ्यास करणे.
  ४. वस्तु आणि सेवा करचा सरकारच्या उत्पादक आणि स्थानिक सरकारच्या वित्तीय स्थायतेवर होणारा परिणामाचा अभ्यास करणे.
- संशोधन पध्दती आणि तथ्य स्रोत**

प्रस्तुत शोधनिबंध तयार करण्यासाठी दुय्यम सामग्रीचा वापर करण्यात आला आहे. यामध्ये प्रामुख्याने संदर्भग्रंथ,जर्नल पत्रे,मसिकेइंटरनेट इत्यादींचा वापर करण्यात आला आहे.

**GST (वस्तु आणि सेवाकर) म्हणजे काय?**

GST म्हणजे वस्तु व सेवा कर असून ती वस्तु किंवा सेवांवर हा एकच कर लागू असेल (केंद्र सरकार व राज्य सरकार) .जव्हा हा एक मूल्य स्थान आधारित वस्तु आणि सेवा यांच्या उपभोगावरील कर आहे. यामध्ये निर्मिती/उत्पादनापासून ते अंतिम उपभोगापर्यंत प्रत्येक टप्प्यावर कर आकारणी करण्याचे प्रस्तावित केले आहे. सारांश असा की केवळ वॉल्यूमच्यावर कर आकारला जाईल आणि अंतिम उपभोगकर्ता/घटकाला कर द्यावे लागणार. GST (वस्तु व सेवाकर) हा एक अप्रत्यक्ष कराचाच एक प्रकार आहे. हा कर मालाचे उत्पादन, विक्री, अथवा आणि सेवा या सर्वोच्चरील राष्ट्रीय पातळीवरील सर्वसमावेशक अप्रत्यक्ष कर असेल. केंद्र सरकार आणि राज्य सरकार जे निर्धारित अप्रत्यक्ष कर लावतात या सर्व करांची जगात जव्हा घेणार आहे.

सध्या VAT (Value Added Tax) मूल्यवर्धित कर उत्पादन शुल्क, सेवा कर असे तीन कर लावण्यात येतो एकच जव्हा हा कर लावला जाईल.

**(वस्तु आणि सेवाकर)कायंचिंत :-**

केंद्र शासन व राज्य शासन द्वारे सामाईक करदरल्यावर एकच वेळी वेगळ्या पुढेरी जव्हा असेल.

केंद्र शासनाद्वारे आंतरराज्य वस्तु/माल पुरवठा आणि सेवापुर्ती वर आकारण्यात येणाऱ्या GST ला केंद्रीय GST(CGST) असे संबोधिले केले जाईल.

राज्य शासनाद्वारे आकारण्यात येणाऱ्या GST ला असे GST(SGST) संबोधिले केले जाईल.

तसेच केंद्र शासनाद्वारे प्रत्येक अंततः राज्य वस्तु पुरवठा आणि सेवापुर्ती व एकत्रित (IGST-Integrated GST) कर





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**A STUDY OF ENVIRONMENT AWARENESS AMONG PASS-OUT STUDENTS IN B.A. AND  
B.COM. PART-II AT ARTS AND COMMERCE COLLEGE, NAGTHANE DIST SATARA  
(MAHARASHTRA)**

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#### **INTRODUCTION**

The environmental education is the study of nature, natural resources, the interrelationship with man, human activities, disturbances of the environment and the attempts to improve the environment. It is an application of knowledge from different disciplines to study and manage the environment. It is also study of the conditions, circumstances and influences that affect life and how life in turn responds. Life requires the proper balance of environment condition to survive. Environmental study is based upon a comprehensive views of various environmental systems. It aims to make the citizens competent to do scientific work and to find out practical solution to current environmental problem.

This study finds out the awareness and implementation of environmental education in society through graduate students.

#### **IMPORTANCE OF STUDY**

Environment is main base of human growth and living life. Human being is direct and indirect depending on a environment because environment plays vital role in every activity of human. Hence the environmental education is a need to young generation of India. The University Grant Commission has formed a committee of expert on environmental studies. This was followed by framing of the core module syllabus of environmental studies for all undergraduate courses. The University Grant Commission has made it compulsory to all universities and colleges in India as per the directives of the Hon'ble Supreme Court of India.

Hon'ble vice-chancellor has endorsed the scheme to the Dean of social science faculty for designing the course curricula. According it has been studied thoroughly and the scheme of it's implementation has been prepared and forwarded to the college.

The course vision is the importance of environmental studies cannot be disputed. The need of sustainable development is a key to the future of mankind, mitigating the problem of pollution, loss of forest, solid waste disposal, degradation of environment, issues like economic productivity and national security, global warming, the depletion of ozone layer and loss of biodiversity have made everyone aware of environmental issues. The United nation conference on world summit on sustainable development at Johannesburg in 2002 have draw the attention of people around the globe to the deteriorating condition of our environment. It is clear that no citizen of the earth can afford to be ignorant of environmental issues. Environmental management has captured the attention of health care managers, managing environmental hazards has become very important. For the development of environment awareness among student.



## GOODS AND SERVICE TAX IN INDIA

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&

Gurav Dipak Uddhav

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### 1. Introduction:

The recently introduced Goods and Service Tax is undoubtedly the biggest tax reform in the monetary history of India. Goods and Service Tax introduced from 1<sup>st</sup> July 2017 in India. Implementation of Goods and Service Tax leaves behind an inefficient complicated and fragmented indirect tax system. Goods and Service Tax has subsumed a profusion of Central and State indirect taxes to create a single unified market. It is stated to make India a seamless national market, boosting trade and industry and in turn growth rate. Goods and Service Tax is expected to represent a leap forward in creating a much clearer dual Value Added Tax. Common base and common rates across goods and services and across States and between Centre and States will facilitate administration and improve compliance while also rendering manageable the collection of tax on inter State sales. Switching over to Goods and Service Tax is fraught with many problems administrative and technical. However such problems are endemic to any change of revolutionary proportions. It is a new tax shrouded in mystery. Stakeholders, State Government, tax officials, manufacturers, traders, third parties and consumers are apprehensive, anxious and uncertain about its implication. Goods and Service Tax is like an elephant amidst blind men, each holding a part of it and wondering what it is.

### 2. Objectives:

1. To know objectives of Tax Policy
2. To understand concept of GST
3. To study future challenges facing Goods and Service Tax.

### 3. Research Methodology

The present study will concerned with the study of Goods and Service Tax. So the required data for the study will be collected from Secondary Sources. The secondary data necessary for the investigation was collected mainly from the various Government publish sources as well as the Internet. (web sites relating to the study) several Books and magazines.



## Synergetic effects of naturally sourced metal oxides in organic synthesis: a greener approach for the synthesis of pyrano[2,3-*c*]pyrazoles and pyrazolyl-4*H*-chromenes

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**Abstract** A clean and more economic protocol for the synthesis of pyrano[2,3-*c*]pyrazoles and pyrazolyl-4*H*-chromenes has been carried out using bael fruit ash (BFA) as a non-conventional natural catalyst in aqueous condition at ambient temperature. The catalyst was obtained from renewable resources by simple thermal treatment to dry rind of *Aegle marmelos* (Bael) fruit and formation of its active phase was confirmed by AAS, DSC-TGA, XRD, FT-IR, and SEM techniques. The BFA catalyst was found to be a green, highly active, easily biodegradable, and recyclable without loss of activity after the fifth run. The methodology provides an alternative platform to the conventional catalyzed process.

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11164-017-3197-8>) contains supplementary material, which is available to authorized users.

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## RESEARCH ARTICLE

Natural Bio-surfactant for Pseudomulticomponent Synthesis of 2-aryl-1-aryl Methyl-1*H*-benzimidazolesSmita T. Morbale<sup>1</sup>, Sachin K. Shinde<sup>1</sup>, Shashikant A. Damate<sup>1</sup>, Madhukar B. Deshmukh<sup>2</sup> and Suresh S. Patil<sup>1\*</sup><sup>1</sup>Synthetic Research Laboratory, PG Department of Chemistry, PDVP College, Tarapur, India; <sup>2</sup>Department of Chemistry, Shivaji University, Kolhapur, India

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*[BBSA-DBN][HSO<sub>4</sub>]: a novel -SO<sub>3</sub>H  
functionalized Bronsted acidic ionic liquid  
for easy access of quinoxalines*

**Megha U. Patil, Sachinkumar K. Shinde,  
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## RESEARCH ARTICLE

BENTHAM  
SCIENCE

## Natural Bio-surfactant for Pseudomulticomponent Synthesis of 2-Aryl-1-aryl Methyl-1H-benzimidazoles

Smita T. Morbale<sup>1</sup>, Sachin K. Shinde<sup>1</sup>, Shashikant A. Damate<sup>1</sup>, Madhukar B. Deshmukh<sup>2</sup> and Suresh S. Patil<sup>1,\*</sup><sup>1</sup>Synthetic Research Laboratory, PG Department of Chemistry, PDVP College, Tasgaon, India; <sup>2</sup>Department of Chemistry, Shriyaji University, Kolhapur, India

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## RESEARCH ARTICLE

BENTHAM  
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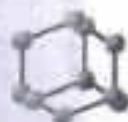
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Smita T. Murbale<sup>1</sup>, Sachin K. Shinde<sup>1</sup>, Shashikant A. Damate<sup>1</sup>, Madhukar B. Deshmukh<sup>2</sup> and Suresh S. Patil<sup>1\*</sup>

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## PAPER



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# Aegle marmelos in heterocyclization: greener, highly efficient, one-pot three-component protocol for the synthesis of highly functionalized 4*H*-benzochromenes and 4*H*-chromenes†

Sachin Shinde, Shashikant Damate, Smita Morbale, Megha Patil and Suresh S. Patil

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## Introduction

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• Multi-component reactions (MCRs) have gained increasing attention for the construction of novel and complex molecular structure because of their environmental-friendly, atom-economy and single-step product formation. This variety can be achieved simply by changing reaction substrate only. For many decades, chemists have been devoting themselves to secure environment by developing new environmental-friendly MCRs for the synthesis of many important biologically active compounds.<sup>2</sup>

In modern organic chemistry, the improvement of reaction efficiency, the avoidance of toxic reagents, the reduction of waste, and the responsible utilization of our resources have

become critical objectives.<sup>3,4</sup> By keeping these ideas in mind, a simple and green approach for the synthesis of 4*H*-benzochromenes and 4*H*-chromenes has been developed. Bael Fruit Extract (BFE) as a catalyst, ethanol as a solvent and room temperature conditions are enough to afford the 4*H*-chromene in nearly quantitative yields. Most important of all, the purification procedure is just followed by filtration, washing and drying, and so the waste can be reduced effectively.

4*H*-Benzochromene and 4*H*-chromene derivatives have received significant attention in organic chemistry due to their biological and pharmaceutical properties such as antimicrobial,<sup>5</sup> antiviral,<sup>6</sup> sex pheromone,<sup>7</sup> anticancer,<sup>8</sup> anti-inflammatory,<sup>9</sup> anti-tubercular,<sup>10</sup> and cancer therapy.<sup>11</sup> Indeed, vegetables and edible fruits are the food resources that are being characterized by natural products, containing chromene moiety in their structure.<sup>12</sup>

Synthesis of 4*H*-benzochromenes has been achieved by condensation of aromatic aldehyde, malononitrile and  $\alpha/\beta$ -naphthols in presence of various acid catalysts such as methanesulphonic acid,<sup>13</sup> TiCl<sub>4</sub>,<sup>14</sup> H<sub>14</sub>[NaP<sub>3</sub>W<sub>10</sub>O<sub>42</sub>],<sup>15</sup> *p*-TSA,<sup>16</sup> as well as basic catalysts such as  $\gamma$ -alumina,<sup>17</sup> Na<sub>2</sub>CO<sub>3</sub>,<sup>18</sup> K<sub>2</sub>CO<sub>3</sub>,<sup>19</sup> piperidine,<sup>20</sup> nano sized MgO<sup>21</sup> and NaOH.<sup>22</sup> This reaction was also reported by employing PTCs such as 1-butyl-3-methylimidazolium hydroxide ([bmim]OH),<sup>23</sup> hexadecyltrimethylammonium bromide (HTMAB),<sup>24</sup> cetyltrimethylammonium bromide (CTAB) coupled with ultrasound,<sup>25</sup> triethylbenzylammonium chloride (TEBA),<sup>26</sup> cetyltrimethylammonium chloride (CTAC),<sup>27</sup> and *N,N*-dimethyl aminoethyl benzyl dimethyl ammonium chloride.<sup>28</sup>

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† Electronic supplementary information (ESI) available: Complete experimental procedures are provided, including preparation of catalyst, general procedure for synthesis of 2-amino-4*H*-chromenes and 2-amino-4*H*-benzochromenes, IR, <sup>1</sup>H NMR, and <sup>13</sup>C NMR of some representative compounds. See DOI: 10.1039/c6ra28779d



## PAPER



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## PAPER



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## *Aegle marmelos* in heterocyclization: greener, highly efficient, one-pot three-component protocol for the synthesis of highly functionalized 4*H*-benzochromenes and 4*H*-chromenes†

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## Trifluoroethanol and liquid-assisted grinding method: a green catalytic access for multicomponent synthesis

Trushant Lohar<sup>1</sup> · Ananda Mane<sup>1</sup> · Siddharth Kamat<sup>1</sup> · Arjun Kumbhar<sup>1</sup> · Rajashri Salunkhe<sup>1</sup>

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**Abstract** An efficient and versatile mechanochemical route for the synthesis of chromene and isoindolo[2,1-*a*]quinazoline scaffolds has been developed via a simple mortar and pestle liquid-assisted grinding method using 2,2,2-trifluoroethanol (TFE) as an efficient catalyst. The present protocol is very efficient as it offers reaction in mild reaction condition, cleaner reaction profiles, effortless work-up step with excellent purity, and high yield of the desired products with short reaction time.

**Keywords** Liquid assisted grinding · Trifluoroethanol · Chromenes · Isoindolo[2,1-*a*]quinazolines

### Introduction

Over the last few years, fluorinated compounds have attracted great interest in organic synthesis due to their favorable properties like low boiling points and high melting points compared with their non-fluorinated counterparts. In addition, they have high polarity and strong hydrogen bond donation which increase their ability to solvate water molecules [1]. Special attention has been paid to 2,2,2-trifluoroethanol (TFE) as its strong electron-withdrawing CF<sub>3</sub> group affects the course of reactions when it is used as a solvent. As TFE is acting as a Brønsted acid, the organic reactions in TFE are generally selective and carried out without using any catalysts.

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11164-017-3206-y>) contains supplementary material, which is available to authorized users.

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## Research Paper

## Palladium supported ionic liquid phase catalyst (Pd@SILP-PS) for room temperature Suzuki-Miyaura cross-coupling reaction

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## ABSTRACT

A new Pd-SILP based on amino functionalized imidazolium ionic liquid immobilized on Merrifield resin (Pd@SILP-PS) has been synthesized. The catalyst was characterized by different techniques like FT-IR, SEM-EDS, TEM, TGA-DTA and XPS. The catalyst has shown to be highly active in Suzuki-Miyaura cross-coupling reaction of various aryl halides and aryl boronic acids in ethanol at room temperature. The activity of catalyst and the nature of product were highly dependent on the type of the solvent used, as well as the substituents present on the aryl halides. The protic polar solvent ethanol gave desired cross-coupling product in good to excellent yields at room temperature. However the aprotic polar solvent THF gave homocoupling product. The catalyst showed at least five times recyclability without a decrease in product yield.

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## 1. Introduction

The past few decades have seen rapid development in the area of Pd catalyzed cross-coupling reactions [1,2]. Especially Suzuki-Miyaura cross-coupling reaction [3,4] has been studied more widely owing to the importance of this reaction in the synthesis of many natural products, pharmaceutical intermediates and organic polymers [5]. As compared to analogous cross-coupling reactions, the Suzuki-Miyaura reaction can be carried out under mild reaction conditions. This reaction has been widely catalyzed by homogeneous catalysts as these catalysts are highly active [6]. However, the high price of Pd metal and its possible contamination in the final product still overwhelm its use in large-scale applications. To avoid these problems, air-stable, recyclable heterogeneous catalysts based on suitable solid supports like carbon, biopolymer, silica, zeolites, organic polymers have been developed [7–11].

In recent years, ionic liquids (ILs) have been engrossed considerable interest in transition metal catalysis as a green, non-volatile, recoverable and recyclable reaction media for biphasic reactions, because of the ease of product and catalyst separation [12,13]. There are many reports cited in literature in which IL itself acts as a ligand in the form of 'N-Heterocyclic Carbene' (NHC) complexes [14].

Nevertheless, due to the substantial amount of ILs are required for biphasic separation and its high preparation cost, many of these ILs are used in very small amounts, in the form of 'Supported Ionic Liquid Phase' (SILP).

Though the 'Supported Liquid Phase Catalysts (SLPC)' have been reported previously [15], in recent years there is an upsurge in the application of SILP catalysts in many catalytic reactions [16,17]. The concept of SILP involves a formation of thin films of ILs containing metal catalysts, on the surface of a suitable solid support. This system leads to a significant decrease in the amount of IL as well as it increases the contact area between the two phases that enhances efficiency of the catalysts. The SILP concept also allows ease of catalyst separation and recycling. This ability of SILP catalysts can permit its potential use mainly in fixed-bed reactors [18]. In recent years only few numbers of Pd-SILP catalysts based on organic polymers and silica have been reported for various cross-coupling reactions [19–26]. While only one report mentioned by Gruttadauria et al. [27] for Pd supported on multi-layered, covalently supported ionic liquid phase (mic-SILP) catalyst for the Suzuki-Miyaura cross-coupling reaction in aqueous medium.

Recently we reported applications of amine functionalized ligands [28] supported on silica [29] as well as alumina-cellulose composite [30] for phosphine-free Suzuki-Miyaura cross-coupling reaction. In this link, we proposed to design highly efficient Pd supported on amine functioned SILP based on Merrifield resin. The conceptual picture of catalyst is represented in Fig. 1. We specu-

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## Review

## Functionalized nitrogen ligands for palladium catalyzed cross-coupling reactions (part I)



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## ABSTRACT

The Pd catalyzed cross coupling reactions of compounds containing C-X bonds (C-I, C-Br, C-Cl, C-N, C-O and C-H) with a variety of nucleophiles is one of the most efficient and reliable approaches for the construction of new C-C and C-heteroatom bonds. In recent years, great achievements have been made in this field, and many powerful catalytic systems based on ligand design have been developed. This comprehensive review covers recent effort made in the constructions of C-C and C-heteroatom bonds through Pd complexes based on the N ligands. We divided this topic into two parts. In present part we have focused on the applications of the ligands containing only N as a donor atom. In the next part we will cover all ligands and complexes containing N in combination with C, P, O and S as a donor atom.

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## 1. Introduction

Since the early 20th century the transition metal catalyzed reactions have been indispensable to all facets of modern chemical synthesis [1]. It is difficult to imagine the reactivity and selectivity of all known homogeneous metal catalysts. But from the last few decades, advances in ligand design bridged this divide, such that today many of the C-C and C-heteroatom bond forming reactions have been well understood. Over the past 50 years a great number of contributions have emerged from a wide range research groups with vast improvements on the Pd catalyzed cross coupling reactions [2].

Special advances have been made in the way of reaction scope including:

- (1) The use of different substrates like aryl halides, triflates, tosylates, mesylates, diazonium salts and many more.
- (2) Direct activation of C-H bonds selectively by proper selection of functional groups containing N as a donor atom (directing group).
- (3) The ability to conduct the coupling reactions at very low metal catalyst loadings.
- (4) Reactions at comparatively low temperatures.
- (5) Use of environmentally benign solvents like water or mixture of solvents containing water.
- (6) Easily recoverable and recyclable catalysts.
- (7) The procedures that utilize "ligand-free" conditions and

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## Transition metal-free Suzuki type cross-coupling reaction for the synthesis of dissymmetric ketones



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### ABSTRACT

A simple, efficient and metal-free route for the synthesis of dissymmetric ketones through Suzuki type cross-coupling reaction has been established. This strategy signifies an attractive, cost-effective and operationally convenient tool for the synthesis of a wide range of dissymmetric ketones. Although conventional routes for the synthesis of ketones have been widely used, the potential challenge with these methods is functional group tolerance. The reported metal-free method represents a reaction with moderate functional group tolerance. The procedure is operationally convenient and shows broad substrate scope with good to excellent product yields.

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In the last few decades, a massive effort has been devoted to the advancement of transition metal catalyzed cross-coupling reactions for the synthesis of many important bioactive compounds using a diverse range of electrophiles and nucleophiles.<sup>1</sup> Such a transition metal catalyzed cross-coupling reactions have endorsed chemists to construct complex molecular frameworks containing specific functional groups covering total synthesis of natural products, active pharmaceutical ingredients as well as structurally important compounds.<sup>2</sup> These reactions are considered as the most reliable, reproducible, and straight forward synthetic tool that enables a wide number of applications in chemical industries. Recently, different research groups circumvent the transition metal catalysts from many organic transformations,<sup>3</sup> as most of the transition metal catalysts are expensive, require ligands and are toxic. Additionally, removal of even a trace amount of metal from the final product is quite challenging, costly and crucial, especially in the pharmaceutical active compounds.

The dissymmetric ketones are exists as a common structural motif in many natural products and pharmaceutical important compounds<sup>4</sup> and have been synthesized from various routes (Fig. 1). Friedel-Crafts acylation reaction (Fig. 1, pathway 1) is one of the fundamental methods used for the synthesis of such dissymmetric ketones,<sup>5</sup> nevertheless this reaction have many inherent limitations. Recently, Pd catalyzed Suzuki type acylation (Fig. 1, pathway 2) of organoboranes by carboxylic acid derivatives

such as acid chlorides, esters, anhydrides and dimethyl dicarbonates<sup>6</sup> have been reported as one of the alternatives to classical Friedel-Crafts acylation. In addition the dissymmetric ketones are also prepared by Pd catalyzed carbonylation (Fig. 1, pathway 3) of aryl halides with carbon monoxide in the presence of organometallic reagents.<sup>7</sup> Recently, transition-metal-catalyzed ortho C–H acylation has been performed as an efficient and direct method for synthesis of aryl ketones.<sup>8</sup>

In continuation of our interest in the development of environmentally benign reaction conditions for organic transformation,<sup>9</sup> we report here metal-free synthesis of dissymmetric ketones through Suzuki type cross-coupling reaction. Our goal was to carry out the coupling of benzoyl chlorides with arylboronic acids by metal-free, base induced conversions, that otherwise would not be possible without Lewis acid (Fig. 1, pathway 4). By using this method we can totally bypass the transition metals as well as Lewis acids. An additional feature of this methodology is, it permits to prepare ketones which contains acid sensitive functional groups, which otherwise not conceivable by Friedel-Crafts reaction conditions.

For the development of metal-free acetylation, 4-nitrobenzoyl chloride and phenylboronic acid were used as a model reaction partners. Initially, the effect of nature and the amount of bases were studied in toluene under heating (100 °C) and the results are shown in Table 1.

Initially, when the model reaction was carried out without base, no product was detected even after extended reaction time to 6 h, indicating that role of base is vital (Table 1, entry 1). The base plays crucial role in activation of phenyl boronic acid similar to that in Pd

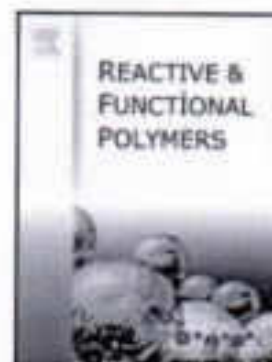
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## Accepted Manuscript

Facile Suzuki-Miyaura cross coupling using ferrocene tethered N-heterocyclic carbene-Pd complex anchored on cellulose

Dolly Kale, Gajanan Rashinkar, Arjun Kumbhar, Rajashri Salunkhe



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## Real and Complex Permeability of Ni- Zn-Ti Ferrite

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### Abstract

Titanium substituted nickel zinc ferrite was prepared by standard ceramic technique. The prepared ferrites were presintered at 750°C and powdering of the formed product was final sintering at 1200°C. Powder x-ray diffraction study shows the formation of single phase spinel structure. The frequency variation of real part of initial permeability ( $\mu'$ ) and complex part of initial permeability ( $\mu''$ ) were studied by using Hioki LCR-Q meter. The frequency variation of initial permeability clearly indicates the low frequency dispersion which may be attributed to domain wall movements. The compositional variation of permeability of titanium substituted nickel zinc ferrite decreases with increase of titanium substitution.

**Keywords:** Real permeability, ceramic method, x-ray diffraction

### 1. INTRODUCTION

Ni-Zn ferrite are useful for making antenna rod, high frequency inductors, transformers, cores and read write heads for high speed digital tape or disc recording. Despite the fact that Ni - Zn ferrites are very good microwave absorbers. The magnetic properties of ferrites depend upon chemical compositions, porosity, grain size, and microstructure. Parvatheeswara et al [1] synthesized Ni-Zn-In-Ti ferrite nanoparticles using classical ceramic method. Also they have studied complex permeability and power loss measurements of Ni-Zn-In-Ti ferrites. They have showed



## Dielectric Behavior of Dysprosium Substituted Magnesium Ferrite

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### Abstract

Dysprosium substituted Magnesium ferrite were successfully prepared by chemical combustion method. The as synthesized powder was presintered in air at 600 °C for 1hr and finally sintered at 950 °C for 1hr. From X-ray powder diffraction pattern of  $MgDy_{0.25}Fe_{1.75}O_4$ , confirmed single phase structure. Crystalline size of synthesized material was obtained from X-ray powder diffraction (311) peak, it is found to be 46.36nm. The frequency and temperature variation of dielectric constant, dielectric loss and loss tangent were determined by using instrument Hioki LCR meter. The frequency variation of dielectric constant shows normal dielectric properties of ferrites. The loss tangent with frequency shows similar properties as dielectric constant.



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Combustion route,  
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XRD.

### Introduction

Nanocrystalline ferrites have very good electric, dielectric and magnetic properties and number of applications from radio frequencies to microwave frequencies. The dielectric constant, dielectric loss, loss tangent and resistivity of ferrites are necessary to know for high frequency electrical applications<sup>1</sup>. The properties of electrical insulating materials are depends upon preparation method, chemical composition and type of additives<sup>2</sup>. Magnesium ferrite is a soft magnetic n - type semiconducting

material, have high Curie temperature, high resistivity and environmental stability; hence it is most suitable for sensing applications<sup>3</sup>. Magnesium ferrites are widely used as catalysts have many applications in adsorption sensors, electric and magnetic technologies<sup>4,5</sup>.

Rare earth element substituted into spinel type structure of ferrite, which can modify electrical as well as magnetic parameters of ferrites<sup>6</sup>. Rare earth doped ferrite material have high resistivity

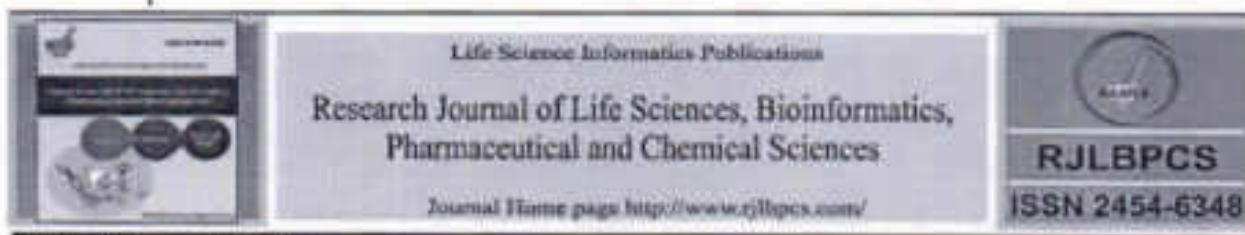
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To Link to this Article:





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**Original Research Article****Detection of seed borne mycoflora from different categories of Chickpea (*Cicer arietinum*) L.****Padmaja M. Chougule<sup>\*</sup>, Yogesh S. Andoji<sup>1</sup>, Shivaji S. Kamble<sup>2</sup>**

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**Abstract**

During present investigation Seed borne mycoflora of chickpea was studied by using blotter and agar plate methods as recommended by ISTA. Total 15 fungi were recorded from different categories of seeds. Among all categories of seeds, injured seeds of chickpea showed maximum seed mycoflora.

**Key words:** Chickpea, seed mycoflora, injured seeds.

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**INTRODUCTION**

Chickpea (*Cicer arietinum*) L. is important pulse food crop in India. It belongs to Fabaceae. It is native of Turkey. Nutritionally, it contains 17.21% proteins, 62% carbohydrates, fats. It has rich source of calcium, iron and vitamin C (Green stage) and vitamin B. Leaves contains malic acid and citric acid important for stomach ailments and important for blood purification.

India ranks first in the world in terms of the acreage cultivate with this crop (7.49 mha) and the annual yield of about 6.33 mnts (Anon.,2007). The crop is affected by many fungal and bacterial pathogens but black root rot of chickpea caused by *Fusarium solani* is very serious fungal disease in India which causes 70 to 80 percent yield loss in field (Nene and Reddy 1987).

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**HISTOPATHOLOGY OF MACROPHOMINA STEM CANKER DISEASE IN PIGEONPEA  
(CAJANUS CAJAN L.)**

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**ABSTRACT**

*Macrophomina phaseolina*, causal agent of stem canker disease has recently emerged as an agriculturally important plant pathogen. *Macrophomina* stem canker disease (MSD), caused by *Macrophomina phaseolina* is a potentially serious disease in pigeonpea that occurs when reaches physiological maturity i.e., during flowering. The fungus incites necrotic lesions on stem and girdles the plant at the base leading to premature flower drop leading to complete wilting and finally death of the entire plant. The mechanisms of infection remain to be fully elucidated. The present study investigated histopathology of MSD caused by *M. phaseolina* in pigeonpea seed and seedlings using light microscopy. Pigeonpea variety 'Bahar' was used in this study. Histopathological sections of seed, stem, root, and leaves were prepared and stained with safranin and trypan blue. Histopathology of the infected plant parts showed the presence of intercellular mycelia and microsclerotia in the cortex and vascular tissues. The germ tube colonized the plant with growth of seedlings following seed coat, cotyledon, stem, root and leaves. According to the results, the pathogen can penetrate and invade the seeds within 24 h post inoculation.

**Keywords:** Histopathology, *Macrophomina phaseolina*, pigeonpea, stem canker.

**INTRODUCTION**

Pigeonpea (*Cajanus cajan* L.) is an important grain legume crop of rainfed agriculture in the semi-arid tropics. Besides Indian sub-continent, it is widely grown in Eastern Africa and Central America. It is not only an important source of protein, but also plays an important role in atmospheric nitrogen fixation into soil. It is reported that a long duration pigeonpea cropping could fix up to 200 kg N /ha and the residual effect for next crop remains 40 kg N/ha.

Pigeonpea is affected by more than 100 diseases but only few cause economic losses. Recently, *Macrophomina phaseolina* (Tassi) Goid has emerged as one of the important pathogen of different agricultural crops including pigeonpea [Kaur et al., 2012a]. *M. phaseolina* is an anamorphic fungus in the ascomycete family Botryosphaeriaceae (Crous et al., 2006). The fungus has a wide geographical distribution from tropics to subtropics ranging from arid to semi-arid climates in

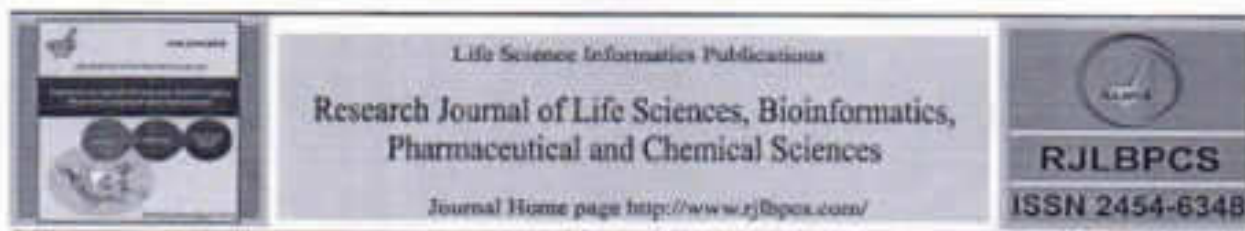
Africa, Asia, Europe, and north and South America (Diourte et al., 1995; Wrather et al., 2001). It has a wide host range, infecting about 500 cultivated and wild plant species from more than 100 families around the world (Mihail & Taylor, 1995). *Macrophomina* is primarily soil and seed-borne fungal pathogen that incites the disease by producing microsclerotia/pycnidia (Pun et al., 1998). *Macrophomina* exhibits high morphological, pathogenic, physiological and genetic variability (Jana et al., 2005; Kaur et al., 2013). Stem canker disease has become one of the most devastating diseases of pigeonpea (*Cajanus cajan* [L.]). The disease incidence and severity of up to 70 and 55% were reported in a survey from regions of eastern Uttar Pradesh in India (Kaur et al., 2012b). *Macrophomina* stem canker is a sporadic disease and causes dry root rot, stem canker, and stalk rot or charcoal rot of plant. The symptoms of the disease appear on the stem as the charcoal like appearance which starts from the base and proceeds upward towards the branches. Under conditions of high temperature and water stress, the disease symptoms are more severe (Short et al., 1980). Although, disease

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**Original Research Article****Isolation and identification of house dust micro-algae from sangli district****Padmaja M. Chougule\*, Yogesh S. Andoji<sup>1</sup>**

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**Abstract**

During present investigation 50 dust samples were collected from houses of those patients who suffers from nasobronchial allergy. Dust samples were collected with the help of vaccum cleaner and packed in sterilized polythene bags and cultured on Bolds basal medium (BBM) ammended with agar powder. The result showed that the members of Cyanophyceae are predominant on all micro-algae, followed by Chlorophyceae and Bacillariophyceae. *Aphanothece nidulans* were most dominant algal species over all which observed in 32 dust samples and causes several respiratory disorders to immuno depressed peoples.

**Keywords-** House dust samples, micro-algae, immuno depressed peoples.

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**INTRODUCTION**

House dust is mixture of diver's components that can cause different type of allergies. Micro-algae is important bio-component among that. The air borne microalgae constitute a source of respiratory hypersensitivity reaction in immuno depressed peoples (Schwimmer and schwimmer,1968). Except few researchers, very less attainment has been paid towards house dust micro-algae. Berstein and safferman (1970) isolated viable 41 algal members from home dust. Lustgraff (1979) has studied the seasonal variation and frequency distribution of micro

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# IJDR

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## Full Length Research Article

### ANTIFUNGAL ACTIVITY OF SOME COMMON MEDICINAL PLANT EXTRACTS AGAINST SOIL BORNE PHYTOPATHOGENIC FUNGI *FUSARIUM OXYSPORUM* CAUSING WILT OF TOMATO

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##### Key Words:

Antifungal Activity,  
Biopesticides,  
Wilt of Tomato,  
*Fusarium Oxysporum*.

#### ABSTRACT

Biopesticides are mostly used to control fungal plant diseases because of their ecofriendly nature and their cost effectiveness. The present study focused on antifungal activity of solvent based plant extracts of common medicinal plants *Azadirachta indica*, *Tinospora cordifolia*, *Ocimum sanctum*, *Justicia adhausa*, *Catharanthus roseus*, *Aegle marmelos*, *Aloe barbadensis*, *Tithonia diversifolia*, *Hyptis suaveolens* and *Pongamia pinnata* were observed against soil borne phytopathogenic fungus *Fusarium oxysporum* by modified poisoned food technique. The methanol, ethyl acetate, benzene, acetone and chloroform extracts were evaluated for present study. The extracts of *Azadirachta indica* and *Ocimum sanctum* were most effective against *Fusarium oxysporum*. The present investigation suggests that acetone and chloroform extracts of *Azadirachta indica* and methanol extract of *Ocimum sanctum* acts as strong biopesticides and completely inhibit the growth of pathogen. This study reveals that these extracts contains amazing fungicidal properties and may be used as botanical biopesticides.

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#### INTRODUCTION

A major reason for the application of medicinal plants is their ability to control pests and pathogens in their surrounding environment. So, they could be effective source of antimicrobial agents and their identification is very important to produce ecofriendly and cost effective pesticides. Biopesticides are gaining growing interest because of their ecofriendly attributes (Dwivedi and Singh, 1998; Karnwal and Singh, 2006). Phytopathogenic fungi are the chief infectious agents which causes malfunctioning during developmental stages and also in post-harvest. Now a days, infection due to fungal pathogens has become more common incidence. Tomato (*Lycopersicon esculentum* Mill) is perennial herb and belongs to family Solanaceae. Tomato is the second most important vegetable crop next to potato and generally used in soups and stews. *Fusarium* wilt is most destructing disease of tomato (Singh *et al.*; 1980). The disease is seed and soil born shows yellowing and wilting symptoms. According to Sherf and Macnab, 1986 *Fusarium oxysporum* causes root rot and wilt of tomato. Fungal species of the genera *Fusarium* and *Aspergillus* are major plant pathogens world wide (Gafoor and Khan, 1976; Mirza and Kureshi, 1978).

*Fusarium* is very common fungal pathogen which cause wilt and rot symptom in plants. Controlling *Fusarium* wilt is very difficult because it spreads so fast and it is estimated that nearly 80% of the crop damage worldwide is caused due to this busy fungi (Agrios, 2000). The most effective method of protecting the plants from fungal pathogens is the application of fungicides. The continuous application of any fungicide may lead to develop resistance in target pathogen and such resistance is acquired by the pathogen. There are so many fungicides available in market which are non-biodegradable and they accumulate in the soil which causes lethal effects on human and other organisms in surrounding environment through food chain. Therefore, there is need to use some ecofriendly cost effective substitutes for management of plant diseases. Natural products are very effective solution to the environmental problems caused by the synthetic fungicides and many investigators are trying to know the effective natural products to replace the synthetic pesticides (Kim *et al.*, 2005). The use of botanical biopesticides for the control of disease in plants is accepted as an substitute source to synthetic pesticides due to their lower negative impacts on the surrounding environment. The botanical biofungicides are cheap, easily available, non toxic and biodegradable (Singh *et al.*, 1986; Dubey, 1991; Alam *et al.*, 2002).

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## ASSESSING WATER BASED RECREATIONAL ACTIVITIES TO ECOTOURISM POTENTIALS IN DROUGHT PRONE REGION OF SANGLI DISTRICT, MAHARASHTRA

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### Abstract:

Reservoirs demonstrate a fundamental home to biodiversity and attractive features to recreationists in many villages, towns. They prevent potentials for water dependent recreational activities like bathing, washing clothes, automobiles, traditional fishing and some ceremonial functions. Reservoirs are unique aquatic ecosystem. The ecosystem services provided by the lake include recreational ecotourism which is widely practiced by local community. However there are challenges of degradation at various adverse levels due to pollution and mismanagement. The main objective was to examine trends of water based activities in relation to ecotourism. This paper presents discussion on observed scenarios that characterise water based recreational activities for appreciating relationship that enhance or hamper ecotourism development. Interestingly, local people who engage in activities are not aware that are actually local eco-tourists. Yet a greater percentage of wastes are generated and disposed in the waters and these activities might not have sufficient economic gains.

**Key words:** Reservoirs, ecotourism, anthropogenic activities.

### Introduction:

Sangli district is situated between 16.46 to 17.1° N and 73.43 to 75.0° E latitudes. The total geographical area of the district is 8601.5 sq. km. Geographically, Sangli district is divided into two zones viz. area adjoining Krishna river basin and eastern drought prone area away from basin with low rainfall and typical arid geographical set up. The overall water level is up to 6 meters down but varies according to geographical area, strata and location of the particular village. The eastern part of the district shows low fertile soil because of natural set up where man-made reservoirs have become source of irrigation besides the well. This region includes Khanapur, Atpadi, Kavathe-Mahankal, Jath and eastern part of Targaon tahsil. This eastern region shows scarcity of water leading to general dry climate. The present work is restricted for the study of man-made reservoirs of the drought prone eastern part of the Sangli district.

All reservoirs (major and minor) are surveyed and total six reservoirs are chosen for the study as a representative of each tahsil. They are 1) Bhambarde and 2) Lengre from Khanapur tahsil, 3) Atpadi reservoir from Atpadi tahsil, 4) Sidhewadi from of Targaon tahsil, 5) Borgaon reservoir from Kavathe-Mahankal tahsil and 6) Bimal reservoir from Jath tahsil. From each tahsil single reservoir is selected however, from Khanapur tahsil two water bodies are selected. It was observed during survey that Bhambarde and Lengre are two big reservoirs of

this tahsil having water throughout the year. Initially it was observed that fruit crops like import quality grapes, sugarcane are cultivated by direct or indirect use of these water resources. Therefore, to know the details about agricultural productivity attempt is made for two water bodies from Khanapur tahsil. These minor and medium reservoirs store rain water received from adjoining areas through smaller channels. It is being utilized for drinking and irrigation purposes through scheme. These reservoirs are mainly constructed for irrigation purpose. Irrigation is an age old art as old as human utilization. The fishing activity is undertaken by the fishermen community and local inhabitants of adjoining villages have become the source of an additional income. Thus, increasing human activities over the recent past years imposing a greater stress on this ecosystem. It is well known that almost all human activities change the quality of water reservoirs. The causative factors responsible for degradation water quality need to be evaluated so as to take proper steps before the situation becomes uncontrollable.

### Material and Methods:

Six reservoirs were visited monthly for the period of two consecutive years (August 2014 to July 2016). Three sampling sites for each reservoir were selected for monthly analysis. The water samples were collected approximately 10-15 meters from border line of each wetland. Therefore, sampling sites were constant throughout the annum. Water




*Phytosociology OF DODDANALA RESERVOIR of Sangli District, Maharashtra (India)*
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**ABSTRACT:**

The wetlands are important and suitable habitats for variety of animals, birds and many aquatic plants, which form a typical food web. They play an important role in providing food to fish and other aquatic animals; provide support, shelter to algae and habitat to some animals, important in cycling of nutrients in the water body. A total number of 07 macrophytes were reported from Doddanala reservoir out of them 6 species of emergent and one was of submerged type. The phytoplankton play an important role as of primary producers. The Chlorophyceae is dominant group represented by 16 genera and 22 species where, Cyanophyceae showed 7 genera and 11 species Bacillariophyceae recorded with 4 genera and 5 species. Euglenophyceae, with only *Euglena acus*. Dinophyceae recorded with 4 species of 2 genera.

The reservoir is also secondarily being used for capture fishery. Important major carps, common carp, Chinese carp fish and one local species occurred in this reservoir.

17 species of aquatic birds were reported in the vicinity of Doddanala reservoir. Attempts have been made to observe the sociology of macrophytes, phytoplankton, fish and bird diversity to obtain the baseline data from June 2013 to May 2015.

**Key Words:** Phytosociology, wetland, Doddanala reservoir, Sangli district, macrophytes, Phytoplankton, fishes and birds.

**INTRODUCTION:**

Aquatic biodiversity has a lot of aesthetic and economic value and is largely responsible for maintaining and supporting overall environmental health of that respective region and ecosystem. The wetlands are suitable habitats for variety of animals, birds and many aquatic plant forms, which form a typical food web and all responsible for several biological products. Patil Alaka (2014) studied biodiversity of Borgaon Wetland of Maharashtra.

Most of the area of the tahsil is hard, rocky with small hills and bare plateaus of several kilometers with xeric habitat. The annual rainfall is also scanty since last many years. The average annual rainfall is 501 mm. The agriculture is either rain-fed or well water irrigated. Since last few years the numbers of the bore wells are tremendously increased for agriculture and drinking water, the under ground water table has considerably decreased. All these conditions are increased day by day and the importance of man-made reservoirs in the tahsil.

Attempts are made to collect the information and update the biological data of Doddanala reservoir as untouched water body in respect to macrophytes, phytoplankton, fishes and birds which will be of use in studying and conserving the fresh water resources of our country.

The Doddanala is small village of Jath and 145 km away from district place. In 1977-80

Irrigation Department has constructed earthen dam riveted with stones. The water is used for irrigation also for washing, bathing and fishing activities. The reservoir is much influenced by human activities.

**MATERIALS AND METHODS:****STUDY AREA:**

Southern Maharashtra includes Sangli, Satara and Kolhapur districts. Out of these three districts, Sangli district is one of the most important district as far as agricultural development is concerned. Sangli district is situated between 16.46 to 17.1° N and 73.43 to 75.0° E latitudes.

Geographically, Sangli district diversified into two zones viz. area adjoining Krishna river basin and eastern drought prone area away from basin with low rainfall and typical arid geographical set up. The overall water level is up to 6 to 7 meters down but varies according to geographical area, strata and location of the particular village. The eastern part of the district shows low fertile soil because of natural set up where man-made reservoirs have become source of irrigation besides the well.

Several limnological studies have been carried out in this region. Some among these are of Hujare (2005), Goel et al. (1988) and Ehosale et al. (1994). Most of the studies were carried out in water bodies of urban area. Sustainable development is only possible with proper management of wetlands.





## LITERARY TOURISM: A GLOBALLY DEVELOPING GENRE

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### Abstract

Tourism implies a more purposeful journey, it is travel for recreational, leisure or business purpose. There are various types of tourism e.g. Educational, Medical, Agricultural, Environmental, Adventure, Sports, Historical, Management, Heritage, Ecological, Religious and Literary etc. Nowadays 'Literary Tourism' is mostly discussed among the writers, poets, critics, students and readers. It is a type of cultural tourism. It deals with places, events of the fictional texts and lives of their authors. Visit their homes and their graves also. It is a new type of secular pilgrimage. Dr. Mukharaj Paul's travelogue titled 'In Shakespeare's England' is a literary tourist guide for the lovers of English literature in which we find vivid description of Oxford and Cambridge University, Stratford, Shakespeare's birthplace, Lake District, Canterbury etc. The sites like John Thorton road, Great gate houses where Rudyard Kipling stayed are also frequently visited by the tourist of overseas. Annual literary festival of Jaipur is of great importance for the lovers of literature. Novel literary spaces exist in the form of the festival. Ranesh Mishra's *Shakespeare in Business* a travelogue to Marathi in his experiences with great South Indian writers. 'Thripur' a novel in Marathi literature by Vidwan Paul is the account of his frequent visits to Portugal city in Europe. Thus literary tourism is developing as world-wide genre.

### Introduction:

The terms tourism and travel are sometimes used interchangeably. Tourism implies a more purposeful journey. It is travel for recreational, leisure or business purpose. It has become a popular global leisure activity. The word 'tour' is derived from Latin 'turnare' and the Greek 'turnos' meaning, 'to lethe or circle', the movement around a central point or axis. This meaning changed in modern English to represent 'one's tour'. A circle represents a string points, which ultimately return back to its beginning. There like a circle, a tour represents a journey that is a round trip, i.e. the act of leaving and then returning to the original starting point, and therefore one who takes such a journey can be called a tourist. In this way 'Tourism is temporary, short term movement of people to destination outside the places where they normally live and work and their activities during the stay at each destination. It includes movements for all purposes'. This definition of tourism is made by Tourism Society of England in 1978. In 1981 the International Association of Scientific Expert in Tourism defined tourism in terms of particular activities selected by choice and undertaken outside the home.

There are various types of tourism e.g. Educational, Medical, Agricultural, Environmental, Adventure, Sports, Historical, Management, Heritage, Ecological, Religious and Literary etc. There are essential requirements for tourism. They are time, money, mobility and motivation.

Nowadays 'Literary Tourism' is mostly discussed among the writers, poets, critics and

readers all over the world of various languages spoken by them. Literary tourism is a type of cultural tourism. It deals with places and events from fictional texts as well as the lives of their authors. It includes a fictional character, visit to a place associated with a novel or novelist, such as their home, or visiting poet's grave. According to various scholars and critics literary tourism is a contemporary kind of secular pilgrimage. There is also long distance walking routes associated with writers, such as Thomas Hardy Way. Thomas Hardy (1840-1928), 19<sup>th</sup> century novelist's fictional work is considered as into 'Wessex Novels'. He immortalized his native Wessex by giving a landscape of a beautiful panorama of places, people, history, customs, conventions, and superstitions etc. Literary tourists are specifically interested in how places have influenced writing and at the same time how writing has created place. In order to become a literary tourist we must have books and we should develop imaginative mindset. There are various literary guides, maps, tours to help the tourist on his or her way. There are also many museums associated with writer's both or literary career, and their home also.

Generally the most literary tourism is focused on famous works, most modern works. They are written to specifically promote tourism are called tourism schemes. Modern tourism fiction can include travel guides within the story showing readers how to visit the real places in the fictional tales.

The author Mr. Dr. Mukharaj Paul wrote a travelogue titled as 'In Shakespeare's England' - Dr. Paul, being a professor of English literature visited England as a journey into the literary tourism. Dr. Paul's encounter with England is reminder for the generations



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८. कर चुकवोगिरीचे प्रमाण कमी होईल.  
९. जीएसटी करामुळे भारतीयांची एकसाथ बाजारपेठ अशी प्रतिमा निर्माण होईल.  
१०. जीएसटी करामुळे प्रादेशिक असमतोल कमी होईल.  
सारांश

वस्तु व सेवा कर प्रणालीमुळे व्यवसाय वृद्धी होण्यास मदत होईल. तसेच हा कर ज्या राज्यात वस्तुची विक्री होणार आहे. त्या राज्याला कर मिळणार असल्याने अनेक राज्यांच्या महमुला मध्ये वाड होणार आहे. तसेच संपूर्ण देशात एकच अप्रत्यक्ष कर पध्दती राहणार आहे. या करामुळे ग्राहकांना बहसंख्य वस्तु व सेवा स्वस्त मिळतील. सरकारला कर प्रशासन करणे सोपे होणार आहे. कारण ही कर पध्दती ऑनलाईन पध्दतीने राबवली जाणार आहे त्यामुळे कर चुकवोगिरी कमी होईल. एकंदरीत ग्राहक, उद्योजक व सरकार अशा सर्वांच्या दृष्टिने वस्तु व सेवा कर पध्दती लाभदायक ठरेल.

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२. योजना मासिक, ऑगस्ट २०१७
३. उद्योजक मासिक, ऑगस्ट २०१७
४. स्पर्धा परीक्षा मासिक, जून २०१७



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## Financial Inclusive Development and Village Panchayats: A Micro Study

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### Introduction

In India, the inclusive approach is not a new concept as Indian development strategies relied on the socialistic pattern of society through economic growth with self reliance, social justice and alleviation of poverty. However, in 2007, India moved to a new strategy focusing on higher economic growth, making it more inclusive. As the economy achieved 5 percent growth rate per annum, the policy makers were anxious about the inclusive growth. As a result, the primary objective of the 11<sup>th</sup> Five Year Plan was to achieve inclusive growth with development. The Indian economy has entered into the 11<sup>th</sup> Plan period with an impressive record of economic growth at the end of the 10<sup>th</sup> Plan. A major weakness of the economy is that the growth is not sufficiently inclusive because it does not cover many groups. Gender inequality persists in India and has an adverse impact on women. The percentage of people living below the poverty line has decreased but the rate of decline in poverty was at a slower pace than the GDP growth rate. Besides, human development indicators such as literacy, education, health, maternal and infant mortality rates have shown steady improvement but with sluggish rates. The present research papers focus on role of village panchayats in the economical inclusive development special reference to Panhala Taluka of Kolhapur district.



## 2. VILLAGE PANCHAYATS AND INCLUSIVE DEVELOPMENT IN PANHALA TALUKA OF KOLHAPUR DISTRICT

Dr. Bandu Jayshing Kadam<sup>1</sup>

### **Abstract**

*In India, the inclusive approach is not a new concept as Indian development strategies relied on the socialistic pattern of society through economic growth with self-reliance, social justice and alleviation of poverty. However, in 2007, India moved to a new strategy focusing on higher economic growth, making it more inclusive. As the economy achieved 5 percent growth rate per annum, the policy makers were anxious about the inclusive growth. As a result, the primary objective of the 11<sup>th</sup> Five Year Plan was to achieve inclusive growth with development. The Indian economy has entered into the 11<sup>th</sup> Plan period with an impressive record of economic growth at the end of the 10<sup>th</sup> Plan. A major weakness of the economy is that the growth is not sufficiently inclusive because it does not cover many groups. Gender inequality persists in India and has an adverse impact on women. The percentage of people living below the poverty line has decreased but the rate of decline in poverty was at a slower pace than the GDP growth rate. Besides, human development indicators such as literacy, education, health, maternal and infant mortality rates have shown steady improvement but with sluggish rates. The present research papers focus on role of village panchayats in the economical inclusive development special reference to Panhala Taluka of Kolhapur district.*

**Key words:** Inclusive Development, Human Development, Village Panchayat, Poverty Alleviation

### **I. INTRODUCTION:**

In India, the inclusive approach is not a new concept as Indian development strategies relied on the socialistic pattern of society through economic growth with self-reliance, social justice and alleviation of poverty. However, in 2007, India moved to a new strategy focusing on higher economic growth, making it more inclusive. As the economy achieved 5 percent growth rate per annum, the policy makers were anxious about the inclusive growth. As a result, the primary objective of the 11<sup>th</sup> Five Year Plan was to achieve inclusive growth with development. The Indian economy has entered into the 11<sup>th</sup> Plan period with an impressive record of economic growth at the end of

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## FUTURE OF CO-OPERATIVES IN A GLOBALISED ENVIRONMENT

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### 1. INTRODUCTION

In the prevailing liberalized economic environment it is being recognized that success of co-operative movement is dependent on the attitude, mind set and dedication of co-operative leaders, members and staff engaged in them. Under this framework of globalised environment, the socio-economic conditions of co-operatives have changed significantly. This change in environment is reflected by new technology parameters; cutthroat competition and high expectations of staff for better services, etc. The private sector concentrates on the maximization of 'profits', while the co-operative sector lays emphasis on maximization of the 'welfare' of the members and are guided by seven co-operative principles and value system.

The approach paper for the 11<sup>th</sup> five Year Plan highlights the need to restructure policies to achieve a new vision based on faster, more broad based and inclusive economic growth. The approach paper aims at to keep the Indian economy on a high sustained growth rate of about 10% by the year 2012 along with a target for an annual growth rate of 4% for the agriculture sector.

### 2. GLOBALISATION AND ITS IMPACT

Various studies have shown that under the prevailing globalised environment, socio-economic inequalities have increased among classes and sections of society over a period of years. A study by Asian Development Bank has estimated that rural inequalities as measured

by Gini coefficient have increased in India. From 0.3183 in 1993 to 0.3502 in 2004. This scenario is indeed, disturbing particularly for the co-operative leadership which have all along been advocating for an equitable distribution of rising incomes and wealth among all sections of society. In the context of increasing economic and social inequalities, questions are being asked about globalization at what cost? Here cost implies loss of employment opportunities due to mergers and acquisition of firm and companies and doption of capital intensive technology with a bias for replacement of labour by capital.

### 3. EVOLVING A STRATEGY BY CO-OPERATIVES

Under the prevalling scenario of corporate governance, co-operative leadership has to chalk out an innovative strategy to face the emerging challenges of globalization. At the same time they have to work out a promotional strategy for a faster, broad based and an inclusive growth rate. The broad components of such a strategy could incorporate the following elements:

1. Promotion of professionalism among various tiers of an organization through appropriate education and training programmes;
2. Building up of a strong financial resource base including its capacity for raising financial resources from members and various institutions;
3. Implementation of information technology;
4. Control on unwanted management and transaction costs;
5. Evolving financial and managerial incentives for the employees in the from of promotions, compensation and career advancement;
6. Expansion of the organization within the parameters of legal provisions;
7. Need to bring strong internal control system as also rist management.
8. The co-operatives should not impose income tax on their profit. The co-operative



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## CHALLENGES BEFORE CO- OPERATIVE MOVEMENT AFTER GLOBALIZATION ERA

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\*\*\*\*\*

### INTRODUCTION :-

Co-operation occupies an important place in the Indian economy. Perhaps no other country in the world is the co-operative movement as large and as diverse as it is India. There is almost no sector left untouched by the co-operative movement. The successive Five-year plans looked upon the co-operation movement as the balancing sector between public sector and the private sector. And the success is evident. Almost 50 percent of the total sugar production in India is contributed by sugar co-operatives and over 60 percent of the total fertilizer distribution in the country is handled by the co-operatives. The consumer co-operatives are slowly becoming the backbone of the public distribution system and the marketing co-operatives are handling agriculture produce with an outstanding growth rate. The National Co-operative Development Corporation (NCDC), a statutory body was set up in 1963 by the Union ministry of Civil Supplies and Co-operation, to promote the co-operative movement in India. Further there is the Indian Farmers Fertilizer Co-operative LTD (IFFCO), which has been successful in setting up an effective marketing network in most of the states for selling modern farming technology instead of fertilizers alone. The operations of IFFCO are handled through its more than 30,000 member Co-operative Marketing Federation

(NAFED) has over 5000 marketing societies. These societies operate at the local wholesale market level and handle agricultural produce. Thus the farmers have a market for their produce right at their door-step. A market which assures them reasonable returns and guaranteed payments. In India we find that the states of Maharashtra and Gujarat are Well Developed. Whereas the states of Andhra Pradesh, Rajasthan and Karnataka have shown remarkable progress in the Co-operative movement and there is a vast potential for the development of Co-operative in the remaining states. Co-operatives today are committed to securing an improvement in the quality of life of a vast majority of Indian people.

### DEFINITION OF CO-OPERATIVE MOVEMENT :-

Co-operative movement can be define as a "Voluntary movement of the people, carried out democratically by pooling together their resources or carrying on the given activity, with the purpose of achieving or securing certain benefits or advantage which given to people cannot get individually and with the purpose of promoting certain virtue and values such as self help, mutual help, self reliance and general goods of all."

### HISTORICAL PROFILE OF CO-OPERATIVE MOVEMENT IN INDIA :-

Around the world modern co-operatives have developed for over 200 years. Co-operative institutions exist all over the world providing essential services which would otherwise be unattainable. In many Third World countries, Co-operatives such as credit unions and agricultural organizations have been very successful in helping people to provide for themselves where private and other corporate capitals do not see high profitability. In 90 countries of the world, over 700 million individuals are members of Co-operative institutions. Globally, Co-operatives have been able to elevate its position as a powerful economic model. In some countries they are a sizeable force within the national economy. During the British rule Nicholson a



## वस्तु व सेवा कर (GST) : भारत

प्रा. जालींदर आनंदराव चांदव,

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अर्थशास्त्र विभाग,

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तासगाव.

### १.१. प्रास्ताविक :-

भारत हा जगज्जिक महासत्ता बनण्याची क्षमता असणारा देश असून त्या दिशेने देशाची वाटचाल सुरु आहे. स्वातंत्र्योत्तर काळात भारत सरकारने जलद अर्थिक विकासासाठी पंचवार्षिक योजनांचा अवलंब केला. प्रत्येक योजनेत धंगवेगळ्या विकासा प्रतिमानांचा अवलंब करून देशाच्या विकासाची गती कशी वाढविता येईल याचा विचार केला. त्याचबरोबर देशाच्या शीती, उद्योग व सेवा क्षेत्रात आमूलाग्र बदल घडवून आणण्याचा प्रयत्न केला. त्यासाठी सरकारला अनेक क्रांतीकारी धोरणत्रयक निर्णय घ्यावे लागले. १९९१ च्या आर्थिक सुधारणेनंतरची एक ऐतिहासिक सुधारणा म्हणून वस्तु व सेवा कर सुधारणा विधेयकाचा उल्लेख करावा लागेल. भारत सरकारने १ जुलै २०१७ पासून वस्तु व सेवा कर प्रणाली संपूर्ण देशासाठी सुरु केली. प्रस्तुत शोधनिबंधात जीएसटी मुळे भारतीय अर्थव्यवस्थेत होणा-या परिवर्तनांचा अभ्यास करण्याचा प्रयत्न करण्यात आला आहे.

### १.२ संशोधनाची उद्दिष्टे :-

१. वस्तु व सेवा कर (GST) प्रणालीची संकल्पना समजावून घेणे.
२. भारतात वस्तु व सेवा कर पध्दतीचा इतिहास जाणून घेणे.
३. वस्तु व सेवा कराच्या वैशिष्ट्यांचा अभ्यास करणे.
४. वस्तु व सेवा कर प्रणालीच्या गुणदोषांची चर्चा करणे.
५. वस्तु व सेवा कर पध्दतीतील उणिवा दूर करण्याचे उपाय स्पष्ट करणे.

### १.३ अभ्यास पध्दती :-

भारत हा खंडप्राय देश आहे. देशात २९ घटक राज्ये व ९

केंद्रशासित प्रदेश आहेत. अशा पर्यंत प्रत्येक राज्यातील कर हे वेगवेगळे होते त्यामुळे एकरूप देशात एकाच वस्तुचे वेगवेगळ्या राज्यात वेगवेगळे दर होते. एकसंध भारताच्या दृष्टीने हा तसा विचार करता विरोधाभास होत. तेव्हा संपूर्ण देशभर एक देश एक कर या उक्ती प्रमाणे भारत सरकारने कर सुधारणेतील एक क्रांतीकारी पाऊल टाकून वस्तु व सेवा कर प्रणाली सुरु केली आहे. ही कर पध्दती भारताच्या संदर्भात काय परिवर्तन करू शकेल तसेच त्याचे गुण व अडगुण यांचा अभ्यास करण्याच्या हेतूने हा शोध निबंध तयार करण्यात आला आहे. देशाच्या कर रचनेच्या इतिहासातील एक क्रांतीकारी सुधारणा व त्यातून एक संध भारताची अनुभूती हे या अभ्यासाचे गृहीतक आहे. प्रस्तुत शोध निबंधात प्रामुख्याने दुय्यम साधन सामग्रीचा वापर केला असून अर्थशास्त्रातील पुस्तके, संदर्भ ग्रंथ, नियतकालिके व विविध वर्तमानपत्रातील लेखांचा आधार घेवून तयार करण्यात आला आहे.

### १.४ भारतीय कर पध्दती :-

सध्याच्या कल्याणकारी राज्याच्या कल्पनेत सरकारला अनेकविध कार्ये पार पाडावी लागतात. त्यामुळे सरकारच्या कार्याचा खूप दिवसेंदिवस वाढत असलेला दिसून येतो. परिणामी सरकारच्या खर्चातही वाढ होत आहे व हा खर्च भागविण्यासाठी उपाय वाढविण्याचा या निष्ठाविण्याचा प्रयत्न करावा लागतो. कर हे सरकारच्या उपायाचे प्रमुख साधन आहे. आजही सरकारच्या एकूण उत्पन्नापैकी ८०% उपाय हे करापासून प्राप्त होत आहे. कर उत्पन्नही करीत असताना टांक केंद्रीभूत मानून कर प्रणाली तयार करावी लागते. तसेच कर रचना अदृश्य असावी. त्यामध्ये समता, संप्रोस्फरता, निरिषता व मिश्रव्ययता या तत्वांचा अंगीकार केलेला असावा. अन्यथा कर चुकवणेही वाढते. झटापट, काळापैसा यामध्ये वाढ होण्याची शक्यता असते.

भारतीय कर रचनेत अद्रत्यक्ष व अद्रत्यक्ष करांचा समावेश होतो. सरकारने अद्रत्यक्ष कर सुधारणा करण्यासाठी वस्तु व सेवा कर विधेयक मंजूर करून हा कर लागू करण्यात आला त्यापूर्वी अद्रत्यक्ष करात केंद्र सरकारचे अधिकारी कर, सेवा कर, आंतरिक अचकारी कर, आंतरिक्त आणि विरोध सेमा कर केंद्रीय अधिभार इ. करांचा समावेश होता हे सर्व कर रद्द होणार आहेत. तर राज्य सरकारचे विक्रीकर अथवा मूल्यवर्धित कर (वॅट), करमगूक कर, स्थानिक स्वराज्य संस्था कर (एल.सी.टी.) न्यायशास्त्र प्रवेश कर, ऐश्वर्य कर, लॉटरी-मटका, जुगाबरोल कर, जाईरातोबरोल कर अचकारी आणि विविध अधिभार इ. करांचा समावेश होतो. हे सर्व रद्द होवून जीएसटी हा एकमेव पर्याय असेल.





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## Human Resource Development In Nandurbar District, Maharashtra.

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### ABSTRACT:

Human is the main impact factor of natural resources and natural resources has need the qualitative human resource for the proper utilization and better management of natural resources and also be affected the development of economical condition of the specific country. This paper is based on secondary data collected from census of India (2011), population of Nandurbar district. The study highlighted that, the human resource development is uneven distributed in the Nandurbar District due to the uneven distribution of natural resources and also shows that, co-relation of human resource development in collaboration with natural resources.

### INTRODUCTION:

Human resource is more important for the economic development as well as sustainable development. The word 'Development' also implies of 'growth' and 'change' for the betterment as soon as improvement in regional level. There are so many indicators and it is very difficult to take all the indicators of human resource development. It is found that the planning for development is generally done at the macro level. The quality of human resource is determined on technological, social, cultural and economical condition. The human resource development is presented with improving productivity with quality development an achieving aims in a dynamic economical as well as social environment. This will be also enable to get a proper human resource development plan.



### STUDY AREA:-

Nandurbar district is located in the Northern part of Maharashtra state, lies between 21°00 to 22°03 degree North latitude and 73°31 to 74°32 degree Eastern longitude. The district comprises of 6 tehsils namely Nandurbar, Navapur, Akkalkuva, Shahada, Taloda and Akrani. Under the Nandurbar Zilla Parishad jurisdiction, 956 villages are covered through 6 panchayat Samities and 501 Gram Panchayats. The variation in relief ranges from the pinnacles and high plateaus of main Satpuda range having height over 3000 feet above mean sea level to the subdued basin of the Nira river in Phaltan tahasils with the average height of about 1000 feet above mean sea level. The climate of the district is hot and dry having average annual rainfall of 872 mm.

### AIMS AND OBJECTIVES:

The present paper has main objective to find the levels of human resource development and some objectives are follows.

- 1) To highlighted the human resources in terms of quality and quantity in the study region.
- 2) To find out the levels of human resource development in the study region at the tahsil level.
- 3) To suggest the planning strategies for improving the level of human resource development in the study region.

### DATABASE AND METHODOLOGY:







## AGRO TOURISM: A SUSTAINABLE DEVELOPMENT FOR RURAL AREAS OF INDIA; WITH SPECIAL REFERENCE TO MAHARASHTRA

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### Abstract:

The urban population having roots in villages always have had the curiosity to learn about sources of food, plants, animals, raw materials like wood, handicrafts, languages, culture, tradition, dresses and rural lifestyle. These changes have generated new ideas as well as approaches to leisure and recreation. These ideas and approaches have paved path towards rural and agro tourism development. Agro tourism is complimentary to traditional agricultural activities. It is an opportunity for farmers to use the available resources in a diversified and innovative way. It creates a win-win situation to farmers as well as tourists. Farmers earn better from innovative use of available resources and the tourist can enjoy village life and nature in an affordable price. Not only is this, the villages also benefited due to the development of agro tourism. In spite of growing agro tourism, the fact remains that the government support through appropriate and conducive policies for agro tourism development is lacking and government should give priority to agro tourism business in Maharashtra through appropriate policy measures.

**Key words** - Agro tourism, rural life, rural recreation

### Introduction:

Tourism is termed as an instrument for employment generation, poverty alleviation and sustainable human development. During 1999-2000, direct employment created by tourism was 15.5 million. Besides, tourism also promotes national integration, international understanding and supports local handicrafts and cultural activities. During 2000, the number of foreign tourists that visited India was 26.41 lac. India's share in world tour market is just 0.38 percent. With this major share, foreign exchange earned is Rs. 14,475 crores. The urban population having roots in villages always have had the curiosity to learn about sources of food, plants, animals, raw materials like wood, handicrafts, languages, culture, tradition, dresses and rural lifestyle. Agro-Tourism which revolves around farmers, villages and agriculture has the capacity to satisfy the curiosity of this segment of population.

Busy urban population is leaning towards nature. Because of natural environment is always away from busy life. Birds, animals, crops, mountains, water bodies, villages provide totally different atmosphere to urban population in which they can forget their busy urban life. Villages provide recreational opportunities to all age groups i.e. children young, middle and old age, male, female, in total to the whole family at a cheaper cost. Rural games, festivals, food, dress and the nature provides variety of entertainment to the entire family. Agro tourism, in which tourists see and participate in traditional agricultural practices without destroying the ecosystems, the host bases. Promotion of Agro-tourism involves some more

important stakeholders namely Ministry of Agriculture and line departments at state and central governments and farmers. Promotion of Agro-Tourism needs conceptual convergence with Rural Tourism, Eco-Tourism, Health Tourism, Adventure Tourism and culinary adventures. Some of the important advantages of Agro - Tourism are it brings major primary sector agriculture closer to major service sector tourism. This convergence is expected to create win-win situation for both the sectors. Tourism sector has potential to enlarge. Agriculture sector has the capacity to absorb expansion in tourism Sector.

### Scope of Agro - Tourism:

Agro-Tourism has great scope in the present study for the following reasons:

1. An inexpensive gateway
2. Curiosity about the farming industry and life style
3. Strong demand for wholesome family oriented recreational activities
4. Health consciousness of urban population and finding solace with nature friendly
5. Desire for peace and tranquillity
6. Interest in natural environment
7. Rural recreation

### Objectives:

1. To examine the importance of agro-tourism development in Maharashtra.
2. To study challenges before agro tourism in Maharashtra

### Methodology:

- The research is will be mainly carried through desk research i.e., secondary sources like maps, photographs, books, internet web sites.



Registration No. MAH-658/13 (N)

Global Peace Multipurpose Society

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### स्वराज्याची घनदीलत – सांगली जिल्हयातील दुर्ग पर्यटकांचे आकर्षण

प्रा. जी. के. पाटील

पद्मभूषण डॉ. बसंतरावदादा पाटील महाविद्यालय तासगांव

आज भारतातील नव्या पिढीला चाकोरीबद्ध जीवनाची समज सांगली आहे त्याला भोकरा रवात घ्यायला मिळतो तो उन्हाळ्याच्या दिवसात जसा सर्व भक्तांमार्फत रावरील समजात उपाय म्हणजे साहसी निर्यात पर्यटन आणि दुर्गधर्मती यासाठी 1980 च्या सुमारास महाराष्ट्र शासनाने तुरुळ केले इको टुरीझम आणि साहस टुरीझम ही कल्पना येत्या पंधरा वर्षात खऱ्या अर्थाने रुजु लागली आहे. या निर्यात दर्शन अथवा किल्ले पर्यटनातून समजायला मिळते विचारांची समृद्धी एक जनीया दृष्टीकोन, पाहणीपणा, स्वतंत्रता आणि संवेदनशीलता एके काळी महाराष्ट्रातल्या पराडी भाषणात विचित्रपतीच्या नेतृत्वाच्याती हिंदवी स्वराज्याचा जवळीक केला आणि उभा महाराष्ट्र प्रजपतीच्या पाठीशी उभा राहिला. याचे कारण प्रजपती शिवाजी महाराजांच्या जन्माच्या अगोदरचा 350 वर्षाचा इतिहास पाहिला, सांगला तर आजची त्या घटनाबद्दल मनसत विरस्कारता निर्माण होते. यज्ञीसत्ताधिरांने जन्माय आणि ज्ञानाधाराची परिस्थिती यातली होती. देव, धर्म आणि मानव यांची स्थिती जगभर शोधनीय झाली होती. सांस्कृतिक यज्ञी सत्ता यज्ञी भाषणांच्या पराकथांवर पातल्या होत्या असे म्हटले तरी वाचने होणार नाही. जगभ्याजले गुरात दुसऱ्यासाठी खर्च होत होत जगदी आमचे स्वतः हरवून गुलाबगिरी स्विकारली होती ज्या काडी हाताच्या बोटावर भोज्याच्या पराकणी सरदाराना जो सन्मान मिळत होता. तो बेगदी आणि बादशाहच्या नजीकचा होता. बादशाहाची गैरसज्जी झाली तर ज्यांन बादशाहसाठी पराकथाची क्षमता खाली त्यासाठी प्रसंगानुरूप त्याच्या उत्तमारीच्या पायाळाती माना घ्यायला लागत होत्या ज्ञान एक तर मरण यातना किंवा मृत्यूस सापोरे जावे ज्ञाने तेव्हा ही स्थिती बदलाची म्हणून प्रजपतीनी हिंदवी स्वराज्य उभासले.

या हिंदवी स्वराज्याचा जवळीक महाराष्ट्राच्या दऱ्या खोऱ्यात तीनशे वर्षांपूर्वी प्रजपतीचा जवळीक करीत घुमला या स्वराज्याच्या मुलभार होण जोगरी आणि सांगरी दुर्ग आज महाराष्ट्रात असलेल्या 361 हुन अधिक गढ कोट किल्ले आजही ते प्रजपतीच्या

प्रदलननितीची आणि भर्द यावज्यांच्या ज्ञानी पराकथाची गळा आपणासनीर ज्ञानी करता आहेत महाराष्ट्रातील या विविध दुर्गांचे, दुर्गन भौगोलिक स्थान आणि पराकथा रचना यातून शिकवताली- स्थापत्य शास्त्राची विस्मयकारीत कल्पती दुरदृष्टी जगभरते या ऐतिहासिक दुर्गांची धर्मती कल्पती आजही तुरुळी त्यांच्यापासून मिळवनी स्पुती घेत असल्याचे दिसते आज इतिहास ज्ञानेच्या एकेकाज्याचा या दुर्गद दुर्गांनीय एके काळी आमचा इतिहास घडविला होता त्याची सत्ता तेथील एक एक पित देत राहले आहे.

पर्यटनासाठी प्रेरित करता आहे. सांगली जिल्हयातील दुर्गन दर्शनासाठी हे विदलन दर्शन 'आज्हात भारतावर प्रेम कल्प्यावर सदैव प्रेरित करेल यातील काडी किल्ले बेलांग, दुर्गद आणि गदीयज्ञा आहे दर दहा-दहा कोसावर एखादा तरी किल्ला आढळतोय सडल आढळत नाही तो किल्लांचा इतिहास वेगळे बोडी आणि त्याच स्वराज्यातल योयदान' हे नव्या पिढीला कळायचे असले आणि त्यांचे जीवन समृद्ध यामचे असले तर त्याने पर्यटन करून राज्या शिकवण्याची स्पुती घ्यानी यासाठी किल्ले पर्यटन जलस्यक आज जगभ्याता संपुर्ण किल्लांची धर्मती करता देणं सज्य नाही तेव्हा किमान - सांगली जिल्हयातील किल्लांची आपण धर्मती करावी व या किल्लांवर कसे पाहण्या येते, तो प्रदेश किती महत्वाचा होता त्याज्जेची भाषण प्रजपतीच्या हाकेतरी प्राणारर बेलांगच्या संकटाना सत्ताय धातीत करी जडत असतील त्याची महती कळेत आणि जगभ्याता राष्ट्र रसायनाती प्रोत्साहन मिळेत या किल्लांचे महत्व सांगताना समवेदपंत जगलाल निहटात, 'संपुर्ण राज्यांचे सार तो दुर्ग किल्लेद्वय दुर्ग नरताय भोकरा देस पराकथा वेलाय निरस्य, प्रजपत्य होऊन देस जजगत होता, देस जजगत झाल्यावर राज्य कोणता म्हणवे या करिता पूर्वी जे.जे. राजे ज्ञाने त्यांनी ज्ञानी देशासाठी दुर्गबापून तो तो देश सायवत करून घेतात आणि ज्ञाने पराकथा संकट दुर्गांच्यावर परितार केले शिकवताली किल्ले म्हणजे प्राणसाला ही भाषणा सर्वत्र होती म्हणून प्रजपतीनी किल्ले सांगण्या

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भारतातील कृषक समाज : आव्हाने





## संद्रीय शेतीची संकल्पना व संद्रीय शेतीसमोरील आव्हाने

विनोदकुमार धोंडीराम कुंभार,

सहाय्यक प्राध्यापक,

समाजशास्त्र विभाग,

पी.डी.व्ही.पी.महाविद्यालय, तासगाव.

मोबाईल: ८२७५३७७९२२, ९९७५५६४६२२

प्रस्ताविक:-

पूर्वा भारतात संद्रीय शेतीसाठी पूरक परिस्थिती होती परंतु हरित क्रांतीनंतर भारतामध्ये रासायनिक शेती करण्याकडे शेतकऱ्यांचा कस वाढला व या रासायनिक शेतीचा मानवाच्या आरोग्यावर दुष्परिणाम होऊ लागला. मानवाची रोगप्रतिकारक क्षमता कमी होऊन त्याला अनेक रोगांना बळी पडावे लागत आहे. हे संकट टाळण्यासाठी संद्रीय शेती ही काळजी गरज बनली आहे. अमेरिकेमध्ये १९८० पासून संद्रीय शेतीवर भर दिला जातो. त्याचप्रमाणे जर्मनी, फ्रान्स, जपान, इटली हे देशही यावरती लक्ष केंद्रीत करित आहेत. सिक्कीम हे १०० : संद्रीय शेती करणारे भारतातील पहिले राज्य आहे. संद्रीय शेती ही एक चळवळ होणे आवश्यक आहे. संद्रीय शेतीमध्ये शेतीमधील परिस्थिती सकारात्मक करण्याची क्षमता आहे. इंटरनॅशनल फेडरेशन ऑफ ऑर्गेनिक एग्रोकल्चर मूव्हमेंट ; ष्चड्ड संद्रीय शेतीची संकल्पना पुढीलप्रमाणे सांगता येईल.

१. आरोग्याचे तत्व
२. पर्यावरणीय तत्व
३. निष्पक्षतेचे तत्व
४. संगोपनाचे तत्व

या चारही तत्वांचा वापर संद्रीय शेतीमध्ये आवश्यक आहे.

व्दोष्टे-

१. संद्रीय शेतीची संकल्पना अभ्यासणे.
२. संद्रीय शेतीची गरज व महत्व अभ्यासणे.
३. संद्रीय शेतीसमोरील आव्हानांचा शोध घेणे.

संशोधनपध्दती-

प्रस्तुत संशोधन लेखासाठी वर्णनात्मक संशोधन पध्दतीचा वापर करण्यात आला आहे. तसेच तासगाव व खानापूर तालुक्यातील संद्रीय शेती करणाऱ्या ३ शेतकऱ्यांच्या मुलाखती घेण्यात आल्या आहेत. कारण सद्यस्थितीत संद्रीय शेतीचा महत्वाचा विषय असला तरी संशोधकांला संद्रीय शेती करणारे खूपच कमी

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Principal

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## Liquid-liquid extraction of thorium(IV) with *N-n*-heptylaniline from acid media

Rupali R. Pawar<sup>1</sup> · Vishal J. Suryavanshi<sup>1</sup> · Suresh T. Salunkhe<sup>1</sup> · Suresh S. Patil<sup>2</sup> · Ganpatrao N. Mulik<sup>1</sup>

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**Abstract** The extraction behavior of thorium(IV) from sulphuric acid medium with *N-n*-heptylaniline in xylene. Various parameters like reagent concentration, acid concentration, equilibration time, diverse ions and effect of diluents were studied. Thorium(IV) was selectively extracted and separated from many metal ions. The nature of the extracted species was determined. Thorium(IV) was analyzed from monazite ore and gas mantle.

**Keywords** Thorium(IV) · Liquid-liquid extraction ·  $H_2SO_4$  · *N-n*-Heptylaniline

### Introduction

Thorium is a naturally occurring, radioactive metal. Nowadays thorium is used in nuclear power generation. So it is the need of time that it should be extracted and finally in pure form. Vary many amines have been used for the extraction of thorium(IV) like Amberlite LA-1 or LA-2 [1], *N-n*-octylaniline [2], mixture of *N-n*-octylaniline and trioctylamine [3], 2-octylaminopyridine [4] and various extractants like di-(2-ethylhexyl) 2-ethylhexyl phosphonate [5], bis(2,4,4-trimethylpentyl) phosphinic acid (Cyanex 272) [6], organo phosphoric compounds from various media [7–15], TODGA in ionic liquids have

been successfully employed for the recovery of thorium(IV) in industry [16]. Extraction of uranium(VI) and thorium(IV) by triphenylarsine oxide from salicylate media has been carried out [17]. Liquid-liquid extraction of uranium(VI) and thorium(IV) by two open-chain crown ethers with two terminal quinolyl groups in chloroform were studied [18].

Extraction of uranium(VI), zirconium(IV) and thorium(IV) by PC-88A from perchlorate media have been carried out [19]. Extraction of thorium(IV) from nitrate solution by bis-2-(butoxyethyl)ether was reported [20]. The extraction studies of uranium(VI) and thorium(IV) with TBPO in toluene from sodium salicylate medium were studied [21]. The extractive separation of thorium(IV) and praseodymium(III) with Cyanex 301 and Cyanex 302 from nitrate medium were studied [22]. The extraction behaviors of uranium(VI), thorium(IV) and lanthanides were studied using Cyanex 923 in toluene from different mineral acid media [23]. Further, high molecular weight amines are also used for the extraction and determination of a variety of other metal ions [24–26].

Previously we have reported the solvent extraction methods for the quantitative extraction of platinum group metals with amines [27–30]. In the present study extraction behavior of thorium(IV) from sulphuric acid media by *N-n*-heptylaniline is undertaken. Various parameters such as reagent concentration, acid concentration, effect of diluents, phase ratio, shaking period, loading capacity and diverse ions were studied. Separation of thorium(IV) from binary as well as multicomponent mixtures was achieved and also from associated elements in geological and real samples. The proposed method is relatively simple, rapid and selective used for the separation from many metal ions successfully.

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# DABCO functionalized dicationic ionic liquid (DDIL): A novel green benchmark in multicomponent synthesis of heterocyclic scaffolds under sustainable reaction conditions



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## ABSTRACT

A novel DABCO functionalized dicationic ionic liquid (DDIL) has been synthesized using diazabicyclo[2.2.2]octane (DABCO), 1,3-dichloro-2-propanol and  $\text{NaBF}_4$  in acetonitrile. The IL was fully characterized by IR, NMR and mass spectroscopic techniques. The presence of  $\text{BF}_4^-$  anion in IL was confirmed by  $^{19}\text{F}$  NMR and also supported by mass analysis. The TGA analysis showed that the IL is thermally stable up to 180 °C temperature. We demonstrated that the presence of the tertiary nitrogen sites and hydroxyl group in the DDIL network enhances the overall activity of DDIL. These make them compatible for base catalyzed one pot multicomponent synthesis of ortho-amino carbonitriles and 3-methyl-4-arylmethylene-isoxazol-5(4H)-ones under grinding without solvent. In addition the activity of DDIL was also studied for synthesis of tetrahydrobenzo[h]pyrimin under ultrasound irradiation in water. Furthermore the DDIL was easily recoverable and recyclable many times with modest decrease in activity.

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## 1. Introduction

In the annals of heterocyclic chemistry, the academic and industrial research groups have been increasingly focused on the development of multicomponent reactions (MCRs). MCRs can lead to green and robust synthetic methodologies to afford rapid synthesis of small drug-like molecules with several degrees of structural diversity [1–2]. This technique simultaneously engage three or more components in one pot, resulting in formation of complex frameworks that incorporate the elements of all the starting materials with good synthetic efficiency [3].

Nowadays, solvent-free reactions have become paradigms of synthetic chemistry [4]. These reactions utilizes alternative energy inputs such as mechanical grinding, ultrasound and microwaves. Among these, mechanical grinding is simple and efficient method of synthesis which combines economic aspects with environmental concerns. The reactions initiated by grinding involves transfer of very small amount of energy through friction [5]. In the mechanical grinding, solid-state reactions occur more efficiently and more selectively than in the solution phase reactions [6]. This methodology facilitates the organic reactions with high yields, requires stoichiometric amount of reactants, avoids the use of volatile organic solvents, short reaction time, and better energy balance with straightforward work-up. The above mentioned benefits offered by mechanical grinding have also been widely used in the field of ionic liquid (ILs) catalyzed MCRs [7].

ILs have been recognized as potential new green alternatives to conventional organic solvents for a wide range of synthetic, catalytic, and electrochemical applications [8]. The ILs are characterized by their unique properties, including non-volatility, low inflammability, tunable hydrophobicity, environmental friendly nature, easy recoverability and recyclability [9].

Moreover, it is well known that physical and chemical properties of an IL can be changed by varying the structure of constituent cations and anions. This modification of ILs can dramatically influence the outcome of various reactions [10]. During the past few years a number of dicationic and polycationic ILs, with a large variety of tunable properties, have been explored [11]. The dicationic ILs contain two head groups, linked by a rigid or flexible spacer [12]. This kind of ILs demonstrate unique features than monocationic ILs and other traditional solvents [13]. Besides the change in the length of the spacer, and the incorporation of functional groups such as thiol, ether, hydroxyl and amino groups in the cations allow the physical properties of the dicationic ILs to be tailored for specific applications [14]. The poly(ethylene glycol)-linked dicationic neutral IL (PEG-DILs) [15] and poly(ethylene glycol)-linked dicationic acidic ILs (PEG-DAILs) [16] have been explored as a powerful catalysts for various transformations.

The synthesis of ILs is complicated and often suffers from halogen impurities but hydroxide based ILs now offers the simplest synthetic tool for the preparation of large number of halogen free ILs [17]. Recently we have demonstrated the application of this methodology for the synthesis of multicationic ILs and its applications for MCR under MW [18]. There are several reports for monocationic DABCO based ionic

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## Palladium Catalyst Supported on Zeolite for Cross-coupling Reactions: An Overview of Recent Advances

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**Abstract** Over the last 30–40 years, Pd-catalyzed C–C bond-forming reactions have gained immense importance for their use in synthesis of biologically and pharmaceutically important organic fragments. Heterogeneous Pd catalysts supported on porous materials, especially zeolites, have many advantages as they have high surface area with tunable acidity and basicity, hydrophobic and hydrophilic character, shape and size selectivity, as well as chemical and thermal stability. They also offer very easy recovery and reusability. This review covers the literature published on the synthesis and characterization of Pd catalysts supported on zeolites and their applications in various organic transformations.

**Keywords** Palladium · Heterogeneous catalysis · Supported catalysts · Zeolites · Coupling reactions

### 1 Introduction

In the last few decades, a new paradigm for the construction of carbon–carbon bonds [1] has enhanced considerably, which has increased the ability of synthetic organic chemists to assemble complex molecular frameworks for many important applications. The transition metal catalysts have the ability to forge carbon–carbon bonds selectively within functionalized and sensitive substrates under comparatively mild reaction conditions [2]. Such catalytic processes have opened new opportunities, particularly in total synthesis of medicinally and biologically important compounds [3]. Among these processes, the Pd-catalyzed cross-coupling reactions such as Mizoroki–Heck [4], Suzuki–Miyaura [5], Negishi [6], Stille [7],

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FULL PAPER

# Cellulose-supported N-heterocyclic carbene silver complex with pendant ferrocenyl group for diaryl ether synthesis

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A cellulose-supported N-heterocyclic carbene Ag(I) complex has been synthesized by covalent grafting of ferrocenyl ionic liquid in the matrix of cellulose followed by metallation with silver oxide. The complex was employed as a heterogeneous catalyst in the synthesis of diaryl ethers. Reactions of a variety of phenols with aryl halides afford corresponding diaryl ethers in moderate to good yields. Recyclability experiments were executed successfully for five consecutive runs.

KEYWORDS

diaryl ether, ferrocene, N-heterocyclic carbene, reusability

## 1 | INTRODUCTION

N-Heterocyclic carbenes (NHCs) are a versatile class of ancillary ligands that have garnered tremendous attention for their ability to effect various C–C, C–N and C–O bond formations.<sup>[1]</sup> This outstanding class of ligands has high activity and selectivity with increased stability towards air and moisture. NHCs allow manipulation of the catalytic performance through adjustment of electronic and steric parameters.<sup>[2]</sup> Compared to phosphorus-containing ligands, NHCs tend to bind more strongly with metals leading to stable metal–carbon bonds thereby avoiding the necessity for the use of excess ligand in catalytic reactions.<sup>[3]</sup> NHC–metal complexes have displayed superior catalytic activities in many useful organic transformations.<sup>[4]</sup> Insight into homogeneous NHC–metal complex catalytic systems has revealed some basic problems in terms of separation and recycling. This factor coupled with their ability to induce contamination of the ligand residue in products has triggered a flourishing interest in heterogenization of homogeneous NHC-based catalytic systems.<sup>[5]</sup> The built-in heterogeneous nature of NHCs allows for a robust recycling and provides excellent opportunity to prevent the contamination of the ligand thereby decreasing the environmental pollution caused by residual metals in the waste. The field of heterogeneous NHCs has witnessed impressive progress during the past few years.<sup>[6]</sup> Despite tremendous strides, a major driver

of current ground-breaking research is the development of new heterogeneous NHCs with different properties and reactivities.<sup>[11]</sup>

The recent quest towards green and sustainable development has spurred an extensive interest in the use of renewable bioresources in catalytic technology.<sup>[7]</sup> Cellulose is the most abundant renewable and biodegradable biopolymer with an annual world production of around 500 billion metric tons. Being abundant and outside the human food chain, it represents the most attractive and economic natural feedstock as per green chemistry principles. It is a long-chain linear polymer made up of repeating units of  $\beta$ -D-glucose linked by 1,4-glycosidic bonds. It has an unusual structure in which every other glucose monomer is flipped over and packed tightly as extended long chains which imparts rigidity and high tensile strength.<sup>[8]</sup> It is insoluble in water and most common solvents due to strong intramolecular and intermolecular hydrogen bonding between the individual chains.<sup>[9]</sup> In addition to the aforementioned properties, its high surface area, non-toxicity, stability in common organic solvents, unlimited availability as a renewable agro-resource and excellent biodegradability make cellulose an excellent renewable biopolymeric support for synthesis of heterogeneous catalysts.<sup>[10]</sup> The interesting properties of cellulose spurred us to investigate its feasibility in the synthesis of heterogeneous NHC–transition metal complexes with catalytic potential.




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## Application of novel multi-cationic ionic liquids in microwave assisted 2-amino-4*H*-chromene synthesis†

 Arjun Kumbhar,<sup>a\*</sup> Sanjay Jadhav,<sup>b</sup> Rajendra Shejwal,<sup>c</sup> Gajanan Rashinkar<sup>b</sup> and Rajshri Salunkhe<sup>a,b</sup>

Novel multi-cationic ionic liquids containing a mesitylene backbone with acetate and methane sulphonate anions have been synthesized. These ionic liquids were used for the synthesis of 2-amino-4*H*-chromenes under microwave heating. The effects of nature and amount of ionic liquids on the yield and reaction time were thoroughly investigated. The ionic liquids showed a considerable level of reusability without a significant decrease in catalytic activity. We have successfully combined the advantages of microwave technology with ionic liquids to facilitate the rapid construction of chromene skeletons from readily obtainable and inexpensive materials via a multicomponent strategy.

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### Introduction

Multi-component reactions (MCRs) play an important role in modern synthetic chemistry. As MCRs generally occur in a single pot, exhibit a high atom economy and good selectivity, they provide a powerful tool towards the synthesis of diverse and complex compounds as well as small heterocycles.<sup>1</sup> Molecules with the chromene structure constitute one of the most interesting class of compounds in organic chemistry due to their biological and pharmacological importance such as antimicrobial,<sup>2</sup> antiviral,<sup>3</sup> antiproliferation,<sup>4</sup> antitumor<sup>5</sup> and central nervous system activities.<sup>6</sup> These compounds are also employed in cosmetics, pigments and used as potential biodegradable agrochemicals.<sup>7</sup> Generally, 2-amino-4*H*-chromenes are synthesized by heating aldehydes, malononitrile and phenols in presence of organic bases like piperidine in organic solvents<sup>8</sup> and also by several modified procedures using Triton B,<sup>9</sup> Phase Transfer Catalysts (PTCs),<sup>10</sup>  $\gamma$ -alumina,<sup>11</sup> Preyssler type heteropolyacid ( $H_{14}[NaP_5W_{30}O_{118}]$ ),<sup>12</sup>  $K_2CO_3$ ,<sup>13</sup>  $TiCl_4$ ,<sup>14</sup> *p*-toluenesulfonic acid,<sup>15</sup> nanostructured diphosphate  $Na_2CaP_2O_7$ ,<sup>16</sup> and nanosize  $MgO$ .<sup>17</sup> Due to the environmentally benign nature of electro-organic synthesis,<sup>18</sup> Elinson *et al.*<sup>19</sup> reported the electrocatalytic chain procedure for the preparation of 4*H*-chromenes by the combined electrolysis of salicylaldehydes and alkyl cyanoacetates in ethanol in an undivided cell. In order to avoid some of the drawbacks of reported methods, the discovery

of a new and efficient catalyst with high potential, short reaction time, recyclability and simple workup procedure is highly desirable.

The research in the field of ionic liquids (ILs) has grown exponentially over the last few decades due to their environmentally friendly nature, non-volatility, recyclability, thermal stability and easy workup.<sup>20</sup> One of the most attractive features offered by IL is both the cationic and anionic components can be varied and modified so that liquid properties can be tailored for specific applications. This modification of ILs can result in unique solvent properties that can dramatically influence the outcome of various reactions. The multi-cationic ILs are superior to mono-cationic ILs as they provide more opportunities to tune their physical and chemical properties. Conventional synthesis of IL is complicated and often suffers from halogen impurities. Hydroxide based ILs now offers the simplest synthetic tool for synthesize large number of halogen free ILs. An exchange reaction of the acid with an aqueous hydroxide solution of ILs affords the desired "Task Specific Ionic Liquids (TSILs)".

Since last few years the microwave heating becomes one of the widely used alternative technique to carry out organic transformations efficiently.<sup>21</sup> Due to the ionic character, IL absorb microwave radiations extremely well and transfer of energy is quick by ionic conduction. The transfer of energy is more efficient with increase in temperature. Hence, when ILs are coupled with MW they exhibit dramatic effect on rate enhancement due to synergistic couple.<sup>22</sup> In view of the emerging importance of the ILs as reaction media and our general interest in microwave as an energy source for chemical processes,<sup>23</sup> we decided to build up a new class of mono, bis and tris imidazolium based ILs containing 1,3,5-alkylidene 2,4,6-trimethyl benzene linkers, where the alkyl arm could be

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 † Electronic supplementary information (ESI) available: IR, <sup>1</sup>H NMR and <sup>13</sup>C NMR data of the compounds. See DOI: 10.1039/c6ra01062h



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# Palladium nanoparticles supported on a titanium dioxide cellulose composite (PdNPs@TiO<sub>2</sub>-Cell) for ligand-free carbon-carbon cross coupling reactions†

 Sanjay Jadhav,<sup>a</sup> Ashutosh Jagdale,<sup>b</sup> Santosh Kamble,<sup>c</sup> Arjun Kumbhar<sup>a\*</sup>  
and Rajshri Salunkhe<sup>a\*</sup>

Well-dispersed non-spherical PdNPs with a diameter of 39–45 nm supported on a TiO<sub>2</sub>-cellulose composite (PdNPs@TiO<sub>2</sub>-Cell) can be synthesized by a simple and clean route. The catalyst was well characterized by XRD, FE-SEM, EDS, and TEM techniques. The PdNPs have good dispersity on the TiO<sub>2</sub>-Cell support. This results in excellent catalytic activities for the synthesis of biphenyls, acrylates, acetylenes and prochiral ketones using low Pd loading (1 mol%) at comparatively low temperature. The effects of the nature and amount of bases, nature of solvents, amount of catalyst and the reaction temperature on the activity of PdNPs@TiO<sub>2</sub>-Cell were thoroughly investigated. The catalyst showed at least four times reusability without decrease in catalytic activity.

## 1. Introduction

Transition metal catalysis especially palladium catalyzed cross coupling reactions of aromatic halides in the presence of various nucleophiles is strategically important in organic synthesis. It has been widely used for the synthesis of a diverse array of biphenyls, acrylates, acetylenes and prochiral ketones by C-C cross coupling reactions. These compounds have profound importance in chemical, pharmaceutical and biochemical industries.<sup>1</sup> Additionally, such compounds are also present in many natural as well as biologically active compounds,<sup>2</sup> and are especially interesting in applications for organic light-emitting diodes and chemiluminescence detection systems.<sup>3</sup> These compounds have been mostly synthesized by palladium catalyzed Suzuki-Miyaura,<sup>4</sup> Miyaura-Heck,<sup>5</sup> Heck-Matsuda,<sup>6</sup> Sonogashira-Hagihara,<sup>7</sup> and carbonylative cross-coupling reactions.<sup>8</sup> Recently, this area of research has attracted great interest because of its high compatibility to a wide variety of functional groups under mild reaction conditions.

Though, most of these transformations have been extensively investigated by homogeneous palladium complexes in

solution.<sup>9</sup> The separation of metal catalysts from the reaction mixture and their reuse is highly desirable from economical and environmental point of view.<sup>10</sup> Additionally, the homogeneous Pd complexes also undergo deactivation due to the aggregation of Pd during the reactions. In this context, heterogeneous catalysts particularly, the PdNPs supported on suitable solid support has found immense importance for many cross coupling reactions.<sup>11</sup> This strategy increases the catalytic activity of Pd and also reduces the amount of metal required for the reaction.<sup>12</sup> Several oxides have been used as a support for PdNPs,<sup>13</sup> because moderate to high dispersions was obtained on these oxides due to favorable metal-support interactions.<sup>14</sup> Out of these oxides TiO<sub>2</sub> based materials have found potential applications across many different areas.<sup>15</sup> In recent years much like the noble metal nanoparticles, PdNPs supported TiO<sub>2</sub> and Pd supported TiO<sub>2</sub> core shell catalysts have seen an extensive amount of research in methanol reforming,<sup>16</sup> hydrogenation,<sup>17</sup> and photocatalysis.<sup>18</sup>

Biopolymers such as alginate, chitosan, starch, and cellulose has been developed as a most attractive support for immobilization of many Pd catalysts.<sup>19</sup> The extensive number of -OH groups present in cellulose can facilitate the complexation of TiO<sub>2</sub> to the molecular matrix, and play a significant role in guiding the organization of TiO<sub>2</sub> among cellulose molecules. In addition to this, the use of cellulose has several key advantages, like no additional reducing agents are required.<sup>20</sup> Cellulose also avoids the aggregations of PdNPs, as it acts as the protecting agent similar to other biopolymers.<sup>21</sup> There is binding interaction between cellulose and the metal nanoparticles which provides a platform to PdNPs and helps to stabilize Pd as that of

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## Full Length Research Article

### DIVERSITY OF DUDHEBHAVI RESERVOIR IN SANGLI DISTRICT, MAHARASHTRA (INDIA)

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#### ABSTRACT

The wetlands are suitable habitats for variety of animals, birds and many aquatic plants, which form a typical food web. A total number of 13 macrophytes were reported from Dudhebhavi reservoir out of them 8 species of emergent and 5 were of submerged type. In aquatic ecosystem, the phytoplankton play an important role of primary producers. The Chlorophyceae is dominant group represented by 15 genera and 20 species where, Cyanophyceae showed 5 genera and 5 species, Bacillariophyceae reported with 7 genera and 8 species, Euglenophyceae, with only *Euglena acus*. Dinophyceae recorded with 2 species of 2 genera. The reservoir is secondarily being used for reservoir capture fishery. Important major carps, common carp, Chinese carp fish and 2 local species occurred in this reservoir. There were 20 species of aquatic birds were observed in the vicinity of Dudhebhavi reservoir. Attempts have been made to observe the diversity of macrophytes, phytoplankton, fish and bird diversity to obtain the baseline data from June 2013 to May 2015.

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#### INTRODUCTION

The word bio-diversity is a biological diversity, which refers to the diversity and variation among all living organisms on the earth. Sangli district is one of the most important districts as far as agricultural development in Maharashtra. Sangli district is situated between 16.46 to 17.1° N and 73.43 to 75.0° E latitudes. Geographically, Sangli district shows two zones viz. area adjoining Krishna river basin and eastern drought prone area away from basin with low rainfall and typical arid geographical set up. The overall water level is up to 6-7 meters down but varies according to geographical area, strata and location of the particular village. The eastern part of the district shows low fertile soil because of natural set up where man-made reservoirs are source of irrigation besides the well. Dudhebhavi reservoir is major irrigation reservoir in Kavthe-Mahankal tahsil. It is about 80 km from district place. It is constructed during 1984. It is constructed during 1984 by the Irrigation Department. Purposely it is constructed for irrigation but now-a-days it is used for fishing activities and for other human activities.

#### MATERIALS AND METHODS

**Study Area:** The total catchment area is 51.76 sq. km. the total capacity of storage is 630.90 Mcft and dead storage is 18.63 Mcft. Length of dam including slipway is 330 meter having clean overflow type of slipway. The height of dam is 19.33 meter and is of earthen type. The submergence area is 152 hectare. The bottom of reservoir is rocky. Hence reservoir shows very less macrophytes. Reservoir was visited monthly for the period of two consecutive years (June 2013 to July 2015).

**Aquatic macrophytes:** During every visit, aquatic macrophytes and marginal macrophytes were studied, photographed and collected from reservoir. In laboratory they were identified by using Cooke's 'The Flora of Presidency of Bombay' (1967), Flora of Kolhapur district (Yadav and Sardesai 2002) and other relevant published literature.

**Phytoplankton:** The phytoplankton were collected using plankton net. It was prepared by using bolting silk No. 125. Total 100 liters of water sample was filtered and concentrate was collected in 200 ml plastic bottle. Two separate sets of concentrated samples were preserved by adding 4% formalin and 1 ml of Lugol's Iodine and observed under Olympus

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FAITHFUL PORTRAYAL OF A CONTEMPORARY SOCIETY IN  
ARAVIND ADIGA'S *THE WHITE TIGER*

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ABSTRACT

*Aravind Adiga is one of the most famous Novelists of India. He became famous with the publication of his very first novel "The White Tiger". He has won the Man Booker Prize Award for the year 2008. It is a fictional work in which he tries to highlight the grave issues of the contemporary society. He shows disparity between the society in rural and urban parts of India and he is mainly concern with the causes that create huge gap between the societies in rural and urban parts of India. He handles the theme very cleverly. The novel is written in epistolary form, where narrator writes a letter to Chinese Premier Wen Jiabao, who is expected to visit India. According to the novelist corruption, traditionalism, and age-old social norms are responsible for the disparity in the contemporary society.*

**Key Words:** - TWT- The White Tiger, Dark India, Light India, Black Money, Corruption, Politics, Medical Care, Human Values and Police Department, and Contemporary Society.

INTRODUCTION

Aravind Adiga's *The White Tiger* (2008) made its appearance on the literary arena of Indian English literature, when Indian society is transforming from age-old set up to its modern version. Its values, loyalty and social norms are changing with the passing time. The novelist tries to highlight the grave current issues of society and the progress our country making in various aspects. He tries to compare the both sides of every aspect very sarcastically. According to *The Sunday Telegraph*, the novel is "Blazingly Savage and Brilliant" and yes, it is. The novelist here tries to present the darkest reality of today's Indian society. It is very hard to accept the facts put-forth by the writer due to its sense of respect for own society and country. But if we take it impartially, we might be agreeing with the writer Aravind Adiga, who presents the facts through the protagonist, Balaram Halwai alias Munna, the son of common rikshaw puller of Laxmangarh, who narrates his own experiences of his life in the novel. Topic of narration is how common rikshaw puller's son rouse to become the successful entrepreneur in Bangalore one of the metro city in south India. Through the life journey of Balram Halwai, the novelist puts the real picture of the Indian society, which is hard to digest but we cannot refuse. We still get some glimpses of all those facts today also, which are expressed by the novelist with great concern for the betterment of the society. The writer's main aim seems to be to contribute in building flawless society that could give

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## मानवी हक्क आणि शिक्षणाची उपयुक्ता

प्रा. जी. के. पाटील\*  
डॉ. पाटील बाबुराव महारी\*

## प्रस्तावना :

मानवी हक्क म्हणजे काय असा प्रश्न प्रथम पडतो. हक्क व प्रतिष्ठा या दृष्टीने जगातील सर्व माणसे समान आहेत. त्यामुळे व्यक्तीचे हक्क आणि प्रतिष्ठा ही स्वाभाविकरूपेच त्या व्यक्तीचे अविभाज्य घटक आहेत. आंतरराष्ट्रीय पातळीवर कायदांची निर्मिती करून हे मानवी हक्क तयार करण्यात आले. जे कायदेशीर हक्क आहेत. त्यांनाच मानवी हक्क असे संबोधले जाते. सोडण्यात सर्व मानवातील प्रतिष्ठा आणि समता ही मूल्ये, मानवी हक्कांच्या मूळारी असलेल्या इतर मूलतत्वांप्रमाणे प्रत्येक संस्कृती, धर्म आणि तात्विक परंपरेत आढळतात. अशा मूल्यांनाच मानवी हक्क असे संबोधले जाते. संयुक्त राष्ट्रसंघात १९४५ मध्ये मानवी हक्क आयोगाची स्थापना करण्यात आली. १० डिसेंबर १९४८ साली सर्व राष्ट्रे आणि मानवसमूह यांनी साध्य करण्याचे आदर्श तत्त्व म्हणून मानवी हक्कांच्या जागतिक घोषणापत्रात मान्यता देण्यात आली. हा दिवस 'आंतरराष्ट्रीय मानव अधिकार दिन' म्हणून पाळला जातो. १९६६ मध्ये संयुक्त राष्ट्रांच्या आमसभेने आर्थिक, सामाजिक व सांस्कृतिक अधिकारांची आंतरराष्ट्रीय प्रमाणका प्रमाणे भारताने १९९३ मध्ये राष्ट्रीय मानव अधिकार स्थापन करण्यात आला. मानवाधिकारांच्या जागतिक जाहिरनाम्यात अनेक महत्त्वाच्या अधिकारांचा समावेश आहे. यामध्ये भाषण स्वातंत्र्य, संचार, स्वातंत्र्य, व्यक्तिगत स्वातंत्र्य, समानतेचा अधिकार, धर्म स्वातंत्र्य, यांचा समावेश आहे. याशिवाय कामाचा अधिकार, विभागीय अधिकार आणि पुरस्तीचा अधिकार, शिक्षणाचा अधिकार यासारख्या व्यापक अधिकारांचाही त्यात समावेश आहे. प्रत्येक व्यक्तीचा समतोल विकास आणि सर्व व्यक्तींची सम प्रतिष्ठा हा या अधिकारांच्या मागचा उद्देश आहे. आपल्या सर्वांसाठी प्रतिष्ठा आणि न्याय हे जाहिरनाम्याचे घोष वाक्य आहे.

मानवी हक्काविषयक जागतिक घोषणापत्रानुसार काही जलमे महत्त्वाची आहेत ती पुढे प्रमाणे :

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- तय्यन
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- प्रत्येक
- अंगी
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*Report on*

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“ENTREPRENEURSHIP SKILLS”





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<b>Organizing Department</b>	:	DEPARTMENT OF COMMERCE
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<b>No. of Participants</b>	:	<b>205</b> , Male 81; Female: 124

### **About Workshop:**

The whole lot you want to know about the concept of entrepreneurship. The word entrepreneur is borrowed from the French language. It is derived from ‘entreprendre’ meaning to ‘undertake’. Thus, entrepreneur is an ‘undertaker’ in the literal sense of the word. Its usage in French language can be traced much before the coming out of actions generally connected with entrepreneurs today. Entrepreneurship is neither a science nor an art. It is a practice. It has a knowledge base. Knowledge in entrepreneurship is a means to an end. An entrepreneur is a person who is devoted to search something new and exploit the novel notions and visions into gainful opportunities by bearing the risk involved in the process. The entrepreneur conceives the idea of an enterprise, lives with it, and lastly establishes the enterprise. Entrepreneurship refers to the progression of activities undertaken by an entrepreneur.

The Department of Commerce and Lead College Committee have jointly Organized one day Online Workshop on **“Entrepreneurship Skills”** on **Wednesday, 10<sup>th</sup> March, 2021**.

Recourse person for the workshop was Hon. Dr. Uday Lokhande, Assistant Professor, Arts And Commerce College, Satara. He highlighted on the Following Entrepreneurship Skills.

- **Business Management Skill**
- **Leadership Skill**
- **Communication & Listening Skill**
- **Customer Service Skill**
- **Financial Skill**
- **Critical Thinking Skill**

He also informed the students about what to do to set up the industry. At the same time students were involved in this workshop.

**Hon. Dr. Milind Hujare**, The President of this workshop and Principal, Padmabhushan Dr.Vasatraodada Patil Mahavidyalaya, Tasgaon, Dist.- Sangli, Maharashtra (India) covered review of progress and development of the department of commerce. Hon. Principal also focused on the opportunities and challenges in the field of business.

**Dr. Sonawale A.G.** Head of the Commerce Department and Coordinator has welcomed all dignitaries on the dice and off the dice he also introduced the resource person in brief.

**Vote of thanks Expressed** by **Miss Kamble K.H.** Member, of organizing committee.

**Anchoring** : By **Mr. Patil G.R.**, organizing member of this webinar.





"Dissemination of Education for Knowledge, Science and Culture" -  
Shikshannabharshi Dr. Bapuji Salunkhe  
Shri Swami Vivekanand Shiksha Sanstha Kolhapur's



**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya**

Tasgaon, Dist- Sangli 416312

Affiliated to Shivaji University, Kolhapur MS.

UNDER LEAD COLLEGE SCHEME

**Department of Commerce**

*Organized*

**ONE DAY ONLINE WORKSHOP**

ON

**"Entrepreneurship Skills"**

Wednesday, 10<sup>th</sup> March 2021

**Time 10:00am onwards**

**Resource Person**



**Dr. Uday Lokhande**

Arts & Commerce College,  
Safara

**Dr. Amol Sonawale**  
HOD & Coordinator

**Prof. Prakash Khade**  
Chairman, Lead College, Committee

**Dr. Milind Hujare**  
Principal

*Organizing Committee*

**Mr. Patil G.R.**  
Member

**Mr. Patil S.M.**  
Member

**Miss. Kamble K.H.**  
Member

\*\*\*\*\*  
**Registration Link:** <https://forms.gle/GZP3D8H9DeUUS1TW8>

"Dissemination of Education through Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekananda Shikshan Sanstha, Kolhapur's  
**PADMABHUSHAN Dr. VASANTRAODADA PATIL MAHAVIDYALAYA,**  
**TASGAON**

**ONE DAY WORKSHOP**

on

**"ENTREPRENEURSHIP SKILLS"**

*Organized By*

**DEPARTMENT OF COMMERCE**

**UNDER LEAD COLLEGE SCHEME**

**SCHEDULE**

Wednesday, 10<sup>th</sup> March, 2021

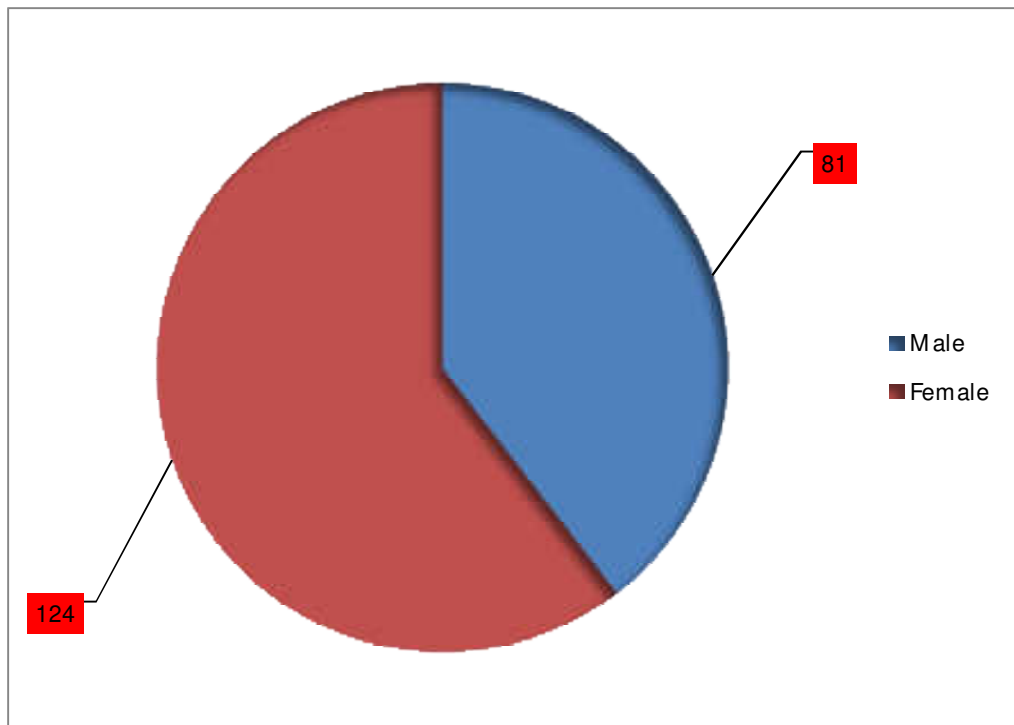
**INAUGURAL CEREMONY**

(Time-10:00am onwards)

<b>Inaugural Speech</b>	:	<b>Hon. Dr. Milind Hujare</b> Principal, PDVP, Mahavidyalaya, Tasgaon
<b>Introduction</b>	:	<b>Dr. Sonawale A.G.</b>
<b>Resource Person</b>	:	<b>Dr. Uday Lokhande</b> Arts & Commerce College, Satara
<b>Topic</b>	:	<b>Entrepreneurship Skills</b>
<b>President</b>	:	<b>Hon. Prin. Dr. Milind S.Hujare</b>
<b>Vote of Thanks</b>	:	<b>Miss. Kamble K.H.</b>
<b>Anchoring</b>	:	<b>Mr. Patil G. R.</b>



## Summary of Participants



## Participants List

Sr. No.	Full Name	Designation and Class (Student / Teacher)	Gender	Mobile No. (Whatsapp)
1	Dr. SONAWALE Amol GOWARDHAN	Assistant Professor	Male	9096615605
2	Anuja Amar chavan	Student	Female	7666939693
3	Mustkim zakir pathan	Student	Male	9975288090
4	Vijay mali	Student	Male	7249415806
5	Sushant Tanaji Zambare	Student	Male	9172514726
6	Jadhav Suhas Sambhaji	Student	Male	9307457132
7	Pawar monika sanjay	B.com sy	Female	9860538315
8	Patil vijita Sunil.	Student	Female	7821998718
9	Khot Dipali Dilip	Student	Female	9022102919
10	Shivani Mohan Kharat	Student	Female	9356832028
11	Ajay Sudhakar Patil	Student	Male	9960867918
12	Patil Shubham Suresh	B.com-2	Male	9657420737
13	Shruti Keshav Sakate	Student	Female	7397914263
14	poonam vilas jadhav	B.com2	Female	9970450834
15	Pradnya Ramachandra Patil	Student	Female	9967126685
16	Sujit machhindra mohite	Student	Male	7020071626
17	Jadhav Akshta Dilip	B.com 2	Female	7666066227
18	Prathmesh Prashant Buchade	Student	Male	8275809009
19	Jadhav Pallavi Ramdas	B. Com	Female	8625824968
20	Megharani sudam waghmode	Student	Female	8459558283
21	Abhijeet Ashok Mane	Bcom ll student	Male	7709921245
22	Kakar Vaishnavi Sambhaji	Student	Female	9175696516
23	Shivani bapu Mali	Student	Female	9322308585
24	Pooja lalaso mane	Student	Female	9322462830
25	Ajay Dagadu Kate	Asst. prof.	Male	9921453845
26	Shweta Satish Nyaynirgune	B.com 2(student)	Female	7083022763
27	Benkar laxmi siyaram	Student	Female	8862088315
28	Sanjiwani santosh godbole	Bcom sy	Female	7620293573
29	bhargav bhaskar joshi	B.com second year	Male	7972423283
30	Sonali Maruti Tupsoundarya	Student	Female	8262921563
31	Vaishnavi Prakash Patil	Student	Female	9545194403
32	Anushka vasant kumbhar	Student	Female	9561871437
33	Siddhi Anil kadam	B.Com2	Female	8329723140
34	Ranpise priyanka zunzarrao	B.com2	Female	8010030065
35	Mulani Mahamad Raju	B.com 2nd	Male	7083707439
36	Akash Sambhaji Chendage	B.com 2	Male	9075107165
37	Ankita jotiram mane	<a href="#">B.com</a>	Female	9970325095
38	Attar tasneem Ilahi	Student	Female	9579062278
39	Chavan sayali anil	Student	Female	9373507077
40	Jadhav Pooja ananda	b.com 2nd year	Female	9579873644



41	Gurav swapnali shrikant	Bcom II	Female	9545195863
42	Autade Madhuri Bharat	Student	Female	7391800203
43	Samiksha Ravsaheb Pawar	Student	Female	7558210744
44	Patil Rutuja Dilip	B. Com Part 2	Female	7875042528
45	Karina jahangir maner	Sonvane sir	Female	9579473301
46	Sandhyarani dhanaji mane	Student	Female	8999075017
47	Namrata Vinayak pardeshi	Student	Female	8605372022
48	Phalake Pratiksha Vinod	Student	Female	7757859160
49	Kanase Sonali Vijay	Student	Female	9637109318
50	Madhura sanjay pol	B. Com I	Female	7387156350
51	Sahil Santosh Sadanand	Student	Male	9325303183
52	Kharade prajakta Mohan	Student	Female	8010655642
53	Samiksha Sandip gurav	B.com 1	Female	8999515822
54	Sandhyarani Ramachandra kumbhar.	Student	Female	7498125609
55	Gavali Pratiksha Suresh	B. Com	Female	7378899305
56	Madhura Nivas Gurav	Student B.com 2	Female	9975462104
57	Chaitanya chandrakant shinde	B. Com 1	Male	9529940516
58	Komal Ramesh Suryavanshi	Bcom (student)	Female	7058969829
59	Rutuja Jayant Gaikwad	B.com III	Female	9273532804
60	Laxmi shrishail navadage	Bcom 1 St year	Female	9028332046
61	Komal Santosh Gavali	Bcom-1	Female	8551093272
62	Sayali subhash patil	Student	Female	8329771653
63	vaishnavi rajendra suryawanshi	student	Female	9307531774
64	Rutuja Anil Mali	A	Female	7841083247
65	Prathamesh Arvind Kamble	B.com 1st year	Male	9561870473
66	Mane Nikita Ganesh	Student	Female	9325116598
67	komal popat pawar	student	Female	7249112804
68	Omkar jotiba shastri	B.com 1 student	Male	7058466535
69	Pranav patil	Student	Male	8055661315
70	Karan Sanjay Navale	Student	Male	8530509606
71	Waghmode pratik keshav	B com 1	Male	9665153430
72	Salunkhe Anita Vinayak.	Student B. Com 3	Female	9579765386
73	Amol Ananda Salunkhe	Student	Male	9022706703
74	Anita pandurang shinde	Student	Female	7218871717
75	Rutika Manik Pawar	Student	Female	9356213045
76	Bhagyashri shivaji nikam	Sonvle sir.	Female	7499778990
77	Rutvik fanchu yadav	Student	Male	7219817278
78	Mane Radhika Subhash	B.com 3	Female	8767912250
79	Pratiksha Rajendra Patil	BCom-3	Female	9322483581
80	Vishal uttam katkar	Student	Male	9960871240
81	Hingmire Shraddha Sunil	Student	Female	9890575165
82	Vijay yuvraj Rendalkar	Student	Male	9860744502
83	Monika manik sutar	Student	Female	7397938493
84	Ketan Shankar Daingade	Student	Male	8806239938
85	Sayali mahesh petkar	Student	Female	9860371144
86	Amruta Dnyandev Edake	Student B.com 1st year	Female	8010454691

87	Jadhav Vishal mahadev	<a href="#">B.com</a>	Male	8956133400
88	Kamble Ankita Balu	Student	Female	7498721114
89	Suryawanshi Dhanshri Mohan.	Student..B.com.III	Female	9325331235
90	Sutar rohan Sanjay	Student	Male	9112307032
91	Madhugandha pradip more	Student Bcom 1 year	Female	7387155976
92	Amruta Balaso patil	Student	Female	7666858637
93	Rushikesh Suresh Jamdade	Student	Male	9075697758
94	Mayuri jadhav	Student	Female	8669594310
95	Dr. Tatoba kallappa Badame	Teacher	Male	9850677039
96	Shinde yogesh shivaji	B.com 1st year	Male	9921424183
97	Kharade pratiksha Tukaram	Student	Female	8530375883
98	Sahil Salim nadaf	Student	Male	9527970072
99	shinde snehal pradip	Student b.com3	Female	7666823155
100	Hankare	student	Male	7058719471
101	Mane Keshav Dipak	Student, B. Com - 1st	Male	9067781219
102	PRASAD JAYANT GORE	STUDENT	Male	9766397851
103	Suyog ravsaheb patil	B COM 3	Male	7397989509
104	Harshada bandu karode	B.com II	Female	9763155924
105	Swapnil sanjay Bhagat	BCOM 3	Male	7378487637
106	Aditi sachin patil	Student	Female	8676127971
107	Omkar Mahadev Patil	Student	Male	9112923071
108	Harshada Hanmant Jadhav	B.com.-1	Female	9975912392
109	Aditya Rajendra Mali	B.com I	Male	7758828863
110	Rajmane Priyanka Dadaso	Bom3	Female	9322709015
111	Swapnali Satish Kharmate	Student	Female	7020052263
112	Amita Gavali	Student	Female	7620728778
113	KOLI HEMA BHAGWAN KOLI	Student	Female	9561942458
114	Kale tejashvini dhanaji	Student	Female	9022636381
115	Aynur Nisar Nadaf	Student	Female	7558664453
116	Swapnali Bhimrav Malame	B.Com 3	Female	9370043536
117	Patil Pratiksha Manik	B. Com 2 nd year , student	Female	7420979418
118	Pooja Shashikant Ghodake	Student	Female	9359707029
119	Chavan Mayur Anandrao	B. Com 1 Year	Male	9373407322
120	Patil pooja bhausaheb	Student	Female	7757075301
121	Sushma Subhash Gaikwad	Student	Female	9373417478
122	Sakshi anil Shinde	Student	Female	9730359480
123	Rushikesh Tanaji Patil	B.com 3	Male	8329122599
124	Soundade Swati Subhash	Student	Female	9011478904
125	Dound Priti Dilip	Student	Female	8847719545
126	snehal ramesh kumbhar	bcom 1 year	Female	7218039779
127	Pranali Raghunath Suryawanshi	Student	Female	9021150094
128	Gurav Aary Arvind	student	Male	9096772322
129	Bedage pratiksha Ramchandra	Bcom 3 year	Female	9552260496
130	Snehal Vijay shinde	Student	Female	9096038962
131	Arpita Shrimandhar Jayappa.	Student	Female	9322782711

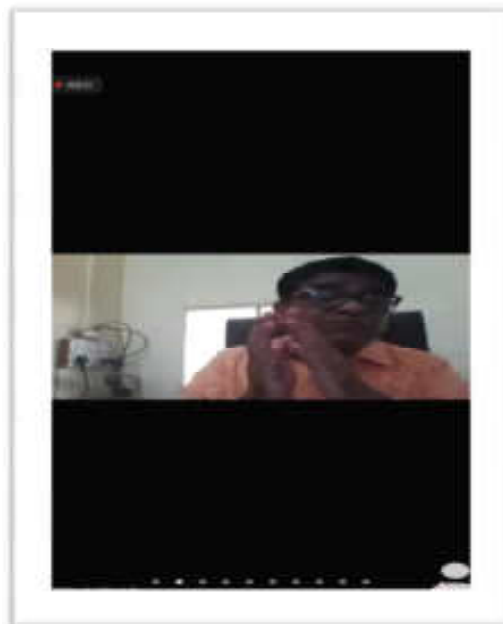
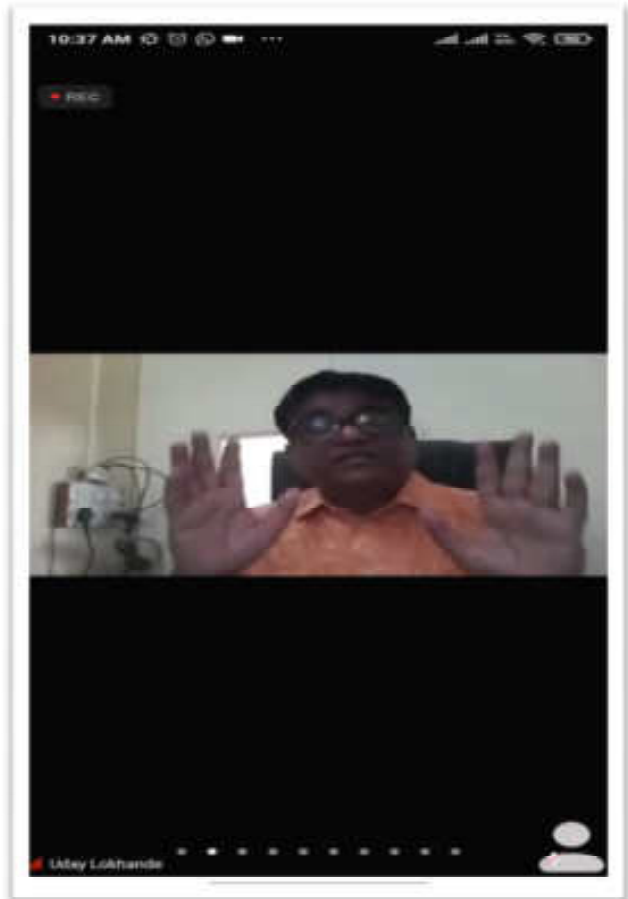
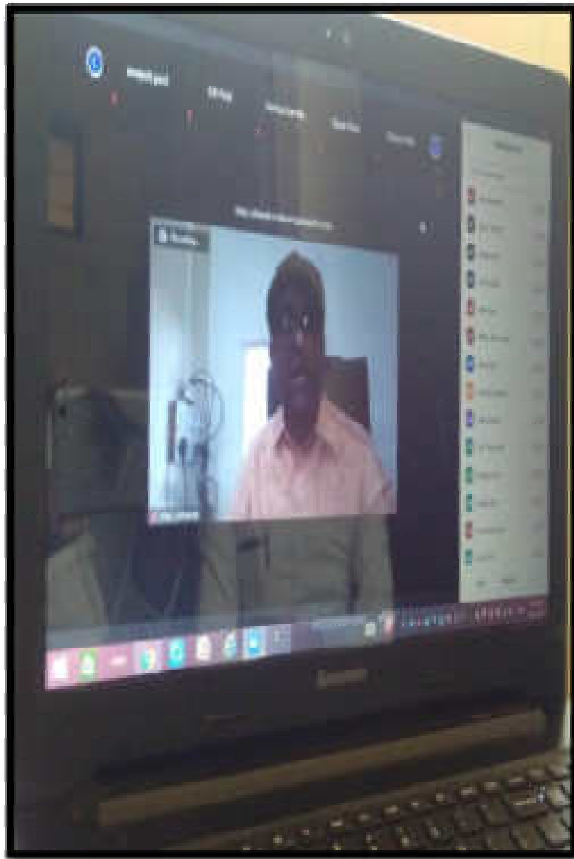


132	Patil Akashi Sanjay	Student	Female	8421661253
133	Aviraj Vilas Shinde	Student	Male	9970179534
134	Pawar monika Tanaji	Student	Female	9356771976
135	Vaishnavi Arjun kadam	Student	Female	9370870333
136	Sahil Patil	Student	Male	7272904004
137	vaibhagu suresh hingmire	b.com 1 year student	Female	7385231929
138	Pratik vikas patil	Student	Female	7709805318
139	kamble shraddha dinkar	student	Female	7219247484
140	Shailesh Baburao sasne	Student	Male	8080945008
141	OMKAR SHRIKANT HINGAMIRE	Student	Male	9145749255
142	Komal balasaheb patil	B. Com	Female	9404977904
143	Akash Anil Jamadade	B.Com -3	Male	8530808203
144	ANKITA ASHOK KORE	B COM	Female	8855012570
145	Arati Annaso kumbhar	B.com 3rd	Female	8999448523
146	Sumit vijaykumar shivankar	B.com 3rd	Male	7448106035
147	Suraj Hari patil	Sonvale	Male	8080912441
148	mohddin Musa Shaikh	BCOM 1	Male	9730760283
149	PATIL TEJAS MANOHAR	B.COM. 1	Male	9822328032
150	Aditya anil jadhav	Student	Male	9096050478
151	Suraj Nivas Pawar	Bcom fy	Male	9370615593
152	Pratik dadaso rajmane	<a href="#">B.com</a>	Male	7058535051
153	Rutika Rajendra Ashtekar	B.com 1st year	Female	9579674580
154	More yogita jayjayram	Student	Female	7517749174
155	Saniya maruti sutar	B. Com3	Female	7378939564
156	suraj ashok patil	student	Male	9422589673
157	Shruti Santosh Rakshe	Student	Female	8308798687
158	Nikhil Prabhakar Jadhav	Student	Male	7888126530
159	Salunkhe tejaswine sambhaji.	Student	Female	9324337958
160	Shivani Bharat Mane	B. Com I	Female	9325210490
161	Sagar blasaheb Wagh	Student	Male	7385122803
162	Amit Dattatray Nikam	B. Com III	Male	9826198763
163	Mane Pranali manohar	B	Female	7058244868
164	Kale Amruta Anil	Student.B.com.III.	Female	9322424533
165	Tejas jadhav	B. Com Fy	Male	7798074287
166	Tushar Tanaji patil	2 nd year b com.	Male	7385641002
167	RAHUL RAMESH JADHAV	B com 2 (student)	Male	8010831697
168	Rishikesh rajendra Patil	Student	Male	9172516369
169	Gavade Jyoti Tukaram	B. Com 1year student	Female	9850672433
170	Mohan Devappa Chinee	Assistant Professor	Male	8600389847
171	Aniket Patil	B.com 3 year	Male	8766903736
172	Chavan pooja bapurao	Student	Female	8766439239
173	Rohan Sanjay Bobade	B.com 3 Sonavane Sir	Male	7798606636
174	Arati Arjun Nyaynirgune	Student	Female	8591051229
175	Jagtap sanika hanmant	Student	Female	7262929660

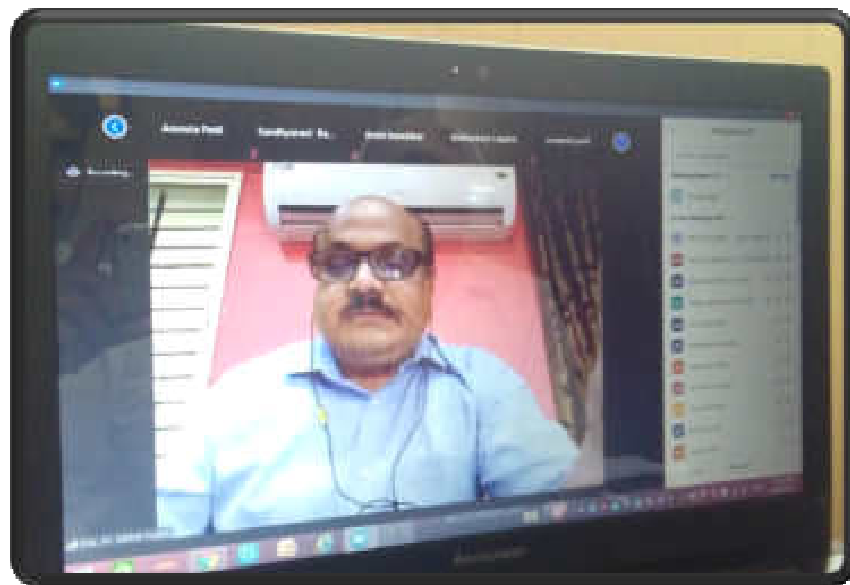
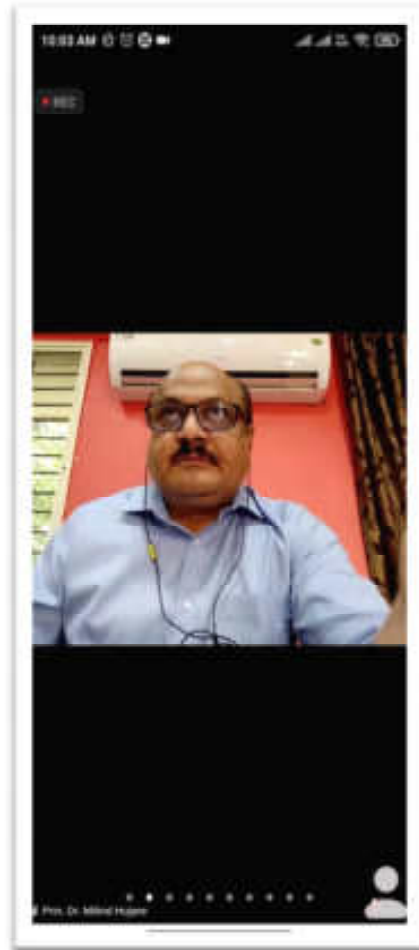
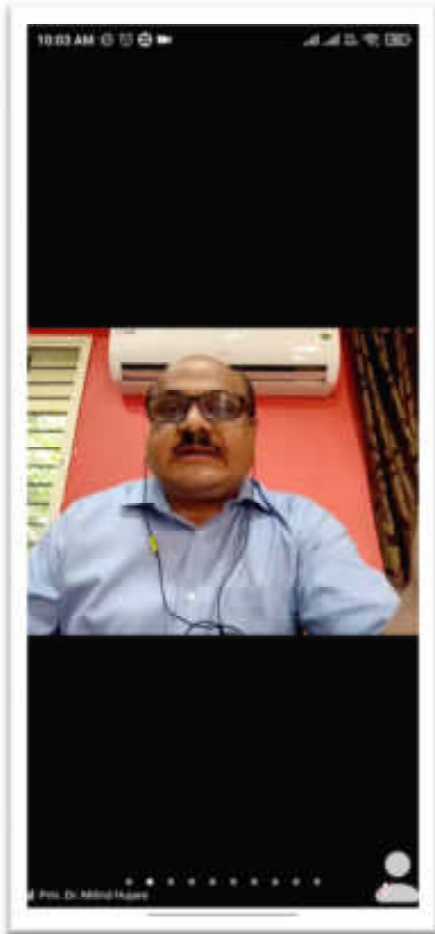
176	Nitin sambhaji nimbalkar	Student	Male	9373721907
177	Sakshi Kashinath Kumbhar	B.com 1 year ( Sonavle Sir )	Female	7559470485
178	Pratiksha shashikant gaikwad	Student	Female	9022482707
179	Omkar ankush chavan	Student B.COM 3	Male	7219881264
180	Akanksha Kuber Patil	Student	Female	7972907942
181	Akash shankar chavan	B. Com 1st	Male	7499001033
182	Shital dattatray khot	Student	Female	9168441190
183	Rushikesh Somnath hingmire	Student	Male	9359898401
184	Sandip Bhagavan Salunkhe	Student	Male	7507302706
185	Aditi dilip pawar	Student	Female	9309919901
186	Ashapak Ramjan Mhetar	Student	Male	7972634001
187	Miss. Rutuja Salunkhe	Student	Female	9766966441
188	Patil shivani Rajendra	SY B. Com	Female	7058778413
189	Dr Dattatray Balaso Thorbole	Teacher	Male	8698586898
190	Sandhya dhanaji shinde	Bcom III	Female	9503346567
191	Rutuja Sachin Jamadade	Student	Female	9322125651
192	Vijay vishnu bhosale	B.com 1	Male	9168555445
193	Kadam Atul sidram	B com sy student	Male	8308851763
194	pratiksha prakash bhosale	B.com 1	Female	9075534071
195	Ashtha shashikant Kamble	student	Female	8104209641
196	Madan vishnu patil	Student	Male	9172551002
197	Arjun janardan pawar	Student	Male	9673761437
198	Akshay balkrishna shinde	Student	Male	9890645822
199	Prakash Ranganath Khade	Assistant Professor	Male	9423877742
200	BABAR RUSHIKESH DHANAJI	B.COM 1year	Male	7768813972
201	Patil prashant rajendra	Student	Male	7666871094
202	Dhotre swapnali shankar	Student	Female	8275254099
203	Suwase Rohini Sunil	B.Com 1	Female	9096891678
204	Jadhav Shital Shashikant	Student	Female	8530280911
205	Sakhare Dattatray Yashwant	Assistant Professor	Male	8605093120

*\* Participants list collected through Google Form*



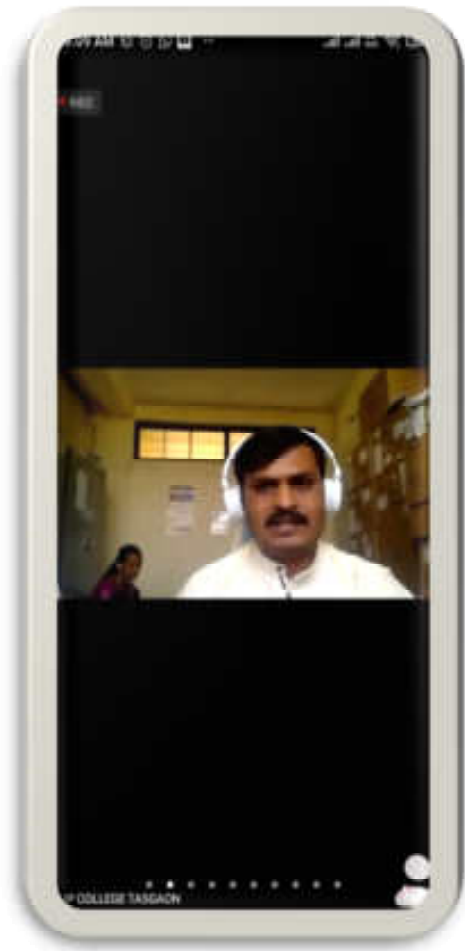
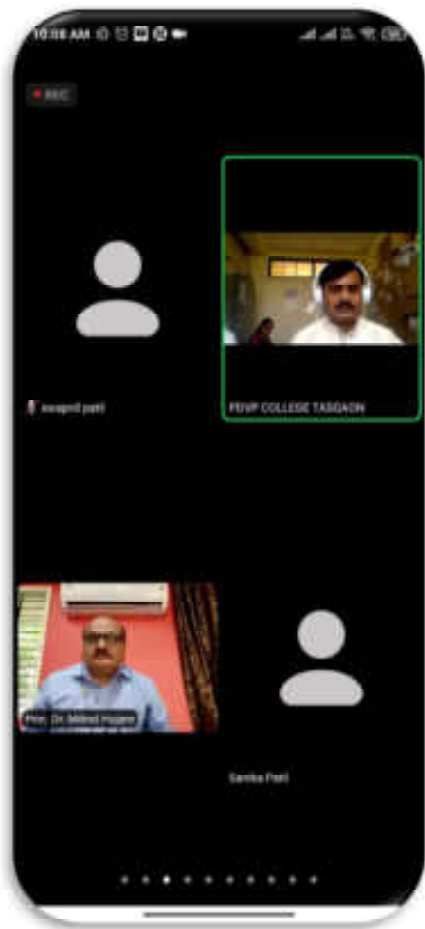


*Resource Person Speech by Hon. Dr. Uday Lokhande*



*Presidential Speech by Hon. Principal Dr. Milind Hujare*





*Introduction Speech by Dr. Sonawale A.G.*



Expressed Vote of thanks  
by Miss. Kamble K.H.



Anchoring by Patil G.R.

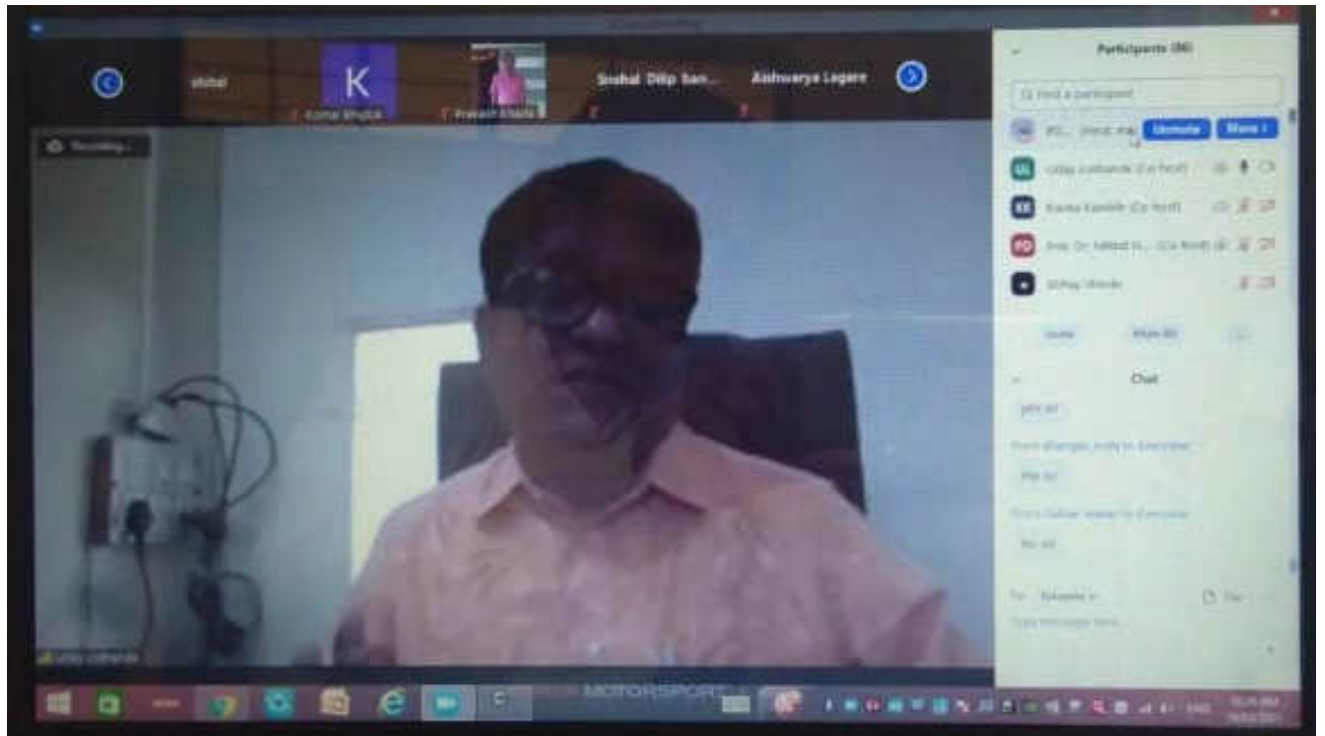




***Actively participated by Prof. Khade P.R.***

***(Chairman, Lead College Committee)***

## Participants



**Actively Participation :** Prof. Khade P.R., Mr. Patil S.M., & All the Faculty members & Students of commerce faculty in our college or other colleges.



"Dissemination of Education for Knowledge, Science and Culture" -Shikshanmaharashi Dr. Bapuji Sahunkhe

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur'



**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya**

Tasgaon Dist-Sangli, MS.



**UNDER LEAD COLLEGE SCHEME**

**DEPARTMENT OF COMMERCE**

**ORGANIZED ONE DAY WORKSHOP ON**

**"ENTREPRENEURSHIP SKILLS"**

**CERTIFICATE OF PARTICIPATION**



This is to certify that Dr./Mr./Ms. {{full name}}

of {{other identifier}}

has actively participated in

One Day Workshop on "ENTREPRENEURSHIP SKILLS" Under Lead College Scheme organized by the Department of Commerce Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon, Dist-Sangli on

Wednesday, 10<sup>th</sup> March 2021.

**Dr. Amol Sonawale**  
HOD & Coordinator

**Prof. Prakash Khade**  
Chairman, Lead College Committee

**Dr. Milind S. Hujare**  
Principal

*Certificate*

**Dr. Amol Sonawale**  
HOD  
Department of Commerce



‘Dissemination of Education through Knowledge, Science and Culture’-Shikshanmaharshi Dr. Bapuji Salunkhe

**Shri Swami Vivekanand Shikshan Sanstha, Kolhapur’s**

**PADMABHUSHAN Dr. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON  
Tal. Tasgaon, Dist.: Sangli.**

**DEPARTMENT OF COMMERCE**

**Report on  
ONE DAY WORKSHOP ON RESEARCH  
METHODOLOGY**

Market Share Research Methodology with Six Pentagonal Steps





<b>Title of Programme</b>	<b>ONE DAY WORKSHO ON RESEARCH METHODOLOGY</b>
<b>Organizing Department</b>	DEPARTMENT OF COMMERCE
<b>Collaboration with</b>	-
<b>Date</b>	24 <sup>th</sup> JANUARY, 2020.
<b>Venue</b>	ROOM NO. 28
<b>No. of Participants</b>	44, Male: 13, Female: 31

A One Day Workshop On Research Methodology was organized by Department of commerce for post graduate students.

Research: Whether you love it or hate it, you need to do it. Finding out the facts about your assignments, your job, or your life will allow you to make better decisions and gain more knowledge. In fact, the more research you do, the more you can do with your life.

Learning basic research skills is something that is lost in many educational systems. While students are often told how to find information, the Internet has become the place most people go first in order to find the facts they need.

Though the Internet is a valuable tool, it is not the only research skill a person needs in order to find the facts. Using basic research methods can help you not only find the information you need, but also find information that you can trust.

“ज्ञान विज्ञान आणि मुद्रास्कार वांछनी शिक्षणप्रसार” - शिक्षणमहर्षी डॉ. बापूजी साळुंखे  
Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's  
Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon  
Department of Commerce

दिनांक १८.०१.२०२०

प्रति,  
मा. प्राचार्य,  
पी. डी. व्ही. पी. महाविद्यालय,  
तासगांव

विषय : 'Research Methodology & Report Writing' एक दिवसीय  
कार्यशाळा घेण्यास परवानगी मिळणेबाबत.....

महोदय,

वरील विषयानुसार एम. कॉम. भाग १ व २ साठी 'Research Methodology & Report Writing' या विषयाची दि. २४.०१.२०२० रोजी एक दिवसीय कार्यशाळा घेण्यास परवानगी परवानगी मिळावी ही विनंती.

कळावे,



आपला विश्वासू,



(डॉ. सोनवले. ए. जी.)

HEAD

Department of Commerce  
P.D.V.P. College, Tasgaon.




“ज्ञान विज्ञान आणि सुसंस्कार यांनाटी शिक्षणप्रसार” - विज्ञानमार्थी डॉ. बापूजी साळुंके  
Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's  
Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon  
Department of Commerce

Date: 18.01.2020

Notice

All the students of M. Com. I & II year are hereby informed that a one day workshop on “Research Methodology and Report Writing” is going to be organized on 23<sup>rd</sup> January 2020. Register you name through college website ([pdvpmtasgaon.edu.in](http://pdvpmtasgaon.edu.in)) before 23<sup>rd</sup> January 2020.

  
(Dr. Sonawale A.G.)  
HEAD  
Department of Commerce  
P.D.V.P.College, Tasgaon.



पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय  
 शाखा, ता. सांगली, जि. सांगली, महाराष्ट्र



मुख्यालय : डॉ. बाबाजी रोड - VSC, 151 \* STD : 023356 - 240 664, 240 665, 240 666, 240 667, 240 668  
 \* शिवाजी विद्यापीठ, कोल्हापूर संखडा \*  
 ई-मेल : dean.pdvpm.tas@gmail.com वेबसाईट : www.pdvpm.tasgaon.edu.in  
 \* महाविद्यालय - 201 9112 डी.डी. नं. 977 899 कोल्हापूर, वे. 22-12-2019 \* शिक्षा विभाग सं. 50/2019

पदाध्यक्ष  
 डॉ. बाबाजी साठुंबे

ना. चंद्रकांत (दादा) पाटील  
 अध्यक्ष

डॉ. अशोककुमार साठुंबे  
 कुलपति

डॉ. सुभाषी गावडे  
 कुलपति

डॉ. मंगल एम. हुजरे  
 कुलपति

पत्रांक क्र. : पी.डी.व्ही.पी.एम.टी./1451

दिनांक : 20/01/2020

To,  
 Dr. Patil Kailas Sunil  
 Head, Department of Economics,  
 Vivekanand College,  
 Kolhapur

**Subject : Invitation as a Resource Person for the One day Workshop.....**

Respected Sir,

We are very glad to inform you that Department of Commerce is going to organize one day workshop on "Research Methodology and Report Writing" to be held on Thursday 23<sup>rd</sup> January 2020 at 10:30 am. You are requested to accept the invitation as a Resource Person for this workshop. So kindly accept the invitation.

Thanking You,

Yours sincerely,

*(Dr. M. S. Hujare)*  
 Principal  
 Padmabhushan Dr. Vasantgadada Patil  
 Mahavidyalaya, Tasgaon, (Sangli)



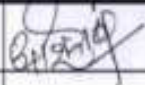
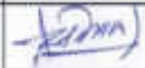
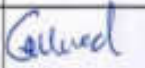
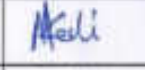
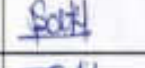

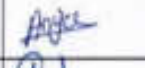

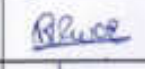
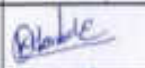
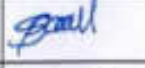

"Dissemination of Education for Knowledge, Science and Culture"  
 -Shikshanmaharshi Dr. BapujiSalunkhe  
 Shri Swami VivekanandShikshanSamstha, Kolhapur Sanchlit  
**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya,**  
 Tasgaon, Dist- Sangli, Pin-416312  
**DEPARTMENT OF COMMERCE**  
 Organized  
**ONE DAY WORKSHOP**  
 On  
**"RESEARCH METHODOLOGY AND PROJECT WRITING"**  
 Date: 23<sup>rd</sup> January 2020

---

<b>First Session (Time-11:00 to 01:00)</b>	
<b>Introduction</b>	: Prof. G. R. Patil
<b>Resource Person</b>	: Dr. Kailas Sunil Patil Vivekanand College, Kolhapur
<b>Subject</b>	: "Introduction to Research Methodology"
<b>President</b>	: Dr. Milind Hujare Principal, PDVP Mahavidyalaya, Tasgaon
<b>Working Lunch (01:00 to 02:00)</b>	
<b>Second Session (Time-02:00 to 04:00)</b>	
<b>Resource Person</b>	: Dr. Kailas Sunil Patil Vivekanand College, Kolhapur
<b>Subject</b>	: "Project Writing "
<b>President</b>	: Prof. K.S. Patil Vice Principal, PDVP Mahavidyalaya, Tasgaon
<b>Second Session III (Time-04:00 to 05:00)</b>	
<b>Discussion and Valedictory</b>	
<b>Chief Guest</b>	Dr. Kailas Sunil Patil
<b>President</b>	Prin. Dr. Milind Hujare
<b>Vote of Thanks</b>	Prof. Kamble K.H
<b>Anchor</b>	Prof. Shinde V.P










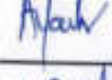

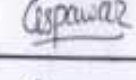
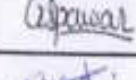
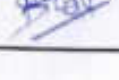
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 Padmabhushan Dr. Vasantaoada Patil Mahavidyalaya, Tasgaon Dist- Sangli  
 Commerce Department

**Research Methodology and Report Writing Dt. 23.01.2020**

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14	varsha	Shinde	kavitakamble440@gmle.com	9146401911	Female	assistant prof.	b.com	



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 Commerce Department  
 Research Methodology and Report Writing Dt. 23.01.2020

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21	KAJAL	PATIL	kajalspatil01@gmail.com	7499452385	Female	STUDENT	M COM II	
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25	NIKITA	MORE	nikitamore738@gmail.com	8999658062	Female	STUDENT	M COM II	
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27	Gayatri	Chougule	gayatrisanjay90@gmail.com	8007721467	Female	Housewife	Mcom 2	
28	Parshuram	Sadakale	parshuramsadakale.dtis@gmail.com	9766610237	Male		M com 2	

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 Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's  
 Padmabhushan Dr. Vasantaoada Patil Mahavidyalaya, Tasgaon Dist- Sangli  
 Commerce Department  
 Research Methodology and Report Writing Dt. 23.01.2020

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31	Pranali	Patil	pranalipatil7842@gmail.com	9096990051	Female	Student	M com first year	P.P. Patil
32	Pranali	Patil	pranalipatil7842@gmail.com	9096990051	Female	Student	M com first year	-
33	Komal	Nimbalkar	pranalipatil7842@gmail.com	9881816096	Female	Student	M com first year	Komal
34	Ajit	Jadhav	ajitbajadhav721996@gmail.com	7775920115	Male	Student	M.sc 2	Ajit
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41	Supriya	Mhamane	anujamali123@gmail.com	7620007965	Female	Student	M Com II	Supriya
42	Shruti	Gaikwad	Snehagaikwad77244@gmail.com	7841941065	Female	Student	M Com II	Gaikwad



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Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon Dist- Sangli  
Commerce Department  
Research Methodology and Report Writing Dt. 23.01.2020

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44	Ranjeet	Kumbhar	kumbharranjeet55@gmail.com	9766647205	Male	Asst.Professor		



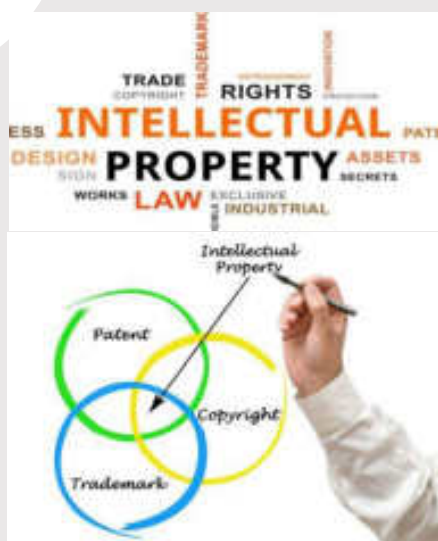
**Dr. Kailas Patil while guiding the students about Research Methodology**



**Students participating in the workshop**

**Dr. A. G. Sonawale**  
Head, Department of Commerce





### **•Short Description of Activity•**

Internal quality assurance cell (IQAC), of Padmabhushan Dr. Vasantaraodada Patil College, Tasgaon and Shri Vijaysinha Yadav college, Peth Vadgaon organized National webinar on “Basics of IPR: Patenting in Academic Research” on 17<sup>th</sup> March 2021 at 11.00 am. In this programme Prin. Dr. Vijaya Chavan, has given preface of the program. Dr. C. B. Mane Coordinator, IQAC introduced resource person of the webinar. Princ. Dr. Milind Hujare has addressed the presidential talk and Dr. Rajaram Atigre has expressed vote of thanks.

### **CONTACT**

PHONE:  
02346 250665

WEBSITE:  
[www.pdvpmtasgaon.edu.in](http://www.pdvpmtasgaon.edu.in)

EMAIL:  
[san.pdvpmtas@gmail.com](mailto:san.pdvpmtas@gmail.com)



## **WEBINAR REPORT** **NATIONAL WEBINAR** **ON** **“BASICS OF IPR: PATENTING IN ACADEMIC RESEARCH”**

Organized By

**Internal Quality Assurance Cell (IQAC)**

- PADMABHUSHAN DR, VASANTARAODADA PETIL MAHAVIDHYALAYA, TASGAON (SANGLI), MS, INDIA**
- VIJAYSINHA YADAV COLLEGE, PETH VADGAON (KOLHAPUR), MS, INDIA**

### **RESOURCE PERSON**

**Dr. Mrudula Bele,**  
**Associate Professor, NDMVP's College of Pharmacy, Nashik**

### **PLATFORM OF WEBINAR**



Google Meet

### **Organizers**

**Prin. Dr. Milind Hujare**

PADMABHUSHAN DR, VASANTARAODADA PETIL MAHAVIDHYALAYA, TASGAON

**Prin. Dr. Vijaya Chavan**

VIJAYSINHA YADAV COLLEGE, PETH VADGAON

### **PARTICIPATION OF STUDENTS**

No. of respondents Registered	No. of total respondents Participated	Out of State	Level
306	101	26	National

## Abstract of Webinar

Dr, Mrudula Bele, Chief Guest in her address, insisted the participants for filing of patents of their academic research and innovations to protect their intellectual work. She expressed that, this workshop will enlighten the participants to go for filing of patents, industrial design and copy rights of their research work and innovations. "Basics of Intellectual Property Rights, Emerging Trends in IPR Legislation in Industry and scope of IPR academic research.

In webinar, students, academicians, researchers and doctors from different institutions participated. Experts from different patent facilitations centers and IP analysts gave talk on IPR and litigation issues.

**Shri Vijaysinha Yadav College, Peth Vadgaon & PDVP College, Tasgaon**  
(Affiliated to Shivaji University, Kolhapur)  
**Internal Quality Assurance Cell (IQAC)**

Jointly Organizes **National Webinar on**  
**Basics of IPR: Patenting in Academic Research**

**Speaker**  
**Dr. Mrudula Bele**  
Associate Professor  
NDMVP's College of Pharmacy  
Nashik (Maharashtra)

**Date and Time**  
17<sup>th</sup> March, 2021  
11.00 am onwards

**With Regards**

<b>Dr. Vijaya R. Chavan, Principal</b>	<b>Dr. Milind Hujare, Principal</b>
<b>Dr. Chandrakant B. Mane, IQAC Coordinator</b>	<b>Dr. Suresh S. Patil, IQAC Coordinator</b>
<b>Dr. Dinesh J. Bhandare, IQAC Co-Coordinator</b>	<b>Dr. Arjun S. Kumbhar, Head Criterion III</b>
<b>Dr. Rajaram H. Atigre, Head Criterion III</b>	<b>Padmabhushan Dr. Vasantraodada Patil</b>
<b>Shri Vijaysinha Yadav College, Peth Vadgaon</b>	<b>Mahavidyalaya, Tasgaon</b>

Registration Link: <https://forms.gle/9rwNCteXYfWN5NXa8>  
Whats App group link: <https://chat.whatsapp.com/D8beBJFBZBs6qdv8Zv0qNj>



Shri Vijaysinha Yadav College, Peth Vadgaon  
& Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya,  
Tasgaon

(Affiliated to Shivaj University, Kolhapur)

Internal Quality Assurance Cell (IQAC)

Jointly Organizes

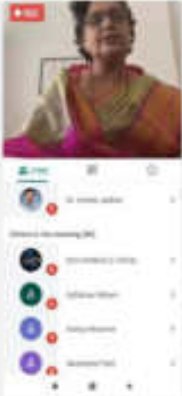
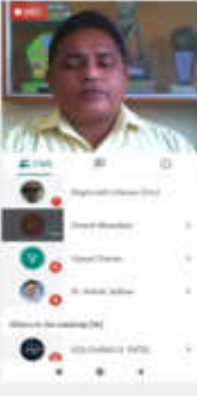
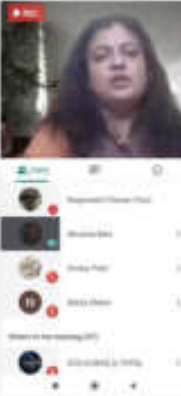

National Webinar on

**Basics of IPR: Patenting in Academic Research**

Wednesday 17<sup>th</sup> March 2021 11:00am

**Programme Schedule**

- **Preface & Welcome** : Prin. Dr. Vijaya Chavan
- **Introduction of Resource Person:** Dr. C. B. Mane, IQAC Coordinator,  
Shri Vijaysinha Yadav College, Peth Vadgaon
- **Resource Person Address:** Dr. Mrudula Bele,  
Associate Professor,  
SIBMVP's College of Pharmacy, Nashik
- **Interaction** :
- **President's Words** : Prin. Dr. Milind Hujare
- **Vote of Thanks** : Dr. Suresh S. Patil, IQAC Coordinator,  
Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya,  
Tasgaon
- **Audite** : Dr. Dinesh Bhosale

			
<b>Welcome Speech</b>	<b>Introductory Speech</b>	<b>Chief Guest's Speech</b>	<b>Presidential Speech</b>
By <b>Prin. Dr. Vijaya Chavan</b>	By <b>Dr. Chandrakant Mane</b>	By <b>Dr. Mrudula Bele</b>	By <b>Prin. Dr. Milind Hujare</b>



Dr. Arjun. S. Kumbhar

  
Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon (Sangli).

**“Dissemination of Education for Knowledge, Science and Culture” -Shikshanmaharashi Dr. BabujiSalunkhe  
Shri Swami VivekanandShikshanSanstha Kolhapur  
PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,  
TASGAON, SANGLI-416213, MAHARSHTRA**

## **Report on One Day Workshop on Intellectual Property and Patenting System**

<b>Event:</b>	<b>One Day Workshop on Intellectual Property and Patenting System in India.</b>
<b>Organizing Department</b>	IQAC
<b>Date</b>	24 <sup>th</sup> January 2020
<b>Venue</b>	Room No. -29
<b>Total Participants</b>	118

- Schedule of the Workshop

<b>One Day Workshop on Intellectual Property and Patenting System in India.</b>	
Date: <b>January 24, 2020</b>	
Time: 11.30 am	
Welcome and Introduction	Prof. (Dr.) Suresh S. Patil, IQAC Co-ordinator
President:	Dr. Milind S. Hujare, Principal, PDVP College Tasgaon
Resource person:	Mr. Sagar Pol Assistant Controller of Patents & Designs Patent Office, Mumbai Department for Promotion of Industry & internal Trade



	Government of India
Vote of thanks:	Dr. Jeevan S. Ghodake, Organizing Secretary

Intellectual Property Rights (IPRs) are a set of exclusive rights protected by law which are accorded to creators or persons over their creations for a certain time period. An IPR holder can realize value from its intellectual assets through utilizing it internally for its own processes or share it externally through provision of goods and services to customers. The latter can be achieved through legal mechanisms such as licensing or assignment.

In today's globally competitive environment, intellectual property has placed itself on a pedestal in the context of economic growth and is becoming increasingly important. Intellectual Property (IP) is the fuel that powers the engine of prosperity, fostering invention and innovation. The increasing significance of intangible assets in the global economy is forcing business organizations to actively manage their IP as a key driver for building and sustaining their competitive advantage and achieving superior performance.

IPRs are now being used not only as a tool to protect creativity and generate revenue but also to build strategic alliances for socio-economic and technological growth. Accordingly, in order to foster the protection of innovations and creativity, the Intellectual Property Office under the Ministry of Commerce and Industry is dedicated to mobilize the use of such technological advancement for the economic development of the country.

The generation of IP largely takes place at the State level through small,

medium and big industries, academic institutions and individuals. Most States have not yet evolved their IP strategies and ecosystems in terms of effective facilitating services for all sectors including MSMEs and start-ups, creating awareness, conducting training programs, systems for utilization of IPR etc. States need to maximize the benefits from their intellectual property by stimulating higher levels of innovation through a judicious system of rewards, ensuring timely and effective legal protection for IP and leveraging strategic alliances for enhancing the value of the intellectual property created in the State.

Taking into consideration the importance of IPR, Internal Quality Assurance Cell of college organized one day workshop on Intellectual Property and Patenting System in India for to aware students and faculty members about IPR on 24<sup>th</sup> January 2020.

The workshop was intended to spread the awareness of intellectual property rights among the students and faculty. Eminent resource person in the field of IPR were invited to enlighten on the subject.

## **INAUGURATION**

Mr. Sagar Pol, (Assistant-----) inaugurated workshop. The president of the seminar was our College Principal Hon. Dr. Milind Hujare. Prof. Dr. S. S. Patil welcomed and introduced the Chief Guest. Mr. Sagar Pol expressed about various types of Intellectual Property and Patenting System. The president Principal Hon. Dr. Milind Hujare in his presidential speech said about all rounded development of College. He focused the vision and expected progress in future. Finally, Dr. Jivan Ghodake expressed vote of thanks.


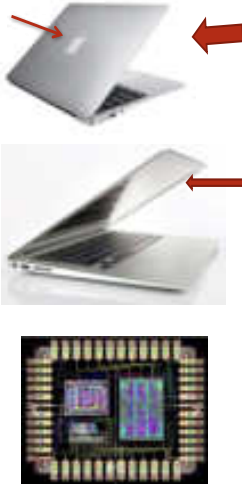




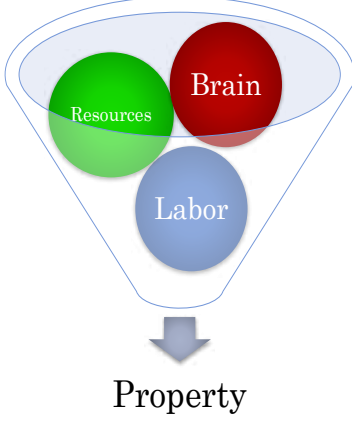
Welcome of Chief Guest Mr. Sagar B. Pol



Keynote address by Chief Guest Mr. Sagar B. Pol

<p><b>ABOUT SPEAKER</b></p>  <p><b>Academics</b></p> <ul style="list-style-type: none"> <li>○ B. Textile (DKTES' TEI, Ich.)</li> <li>○ M. Tech (Indian Institute of Technology, Delhi- IITD)</li> <li>○ LL.B. (Mumbai University)</li> <li>○ Post Graduate Diploma in IPR (Pursuing)</li> </ul> <p><b>Experience:</b></p> <ul style="list-style-type: none"> <li>○ Examiner of Patents and Designs (2012-2018)</li> </ul> <p><b>Present Posting:</b></p> <ul style="list-style-type: none"> <li>○ Assistant Controller of Patents and Designs, at Patent Office-Mumbai</li> </ul> <p style="text-align: right;">1.01/20/20</p> <p style="text-align: center;">2</p>	<p><b>Different IPs in a Single Product</b></p>  <div style="background-color: #8B4513; color: white; padding: 10px; width: fit-content; margin-left: auto; margin-right: auto;"> <p>LED display- Patent          Body of laptop- Design          Apple sign- Trade Mark          User Manual- Copyright          layout of IC- SICL Design</p> </div> <p style="text-align: right;">1.01/20/20</p> <p style="text-align: center;">4</p>
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### INTELLECTUAL PROPERTY RIGHTS







Property

16/12/2020

5

### PATENTS

16/12/2020

11

## FIRST SESSION

The Chief Guest and Speaker of the first session Mr. Sagar Pol( Assistant --- -), he expressed the concepts of Intellectual Property, Patents, Copyrights and Trademarks with real time examples and case studies of Hush Puppies, Kearns v/s Ford Motors (Windshield wipers) etc.The president of this session was Prof. Dr. S. S. Patil told popularly used for public utility and technology share. The requirements and procedure for obtaining the Patent, Novelty and Technological inventions and eligibility to obtain the same was briefed in the session. Mr. SachinShinde expressed vote of thanks.





Introduction of Chief Guest by  
Prof . Suresh S. Patil



Presidential address by  
Prin. Milind S. Hujare

## SECOND SESSION

Second Session was discussion about intellectual Property, Patents. How application of patents, acts of patents, about Copyrights Law Administration and Enforcement in India, Copyrights Protective Work, who can obtain Copyrights , the Bundle of Rights associated with Copyrights and the term of Protection of Copyrights in different fields were discussed issue in this second session.

## VALEDICTORY FUNCTION



Participant students and faculty





*'Dissemination of Education through Knowledge, Science and Culture'-Shikshanmaharshi Dr. Bapuji Sahankhe*

**Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's**  
**PADMABHUSHAN Dr. VASANTRAODADA PATIL**  
**MAHAVIDYALAYA, TASGAON**  
Tal.: Tasgaon, Dist.: Sangli.

One day workshop on

***Intellectual Property and Patenting System in India***

Organized By

**INTERNAL QUALITY ASSURANCE CELL (IQAC)**

**CERTIFICATE**

This is to certify that Mr./Ms. -----  
of *PDVP Mahavidyalaya, Tasgaon, Dist. Sangli* participated in the one  
day workshop on *Intellectual Property and Patenting System in India*  
held on Friday, 24<sup>th</sup> January 2020.

  
Dr. Jeevan S. Ghodake  
Organizing Secretary

  
Prof. (Dr.) Suresh S. Patil  
IQAC Coordinator

  
Dr. Milind S. Hujare  
Principal

Prof. Dr. S.S.Patil introduced guests. Mr. Sagar Pol was the Chief Guest of Valedictory Function. Our College Principal Hon. Dr. MilindHujare was president this function. The Chief Guest informed and instructed the challenges and difficulties before Indian Economy after globalization. Principal Dr. MilindHujare explained need and utility of national seminars for the development. Mr. A. Jagdale expressed vote of thanks.



Dr. Jeevan S. Ghodake  
Organizing Secretary



One day Workshop on Intellectual Property and Patenting System in India, Dt. 24/01/2020

Sr. No.	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designatio
33	901	NIKITA	Olekar	A/P -Alkud (s) ,Tal- K.mahankal , Dist - Sangli	olekarnikita@gmail.com	9307752799	P.D.V.P. College, Tasgaon	1/21/2020	Female	Student
34	902	Rutuja	Patil	A/p Bisur, tal. Miraj, dist. Sangli	rutujap1802@gmail.com	9158389707	PDVP college Tasgaon	1/21/2020	Female	Student
35	903	Prajakta	Patil	Kavathe mahankal	Prajaktapatil48@gmail.com	9552738898	Pdvp college	1/21/2020	Female	Student
36	904	Asmita	Patil	A/P sawlaj, Tal- Tasgaon, Dist- Sangli	asmilapatil0447@gmail.com	8329155669	PADMABHUSHAN DR.	1/21/2020	Female	Student
37	905	Amruta	Dhamane	A/p malgaon, tal miraj, dist sangli	amrutadhamane576@gmail.com	9370636315	Pdvp college	1/21/2020	Female	Student
38	906	Shubhangi	Pawar	A/P sawlaj Tal-tasgaon Dist- Sangli	Shubhangipawar884@gmail.com	7558470275	Pdvp college Tasgaon	1/21/2020	Female	Student
39	907	Pallavi	Zambre	A/P- Dongarsoni , Tal.:Fashion, Dist.:Sangli	www.pallavizambre1808@gmail.com	7507452637	P.D.V.P.college, Tasgaon	1/21/2020	Female	Student
40	908	Mayuri	Patil	A/p Arjunwad, tal. Shirol, dist. Kolhapur	mayuripatil10244@gmail.com	7028926871	PDVP college Tasgaon	1/21/2020	Female	Student
41	909	Pradnya	Patil	Nagrale	Ppatil9188@gmail.com	9373209271	Pdvp college	1/21/2020	Female	Student
42	910	Monika	Mane	A/p Sawarde,tal. Tasgaon, diat. Sangli	monikapmane4111@gmail.com	7758000349	PDVP college Tasgaon	1/21/2020	Female	Student
43	911	Rohini	Patil	A/P Kolindre Tal : Ajara Dist : Kolhapur	rohiniptil06377@gmail.com	7264047899	PDVP college Tasgaon	1/21/2020	Female	Student
44	912	Swapnil	Shinde	A/p nagaj Tal kavathe mahankal Dist Sangli	ss2506344@gmail.com	7028550395	Pdvp college Tasgaon	1/21/2020	Male	Student
45	913	Suyash	Sutar	A/P- Balawadi, Tal- Khanapur, Dist- Sangli Pin- 415307	sutarsuyash1@gmail.com	9604787170	P.D.V.P. College, Tasgaon	1/21/2020	Male	Student
46	914	Rohit	Kamble	A/p sindur tal jath dist sangli	rohitkamble356@gmail.com	7709614820	Pdvp college Tasgaon	1/21/2020	Male	Student
47	915	Ravindra	Vhanmane	A/P- Junoni, Tal- Sangola, Dist- Solapur Pin- 413307	ravindravhanmane8@gmail.com	8007846544	P.D.V.P. College, Tasgaon	1/21/2020	Male	Student
48	916	Supriya	Patil	A/p Chinchani (patil mala), Tal- tasgaon	Sprityappatil08@gmail.com	9373395955	P.d.v.p.college Tasgaon	1/21/2020	Female	Student



**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon Dist- Sangli  
INTERNAL QUALITY ASSURANCE CELL**

**One day Workshop on Intellectual Property and Patenting System in India, Dt. 24/01/2020**

Sr. No.	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designation
17	869	Pragati	Shinde	Shinde Galli, Tasgaon	pragatvs1997@gmail.com	8055048962	PDVP College, Tasgaon	1/21/2020	Female	
18	870	Aishwarya	Medhe	A/P-Parite, Tal-Karveer Dist-Kolhapur	aishwaryamedhe5@gmail.com	7744972980	PDVP College, Tasgaon	1/21/2020	Female	Student
19	871	Pranali	Salunkhe	A/P Arawade	pranalisalunkhe997@gmail.com	9730975614	P.D.V.P.college, Tasgaon	1/21/2020	Female	student
20	872	AYESHA	ATTAR	7th lane, Gandhi chowk, Jaysingpur	ayeshattar2495@gmail.com	7709488997	P.D.V.P. COLLEGE, TASGOAN	1/21/2020	Female	—
21	873	Pragati	Shinde	Shinde Galli, Tasgaon	pragatvs1997@gmail.com	8055048962	PDVP College, Tasgaon	1/21/2020	Female	—
22	874	Radhika	Ghali	A/P Ichalkaranji Tal.-Hatkangle, Dist.-Kolhapur	radhikaghali682@gmail.com	7972997172	pdvp college tasgaon	1/21/2020	Female	—
23	875	Sushama	Vedpathak	A/Post-Hivare, Tal-Kahanapur, Dist-Sangli	skvedpathak08@gmail.com	9730653415	P.D.V.P. College, Tasgaon	1/21/2020	Female	Student
24	876	dattatraya	nalavade	waiphale tasgaon	dinalavade@gmail.com	8975227886	pdvp tasgaon	1/21/2020	Male	teacher
25	877	shrutika	dabhade	Ap Tadvale Tal:shirala dist:sangli	shrutikas5dabhade@gmail.com	8275437256	PDVP college	1/21/2020	Female	student
26	878	Payal	Thakur	213 South Shivaji Nagar, Sangli	tpayl1917@gmail.com	9156766114	P.D.V.P. Tasgaon	1/21/2020	female	Student
27	879	Shankar	Mane	A/P Turachi	shankarmane.dt@gmail.com	7620218737	P.D.V.P.college, Tasgaon	1/21/2020	Male	student
28	880	Shweta	Varude	A/p Kundal, Tal-Palus, Dist-Sangli	shwetavarude2018@gmail.com	8983387616	P.D.V.P College, tasgaon	1/21/2020	Female	Student
29	881	Priyanka	Jadhav	Plot No.77, A ward, Hari Mandir	priyankajadhav2269@gmail.com	7768022068	PDVP College, Tasgaon	1/21/2020	Female	Student
30	882	prachi	phalake	A/P : Ashta, Tal: Walwa, Dist: Sangli	prachiphalake2@gmail.com	9730858534	PDVP college	1/21/2020	Female	student
31	883	minal	patil	A/P Nagaon Kavathe	minalpatil483@gmail.com	8530801183	P.D.V.P.College Tasgaon	1/21/2020	Female	student
32	900	Swaleha	Momin	A/P vita, tal. Khanapur, dist. Sangli	mswaleha29@gmail.com	7218023969	PDVP college tasgaon	1/21/2020	Female	Student



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**One day Workshop on Intellectual Property and Patenting System in India, Dt. 24/01/2020**

Sr. No	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designation
1	325	Ashutosh	Jagdale	C/O RAVINDRA MADHUKAR GURAV, FLAT NO. 4,	aajagdale007@gmail.com	88888036120	PDVP College	1/15/2020	Male	Asst Professor
2	329	Sagar	Shinde	PDVP College, Tasgaon	sagarshinde1193@gmail.com	9503235822	P.D.V.P. College, Tasgaon.	1/15/2020	Male	Assistant Professor
3	395	shridhar	thoravat	At post waghapur tal tasgaon dist sangli state maharashtra	shridharthoravat654@gmail.com	9975374700	Pdvp college tasgaon	1/16/2020	Male	rulglar
4	470	Jeevan	Ghodake	PDVP College, Tasgaon	jeevan_ghodake@rediffmail.com	9860122466	PDVP College, Tasgaon	1/16/2020	Male	Assistant prof
5	472	Dr. Alka	Inandr	79, Rajasahab Bungalow, Rajnagar, Sangli	draikapatil1@gmail.com	9420679006	PDVP college Tasgaon	1/16/2020	Female	Ass. Prof.
6	524	Rushikesh	Patil	At post Khujgaon tal tasgaon dist sangli	rushikeshp584@gmail.com	9075645242	PDVP COLLAGE TASGAON	1/16/2020	Male	
7	691	Prajwal	Kumbher	A/t post Tasgaon	Prajwalkumbhar42001@gmail.com	9960506171	PDVP college	1/17/2020	Male	
8	696	Rahul	Koli	A/T post tasgaon	Rahulkoli1385@gmail.com	9172257364	PDVP college	1/17/2020	Male	
9	750	SUNIL	GAVIT	P. D. V. P. COLLEGE Tasgaon	sunilgavitt111@gmail.com	9404585979	P. D. V. P. Mahavidyalaya	1/18/2020	Male	Assistant professor
10	764	Tatoba	Badame	Tasgaon	dratoba@gmail.com	9850677039	P.D.V.P.College,Tasgaon	1/18/2020	Male	Assistant Prof
11	841	Satyajit	Bhosale	A/P kavathe mahankal ,sangli	Bhosalesatyajit999@gmail.com	8530545507	PDVP college tasgaon	1/19/2020	Male	
12	852	Dr.Vinodkumar	Kumbhar	PDVP College, Tasgaon	vinodkumarkumbhar9@gmail.com	99755564622	P.D.V.P.College, Tasgaon	1/21/2020	Male	Assistant Professor and
13	865	Sachinkumar	Shinde	At. Post. Balagavade, Tal. Tasgaon	sachinshinde888@gmail.com	9730559905	PDVP College Tasgaon	1/21/2020	Male	Assistant Professor
14	866	Dhanaji	Jadhav	A/P Kavthe Piran, Tal: Miraj, Dist: Sangli Pin Code:416417	dhanajijadhav757@gmail.com	9096630757	PDVP College Tasgaon	1/21/2020	Male	Assistant Professor
15	867	Adwait	shinde	A/P vadiyeraibag	adishinde5592@gmail.com	8275176464	pdvp tasgaon	1/21/2020	Male	tasgaon
16	868	Radhika	Ghall	A/P Ichalkaranji Tal.-Hatkangle, Dist.-Kolhapur	radhikaghall82@gmail.com	7972997172	pdvp college tasgaon	1/21/2020	Female	Student



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**One day Workshop on Intellectual Property and Patenting System in India, Dr. 24/01/2020**

Sr. No.	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designa
165	1150	Dattatray	Sakhare	TASGAON	dattatrayys2018@g mail.com	8605093120	PDVPCOLLEGE	1/24/2020	Male	ASSISTA PROFESS
159	1154	Darshana	Divake	A/P-Mayani Tal-Khatav Dist- Satara	Darshanadivate777 @gmail.com	8975967163	Pdm. Dr vasanttraodada patil mahavidyalay, tasgaon	1/24/2020	Female	Stude
160	1155	Ranjeet	Kumbhar	Tasgaon	kumbharranjeet55 @gmail.com	9766647205	P.D.V.P Mahavidyalaya Tasgaon	1/24/2020	Male	Asst.Prof
161	1162	SUNIL	GAVIT	Tasgaon	sunilgavit111@gmai l.com	9404585979	P. D. V. P. Mahavidyalaya	1/24/2020	Male	Assista profess
162	1163	Mayuri	Vasudev	At post tasgaon.	mayurivasudev1998 @gmail.com	7447553059	Pdvp tasgaon	1/24/2020	Female	Stude
163	1164	Komal	Mali	At post tasgaon	komalmali9299@g mail.com	7843074935	Pdvp tasgaon	1/24/2020	Female	Stude
164	1165	Sagar	Salunkhe	At post Dhalewadi Tal Kavathe Mahankal	Sagarsalunkhe9697 @gmail.com	8329275182	Pdvp College tasgaon	1/24/2020	Male	Stude
165	1168	Vaishali	Patil		vaishalipatil494@g mail.com	9518388838	PDVP College Tasgaon	1/24/2020	Female	Assista profess
166	1169	Ashwini	Patil	P.D.V.P.College tasgaon	patilashwini791@g mail.com	7387915705	P.D.V.P.College Tasgaon	1/24/2020	Female	Assista Profess
167	1170	Swati	Jadhav	PDVP College, Tasgaon	sdj131@yahoo.co.in	9371491200	PDVP College, Tasgaon	1/24/2020	Female	Assista Profess
168	1171	Snehali	Mali		malisnehali66@gma il.com	8788909868	PDVP College Tasgaon	1/24/2020	Female	Assista profess
169	1172	Snehali	Mali	Tasgaon	malisnehali66@gma il.com	8788909868	P.d.v.p.college tasgaon	1/24/2020	Female	Assista profess



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Sr. No.	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designation
145	1129	Mayuri	Vasudev	At post tasgaon	Mayurivasudev1998@gmail.com	7447553059	Pdvp tasgaon	1/23/2020	Female	Student
146	1135	Gajanan	Pawar	Tasgaon	gajananpawar121@gmail.com	9823231814	PDVP College Tasgaon	1/23/2020	Male	Assi.Profess
147							Padmabhushan Dr Vasantrodada Patil Mahavidyalaya Tasgaon			
	1136	Amit	Mali	Dattanagar, Miraj	amitgeoo08@gmail.com	8208447808		1/23/2020	Male	Asistata Profess
148	1137	Dattatray	Thorbole	P D V P College Tasgaon dist sangli	dbthorbole@gmail.com	8698586898	P d v p college tasgaon dist Sangli	1/24/2020	Male	Asistata profess
149	1138	Vijay	Kate	Ap post Lotewadi, tal - sangola, dist - solapur	Katev9797@gmail.com	7620628679	PDVP college tasgaon	1/24/2020	Male	
150	1139	Vipul	Mohite	A/p Mohite vadgaon	vipulmohitek11@gmail.com	9766048870	PDVP college PDVP	1/24/2020	Male	Asistata profess
151	1142	Swati	Ghatage	Pdvp,college tasgaon	GHATAGESWATI2292@GMAIL.COM	9503695021	college,tasgaon	1/24/2020	Female	Asistata profess
152	1143	Megha	Patil		mupatil30@gmail.com	8830046904	PDVP college Tasgaon	1/24/2020	Female	Asistata profess
153	1145	Sujata	Mali	Pdvp college Tasgaon	sujabatamali.133@gmail.com	8806069770	pdvp college Tasgaon	1/24/2020	Female	Asistata profess
154	1146	Dattatray	Sakhare	PDVP,College, Tasgaon	dattatrayvs2018@gmail.com	8605093120	PDVPCOLLEGE	1/24/2020	Male	ASSISTATA PROFESS
155	1147	Dattatray	Sakhare	PDVP,College, Tasgaon	dattatrayvs2018@gmail.com	8605093120	PDVPCOLLEGE	1/24/2020	Male	ASSISTATA PROFESS
156	1148	Nisha	Kudale	At,po,Bhavaningar tal,waiwa dist,Sangli	nishakudae395@gmail.com	9021914548	Pdvp	1/24/2020	Female	Master scienc
157	1149	Rajaram	Mankar	Tasgaon	rajarammankar@rediffmail.com	9096505286	PDVPCOLLEGE,TASGAON	1/24/2020	Male	Assisoc profess



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Sr. No.	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designation
129	1098	Subhash	Rankhambe	Padmabhushan Dr Vasantraodada Patil	subhashrankhambe@gmail.com	8999940128	PDVP College Tasgaon	1/23/2020	Male	Laboratory Assistant
130	1099	Sunil	Kavatagi	At/p:Umarani Tal:Jath Dist:Sangli	sunilkavatagi58@gmail.com	8600363302	PDVP college Tasgaon	1/23/2020	Male	-
131	1100	Audumbar	Kodag	At/p:Avandhi Tah:Jath Dist:Sangli	kodagaudumbar3@gmail.com	9168324292	PDVP college Tasgaon	1/23/2020	Male	
132	1101	Shashikant	Sale	At/P:Nigadhi kh Tal:Jath Dist:Sangli	Shashisale3399@gmail.com	9657683399	PDVP college Tasgaon	1/23/2020	Male	
133	1102	Arjun	Kumbhar	P D V P College, Tasgaon	arjun2win@yahoo.co.in	9960543180	P D V P College, Tasgaon	1/23/2020	Male	Asso. Prof
134	1109	BANDU	KADAM	PDVP COLLEGE TASGAON	bjkadam1132@gmail.com	9970535723	PDVP COLLEGE TASGAON	1/23/2020	Male	Asstata Profess
135	1110	Parvati	Mali	A/P Kokale Tal.:Kavathe Mahankal Dist.:Sangli.	parvatimali896@gmail.com	7066972943	College,Tasgaon	1/23/2020	Female	Stude
136	1113	Ajay	Tarange	Tasgaon	ajaytarange01@gmail.com	9766448645	Pdvp college Tasgaon	1/23/2020	Male	Teach
137	1114	Rupesh	Patil	Department of Chemistry PDVP college, Tasgaon	patilrupesh984@gmail.com	7875851751	PDVP college Tasgaon	1/23/2020	Male	Research Stude
138	1115	Kisan	Patil	Tasgaon, Dist -Sangli	kisanpatil1953@gmail.com	9890703623	P.D.V.P.College, Tasgaon	1/23/2020	Male	Associ Profess
139	1116	Ankita	Yadav	A/P - Ramanandnagar Tal-Palus, Dist-Sangli	ankityadav2107@gmail.com	7447523515	P. D. V. P. College, tasgaon	1/23/2020	Female	Asst P
140	1117	SUNIL	GAVIT	Tasgaon	sunilgavit111@gmail.com	9404585979	P. D. V. P. Mahavidyalaya	1/23/2020	Male	Asstata profess
141	1118	Pravin	Sawale	Ap Anjani Tal Tasgaon Dist Sangli Maharashtra	sawalepravin92@gmail.com	9511767440	Pdvp college tasgaon	1/23/2020	Male	Sawal
142	1119	Sanyogeeta	Desai	A/P vhe, Tal-Patan, Dist-Satara, Pin No-415114	sanyogeedesais0508@gmail.com	7620608879	PDVP College Tasgaon	1/23/2020	Female	Stude
143	1120	Priyanka	mali	At post tasgaon dist.sangli	Priyankamali301@gmail.com	8483987620	Pdvp college tasgaon	1/23/2020	Female	Stude
144	1125	Komal	Mali	At post tasgaon	Komalmail9299@gmail.com	7843074935	Pdvp college tasgaon	1/23/2020	Female	Stude



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Sr. No.	ID	First_Name	Last_name	Address	Email	Mobile	College_Name	Date	Gender	Designation
113	1062	Samruddhi	Mane	A/P dafalapur	manesamruddhi51@gmail.com	8669860288	Pdvp college tasgaon	1/23/2020	Female	Msc
114	1072	Sujata	Patil	At post Borgeon Taluka Tasgaon District Sangli	suatapatil8600526593@gmail.com	8600526593	PD V P College Tasgaon	1/23/2020	Female	Master of science
115	1073	Jalindar A.	Yadav	Shanti Anand Nivas vidya nagar savali road Miraj	jalindaryadav1966@gmail.com	9422692698	Pdvp college	1/23/2020	Male	Aaso.
116	1075	Pushpa	Kashid	A/P_sangli	pushpakashid25@gmail.com	8485851532	Pdvp college tasgaon	1/23/2020	Female	Assistant Professor
117	1077	Chaitali	Gavali	Tasgaon	chaitaligavali7@gmail.com	7030370550	P.d.v.p.tasgaon	1/23/2020	Female	Assistant Professor
118	1078	Parashuram	Tell	Dept. Of Zoology, P. D. V. P. College, Tasgaon.	drpbte115@gmail.com	9822866577	P. D. V. P. Colleges, Tasgaon	1/23/2020	Male	Assistant Professor
119	1079	Shailaja	Kusarkar	Old satara road, landghole mala, Tasgaon	Kusarkarshailaja1995@gmail.com	7058572535	Pdvp college, Tasgaon	1/23/2020	Female	Assistant professor
120	1080	haji	Nadaf	Dept. of History, PDVP College, Tasgaon, DIST SANGLI	hdnadaf80@gmail.com	9767952132	PDVP College	1/23/2020	Male	Asst Prof.
121	1082	Kirti	Kolap	Dept. of History, PDVP College, Tasgaon, DIST SANGLI	hdnadaf80@gmail.com	9767952132	PDVP College	1/23/2020	Female	Asst Prof.
122	1086	Umesh	Shivpuje	A/P- Hatnur, Tal- Tasgaon, Dist- Sangli Pin- 416314	shivpujeumesh@gmail.com	9511989888	P.D.V.P. College, Tasgaon	1/23/2020	Male	Student
123	1088	Pradnya	Koli	A.P Achakanahalli, Taluka - Jath, District -Sangli	pradnya8597pk@gmail.com	7218206212	PDVP college Tasgaon	1/23/2020	Female	Student
124	1089	Mithila	Sadakale	Tasgaon	mcsadakale1995@gmail.com	9370187186	P. D. V. P. College, Tasgaon	1/23/2020	Female	Assistant Professor
125	1090	Nazneen	Mushrif	Mujawar gali gururwar peth miraj	nazneenmulla785@gmail.com	9970307405	Pdvp Tasgaon	1/23/2020	Female	Assistant professor
126	1093	Kavita	Kumbhar	PDVP collage Tasgaon	Kavikumbhar93@gmail.com	8698035268	PDVP collage Tasgaon	1/23/2020	Female	Assitant professor
127	1094	Pratiksha	Bhandare	P.D.V.P. Mahavidyalaya Tasgaon	Pratikshabhandare@gmail.com	8624888288	P.D.V.P. Mahavidyalaya Tasgaon	1/23/2020	Female	Assist professor
128	1096	Pratiksha	Bhandare	P.D.V.P. Mahavidyalaya Tasgaon	Pratikshabhandare@gmail.com	8624888288	P.D.V.P. Mahavidyalaya Tasgaon	1/23/2020	Female	Assist professor



**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon Dist- Sangli**  
**INTERNAL QUALITY ASSURANCE CELL**

**One day Workshop on Intellectual Property and Patenting System in India, Dt. 24/01/2020**

Sr No.	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designatio
97	1030	Prasad	Datar	Sant Dnyaneshwar Nagar Budhgaon Tal. Miraj Dist.	Prasaddatar19@gm ail.com	9561514874	PDVP Tasgaon	1/23/2020	Male	Student
98	1031	Sangram	Pawar	At post sonkire Tal kadegaon dist sangli	sangrampawar61@ gmail.com	7038215481	Pdvp college tasgaon	1/23/2020	Male	Student
99	1032	Vijay	Sankpal	At post sargaon Tal shirala dist sangli	vijaysankpal12298@ gmail.com	7218630049	PDVP COLLEGE TASGAON	1/23/2020	Male	Student
100	1033	Ganesh	Awasare	Pundi road vita naka tasgaon.	ganeshawasare21@ gmail.com	9422386515	PDVP Tasgaon	1/23/2020	Male	Student
101	1034	Ajit	Jadhav	At Post sultangade tal Khanpur Districts Sangli	ajitjadhav721996 @gmail.com	7775920115	PDVP dg Tasgaon	1/23/2020	Male	Student
102	1036	Rohini	Patil	At post Bedag Taluka Miraj District Sangli	rohiniutkarsha99@g mail.com	7498774416	PD V P College Tasgaon	1/23/2020	Female	Master of science
103	1039	Snehal	Patil	At Post Belanki , Tal-Miraj, Dist- Sangli	snehalpatil10298@ gmail.com	7558395930	Pdvp dg Tasgaon	1/23/2020	Female	Student
104	1040	Sneha	Patil	At post Sangli Taluka Miraj District Sangli	patilsneha2607@g mail.com	7776085606	PD V P College Tasgaon	1/23/2020	Female	Master of science
105	1043	Sanjay	Phadatare	At/ P: watambare Tah: sangola Dist: solapur	sanjayphadatare7@ gmail.com	86693390974	PDVP college Tasgaon	1/23/2020	Male	Student
106	1044	Pranali	Karande	AP miraj tal Miraj dist sangli	karandepranali55@ gmail.com	9607768939	Pdvp college tasgaon	1/23/2020	Female	Master of science
107	1045	Utkarsha	Patil	Ap bedag tal Miraj dis sangli	utkarshapatil196@g mail.com	7028549741	Pdvp dg tasgaon	1/23/2020	Female	Master of science
108	1047	Snehal	Patil	Ap tasgaon dis sangli	smpatil2203@gamil. com	7387927671	Pdvp dg tasgaon	1/23/2020	Female	Master of science
109	1050	Rameshwari	Patil	At post Borgaon Taluka Tasgaon District Sangli	rameshwarit755@g amil.com	8600857617	PD V P College Tasgaon	1/23/2020	Female	Master of science
110	1054	Priyanka	Mali	At post tasgaon	Priyankamali301@g mail.com	8483987620	Pdvp college	1/23/2020	Female	Master of science
111	1055	arjun	wagh	165/3c, plot no 6,mangai colony,no 1,shahu	arjunwagh2011@g mail.com	8329309410	Pdvp college tasgaon	1/23/2020	Male	Assistant Professor
112	1061	Poonam	Dubal	A/p-soni tal miraj, dist-sangli	poonamdubal1220@ gmail.com	7709181172	Pdvp college tasgaon	1/23/2020	Female	Master of science



**Padmabhushan Dr. Vasanttraodada Patil Mahavidyalaya, Tasgaon Dist- Sangli  
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**One day Workshop on Intellectual Property and Patenting System in India, Dt. 24/01/2020**

Sr. No.	ID	First Name	Last name	Address	Email	Mobile	College Name	Date	Gender	Designation
81	983	ATISH	PAWAR	A/p - Sangola , Tal - Sangola Dist - Solapur	atishspawar1997@gmail.com	7219456124	Pdvp college , Tasgaon	1/22/2020	Male	Student
82	985	Vaibhav	Sutar	A/p - Aanjani , Tal - Tasgaon, Dist - Sangli	Vaibhavsuz200@gmail.com	9890135036	Pdvp college tasgaon	1/22/2020	Male	Student
83	991	Devendra	Shinde	Tasgaon Dist sangli	devendrashinde2017@gmail.com	9503581050	PDVP college tasgaon	1/22/2020	Male	Lecturer
84	992	Yogesh	Gejage	At/Post-Ajnale Tal-Sangola Dis-Solapur	yogeshgejage11@gmail.com	9960901848	P.D.V.P. college Tasgaon	1/22/2020	Male	Student
85	1000	Ranjeet	Patil	A/p : rajapur dist : tasgaon	ranjeetpatil95cool@gmail.com	9975885166	PDVP College tasgaon	1/22/2020	Male	Student
86	1004	Pooja	Chougule	Ap manerajuri tal tasgaon dist sangli	vilas.chougule5251@gmail.com	8625953981	Pdvp college tasgaon	1/22/2020	Female	Master of science
87	1005	Rushikesh	Kshirsagar	At post kavhe	rushikeshkshirsagar1811@gmail.com	7350488518	PDVP COLLEGE TASGAON	1/22/2020	Male	student
88	1007	Soheb	Jamadar	A/P Herwad Tal - shirol Dist - Kolhapur	sohebjamadar68@gmail.com	9370570164	Pdvp college tasgaon	1/22/2020	Male	student
89	1009	Omkar	mahajan	Ap kavlapur	onkarmahajan43@gmail.com	8830898332	pdvp,tasgaon	1/22/2020	Male	Tasgaon
90	1016	Abhishek	Deshmukh	A/p khujgaon , Tal - Tasgaon , Dist - Sangli	abhishekdeshmukh687@gmail.com	7387530557	Pdvp College Tasgaon	1/22/2020	Male	Khujgaon
91	1017	Sayali	Lavate	Kolhapur	sayalilavate95@gmail.com	9359254725	PDVP college	1/22/2020	Female	Workshop
92	1020	Revati	Lohar	Kolhapur	revtilohar@gmail.com	9511938550	PDVP	1/22/2020	Female	Workshop
93	1023	Priti	Shingate	Gondavale	Pritishingate@gmail.com	8080641230	PDVP Tasgaon	1/22/2020	Female	Work shop
94	1024	Surekha	Shembade	Ajnale	surekhashembade247@gmail.com	9146725300	PDVP Tasgaon	1/22/2020	Female	Workshop
95	1028	Aditya	Bhasme	A/P Chinchani Tal - Tasgaon Dist - Sangli	adityabhasme1998@gmail.com	7515653584	P.D.V.P. Tasgaon	1/23/2020	Male	Chemistry
96	1029	Hrishikesh	Pandaji	Gaonbhag Budhgaon	rushikeshpandaj19766@gmail.com	9763757790	PDVP Tasgaon	1/23/2020	Male	Chemistry



**Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon Dist- Sangli**  
**INTERNAL QUALITY ASSURANCE CELL**

**One day Workshop on Intellectual Property and Patenting System in India, Dt. 24/01/2020**

Sr. No.	ID	First_Name	Last_name	Address	Email	Mobile	college_Name	Date	Gender	Designatio
65	933	Vallabh	Panchal	At/Po:Sangola, Tal:Sangola, Dist :Solapur	vallabh1panchal@gmail.com	7559114095	PDVP Mahavidyalaya	1/21/2020	Male	Student
66	934	Swapnali	Patil	A/p Dhavali Tal-Tasgaon Dist - Sangli	swapnalipatil5225@gmail.com	7756950352	PDVP college Tasgaon	1/21/2020	Female	Student
67	935	Akshay	Sakhare	Haroli	akshaysakhare5523@gmail.com	8788065908	Pdvp Tasgaon	1/21/2020	Male	Student
68	936	Rupesh	Patil	Shelap	patilrupesh984@gmail.com	7875851751	PDVP college	1/21/2020	Male	Research Student
69	938	Archana	Rajmane	A/p-yelavi Tal-Tasgaon district sangli	archanarajmane139@gmail.com	9503439783	P. D. V. P. College, Tasgaon	1/21/2020	Female	Assistant professor
70	940	Payal	Kasar	A/p palus tal palus dist sangli	payalkasar6688@gmail.com	9518381364	Pdvp college tasgaon	1/21/2020	Female	Student
71	943	Sangram singh	Rajput	At.Post-Jaysingpur Tal-Shriol, Dist-Kohapur	sangramsinghrajput898386@gmail.com	8983865123	P.D.V.P.College, Tasgaon	1/21/2020	Male	Student
72	948	Swapnali	Jadhav	At/Po:Bastwade, Tal:Tasgaon, Dist:Sangali	gnikitapatil@gmail.com	9096928409	PDVP Mahavidyalaya	1/21/2020	Female	Student
73	949	Swapnali	Jadhav	At/Po:Bastwade, Tal:Tasgaon, Dist:Sangali	gnikitapatil@gmail.com	9096928409	PDVP Mahavidyalaya	1/21/2020	Female	Student
74	950	Sampada	Sawant	At/Po:Kit wade, Tal:Ajara, Dist:Kohapur	sawantsampada195@gmail.com	7066955904	PDVP Mahavidyalaya	1/21/2020	Female	Student
75	951	kavita	koshti	A/p shipur tal Miran dist sangli	kavitakoshti771@gmail.com	7219672557	Pdvp college	1/21/2020	Female	Student
76	952	Pratiksha	Shendage	At/Po:Ped, Tal:Tasgaon, Dist:Sangali	Shendageashwin125@gmail.com	7083546947	PDVP Mahavidyalaya	1/21/2020	Female	Student
77	954	Siddharth	Zadbuke	Vasumbe	Sidzadbuke13@gmail.com	8380841972	P. D. V. P tasgaon	1/21/2020	Male	Student
78	956	Kiran	Karajgar	H.no 470,gavali gali,kacchi mashid sangli.	kiranskarajgar@gmail.com	9156018497	Pdvp mahavidyalaya	1/22/2020	Female	Student
79	970	Aishwarya	More	A/p birrawadi tal- tasgaon dist-sangli	moreaishwarya@gmail.com	8459453347	Pdvp college Tasgaon	1/22/2020	Female	Student
80	974	Chavan	Preeti	At bhilwadi station, tal palus.	preetipatil2908@gmail.com	9665794905	P.d.v.p. college, tasgaon.	1/22/2020	Female	Tasgaon



**Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon Dist- Sangli**  
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Sr. No.	ID	First_Name	Last_name	Address	Email	Mobile	College_Name	Date	Gender	Designation
49	917	Suraj	Patil	Ap jaygavhan	surajpatil1687@gmail.com	8600624127	Pdvp collage tasgaon	1/21/2020	Male	Student
50	918	Shreya	Patil	A/P Andhali Tal- Palus Dist- Sangli	shreyapatil705@gmail.com	8805203476	PDVP COLLEGE TASGAON	1/21/2020	Female	Student
51	919	Nivedita	Jadhav	A/p : savrde. Tal : tasgaon.	niveditajadhav96@gmail.com	9561024617	PDVP College tasgaon	1/21/2020	Female	Student
52	920	Nikita	Patil	At/Po:Kolimdre,Tal:Ajara,Dist:K olhapur	gnikitapatil@gmail.com	8308107493	PDVP Mahavidyalaya	1/21/2020	Female	Student
53	921	Sanyuja	Patil	Amruteshwar nagar tasgaon	psanyuja@gmail.com	9970040383	PDVP College tasgaon	1/21/2020	Female	Student
54	922	Abhishek	Dhale	273,Dr. Babashch ambekar nagar,Sangli	abhishekdhale196@gmail.com	7757833647	PDVP college Tasgaon	1/21/2020	Male	Student
55	923	Samruddhi	Gurav	Siddheshwar chowk tasgaon	Samruddhigurav1670@gmail.com	7028484736	PDVP College tasgaon	1/21/2020	Female	Student
56	924	Shubham	Malwade	A/p : miraj. Dist : sangli	shubhammalwade2015@gmail.com	8857867672	PDVP College tasgaon	1/21/2020	Male	Student
57	925	Komal	kamble	At/Po:Kavthemahankal,Tal:Kavthemahankal,Dist:Sangli	komalkamble848@gmail.com	8530261500	PDVP Mahavidyalaya	1/21/2020	Female	Student
58	926	rohan	shinde	shivganga appartment , near nath temple	shinderohan341@gmail.com	7558555159	pdvp college	1/21/2020	Male	student
59	927	Sumaiya	Mulla	At/Po: Dhulgaon, Tal: Tasgaon, Dist: Sangli	Sumaiyamulla020@gmail.com	7028823947	PDVP Mahavidyalaya	1/21/2020	Female	Student
60	928	Lata	Waghamode	A/p: Revnal, Tal: Jath, Dist: Sangli	lwaghamode2@gmail.com	9075828609	P.d.v.p. college Tasgaon	1/21/2020	Female	
61	929	Poonam	Khilari	A/P Galavewadi Tal : Atpadi Dist: Sangli	Poonamkhilari78@gmail.com	7028589934	PDVP college Tasgaon	1/21/2020	Female	Student
62	930	Omkar	Mane	At/Po:Kinhai Tal:Koregaon,Dist:Satara	omkarmane1503@gmail.com	9689757481	PDVP Mahavidyalaya	1/21/2020	Male	Student
63	931	Anjana	Padalkar	A/P-Yamgarwadi Tal-Tasgaon Dist-Sangli	anjanapadalkar01997@gmail.com	7755954247	P. D. V. PCollege	1/21/2020	Female	Student
64	932	Aishwarya	Mane	A/p-Yelavi, Tal-Tasgaon, Dist-Sangli	aishwaryamane283@gmail.com	9657622050	Pdvp college tasgaon	1/21/2020	Female	Student

# Webinar Report



INTELLECTUAL  
PROPERTY **INDIA**

**Principal Dr. Milind Hujare**

Padmabhushan Dr. Vasantraodada Patil  
Mahavidyalaya, Tasgaon Dist. Sangli

**Dr. Ajay Ambhore**

Program Convener

**Dr. Alka Inamdar**

Coordinator, IQAC

*Monday, 20<sup>th</sup> Sept. 2021*

One Day Online National Webinar on

## **Intellectual property Right & Patent Filing**







"ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार" - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

**Shri Swami Vivekanand Shikshanan Sansths Kolhapur**

**PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON DIST – SANGLI**  
(Affiliated to Shivaji University, Kolhapur)

**Research and Innovation Committee**

**One Day Online National Webinar on**

**INTELLECTUAL PROPERTY RIGHTS AND PATENT FILING**



**Report  
2020-21**



"Dissemination of Education through Knowledge, Science and Culture" -Shikshanmaharshi Dr. Bapuji Salunkhe.

Shri Swami Vivekanand Shikshan Sanstha Kolhapur's  
**Padmabhushan Dr. Vasanttraodada Patil Mahavidyalaya**  
**Tasgaon, Sangli (MS), India-416312**  
(Affiliated to Shivaji University Kolhapur)



RESEARCH AND INNOVATION COMMITTEE IN ASSOCIATION WITH  
INTERNAL QUALITY ASSURANCE CELL (IQAC) PRESENTS

**National Webinar on**

**"Intellectual Property Rights and Patent Filing"**



**Resource Person**

**Dr. M. M. Betkar**

Principal, Shri Kumarswami  
Mahavidyalaya, Ausa, Latur



**Date & Time**

20<sup>th</sup> Sept. 2021

11:30 am onwards



Google Meet

**Register Here**

**Registration link:**

<https://bit.ly/IPRRegistrationLink>

**WhatsApp Group:**

<https://bit.ly/IPRWhatsAppGroup>



**PATRONS**

**Hon. Prin. Abhaykumar Salunkhe**

Chairman  
Shri Swami Vivekanand Shikshan Sanstha Kolhapur

**Hon. Prin. Shubhangi Gawade**

Secretary  
Shri Swami Vivekanand Shikshan Sanstha Kolhapur

**Hon. Prin. Dr. R. V. Shejwal**

Joint Secretary (Administration)  
Shri Swami Vivekanand Shikshan Sanstha Kolhapur

**Hon. Prin. S. M. Gawali**

Joint Secretary (Finance)  
Shri Swami Vivekanand Shikshan Sanstha Kolhapur

**With Regards,**

Dr. Milind S. Hujare,  
Principal

Dr. Alka P. Inamdr,  
IQAC Coordinator

Dr. Ajay N. Ambhore  
Chairman,  
Research & Innovations  
(9850625682)



**Organizing Committee**

Dr. Pawan B. Teli (9822866577)

Dr. Sachinkumar K. Shinde (9730559905)

Dr. Haji D. Nadaf (9767952132)





## *Intellectual Property Rights and Patent Filing*

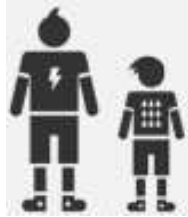
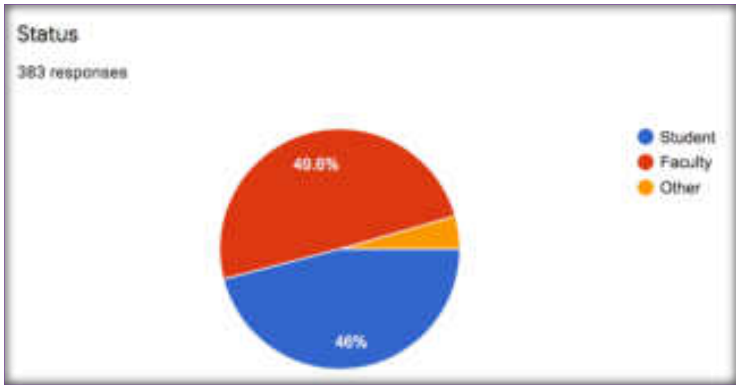
➤ <b>Event</b>	<b>Intellectual Property Right and Patent Filing</b>
➤ <b>Date</b>	<b>20<sup>st</sup> Sept. 2021</b>
➤ <b>Organizer</b>	<b>Research and Innovation Committee</b>
➤ <b>Mode</b>	<b>Online</b>

### **PARTICIPANTS**

<b>Participant</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>Students</b>	<b>92</b>	<b>84</b>	<b>176</b>
<b>Faculty</b>	<b>104</b>	<b>103</b>	<b>207</b>
<b>Total</b>	<b>196</b>	<b>187</b>	<b>383</b>



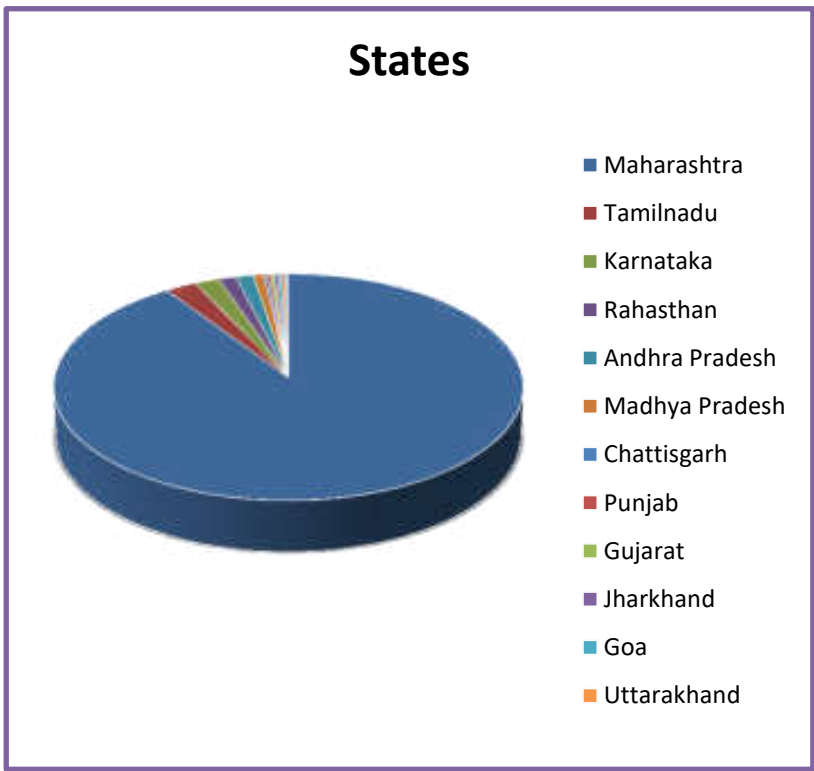
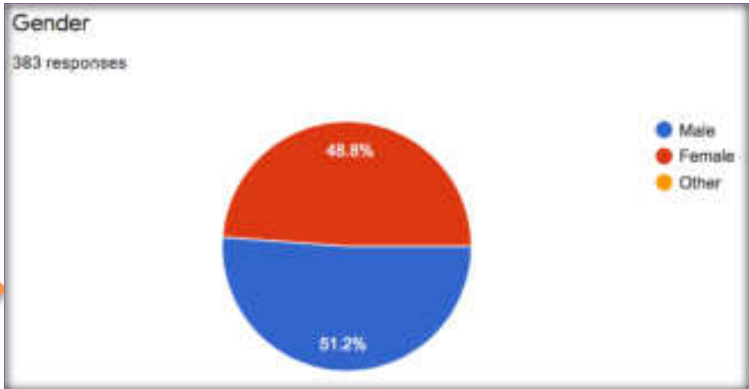
# Participation



Teacher - Student Ratio



Participants Gender Ratio



Participants Location





## **Intellectual Property Rights and Patent Filing**

A one day National webinar titled 'Intellectual Property Rights and patent Filing' was organized by Research and Innovation Committee with IQAC on Monday, 20<sup>th</sup> Sept. 2021. The webinar was commenced at 11:30 o'clock.

Intellectual Property Right plays a key role in gaining advantages position to uphold economic growth of our nation. India enjoys a large asset of R&D personnel and infrastructural facilities. Scientists and policy makers need more information, orientation and facilities for protecting the products of intellectual skill of Indian Scientists. Hence this workshop was organized to aware about the IPR college faculty and students.

### **Content of the webinar**

Following are the topics which were covered in this webinar

- Intellectual Property Rights (IPRs) - An Introduction with need of its protection
- Copyright and Trademark Management in India.
- Ethical Issues related to IPR
- Compulsory licensing and Bolar Exemption in India
- Procedure of Patent filing, Commercialization of patents
- Patent System in India and National Biodiversity - Biotechnological inventions
- Tools for Patent Searching - Panel Discussion on Life Science Inventions

Intellectual property right (IPR) is the rights granted to the creators of intellectual property and include trademarks, copyrights, patent, industrial design rights and some jurisdictions and trade secrets. Rather than protecting possessions, intellectual property law protects exclusive rights to use or reproduce the intellectual property (IP). Copyrights protect expression while patents protect inventions and neither protects ideas.



## **Participant**

More than 380 participants are participate from all over the India like Rajasthan, Punjab, Andhra Pradesh, Karnataka, Chhattisgarh, Tamil Nadu, Gujarat, Jharkhand, Madhya Pradesh and Goa. For this workshop, we invite **Dr. M. M. Betkar** as a resource person. Whereas, as a president of this webinar, our college principal, **Dr. Milind Hujare** sir gave his valuable time from his busy schedule.

Dr. M. M. Betkar is a principal of Shri Kumarswami Mahavidyalaya, Ausa, Dist. Latur. He provides all the necessary information about IPR in very easy and effective manner. In his presentation, he explains about the meaning of IPR, its importance's, its types with the simple examples. He also explains about patentable and non-patentable innovations. Also he informs us about how to file a patent. Thus by using more than 80 animated slides, Dr. Betkar delivered an effective and simple presentation which was enjoyed by our participant.

In the presidential speech Principal, Dr. Milind Hujare sir said that in the coming years the country will be known for its scientific creations in different fields ranging from agriculture to space research. At that time Protection for their intellectual property will be an encouragement to budding scientists to come out with more innovations and inventions, he said.

Welcome and Introduction of this webinar was addressed by Dr. Ajay Ambhore, Convener of Research and Innovation Committee. Whereas vote of thanks delivered by Dr. P. B. Teli. Dr. S. K. Shinde as a member committee played an important role for successful organization of this national webinar





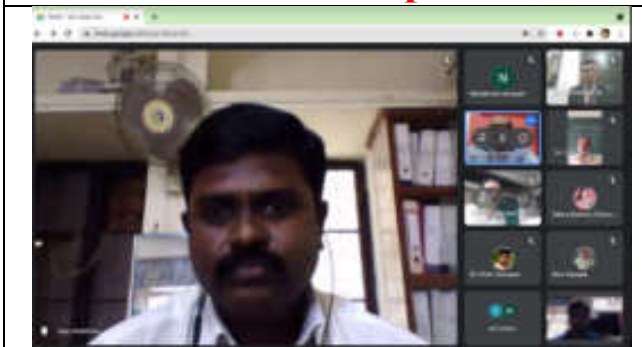
## Photo Gallery



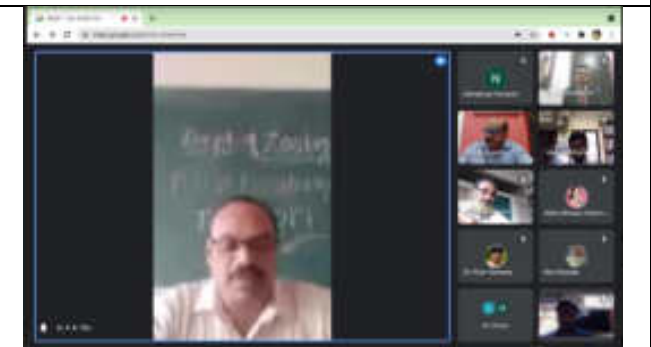
**Principal Dr. Milind Hujare**  
**Precedential Speech**



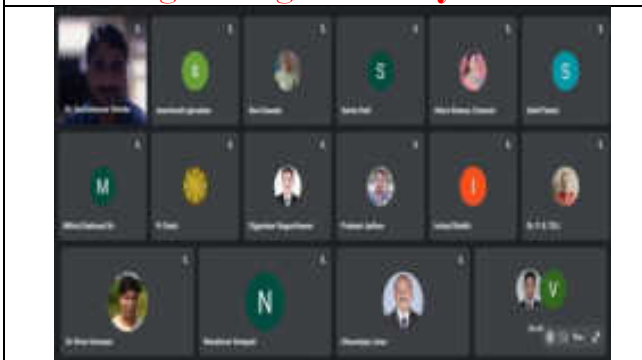
**Dr. M. M. Betkar**  
**Resource Person**



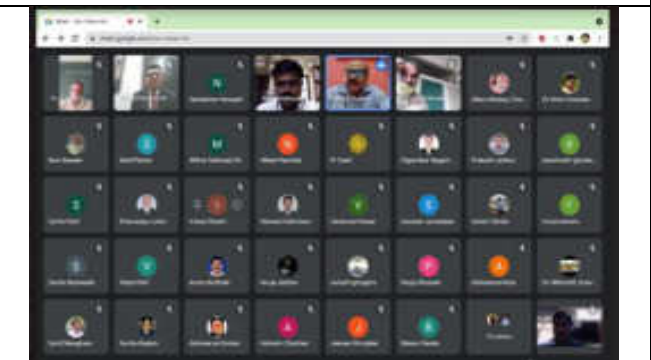
**Dr. Ajay Ambhore**  
**Organizing Secretary**



**Dr. P.B. Teli**  
**Vote of Thanks**



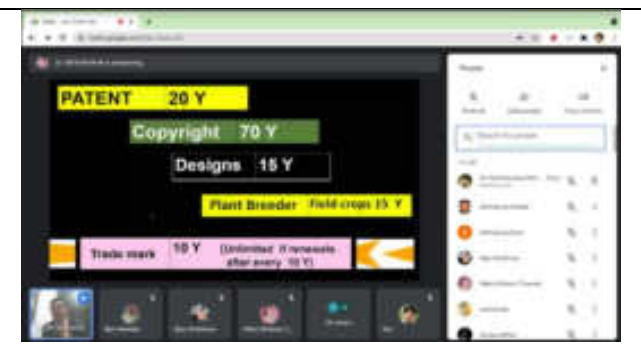
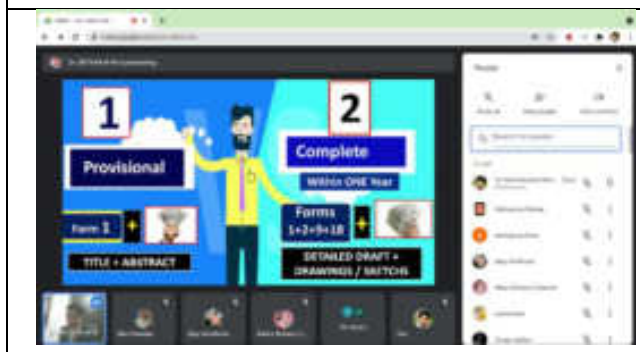
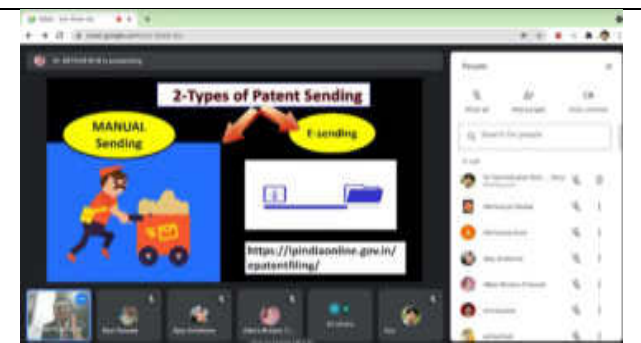
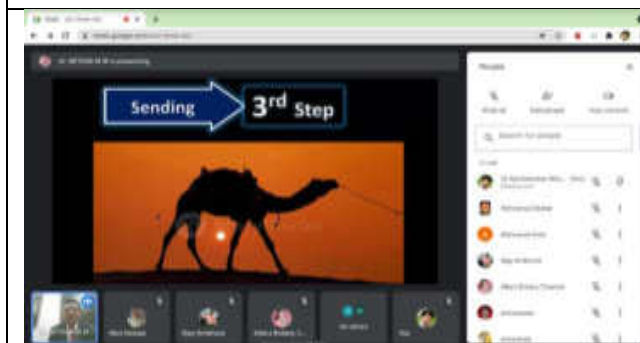
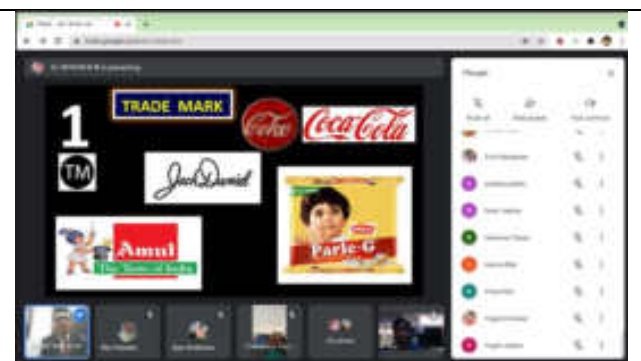
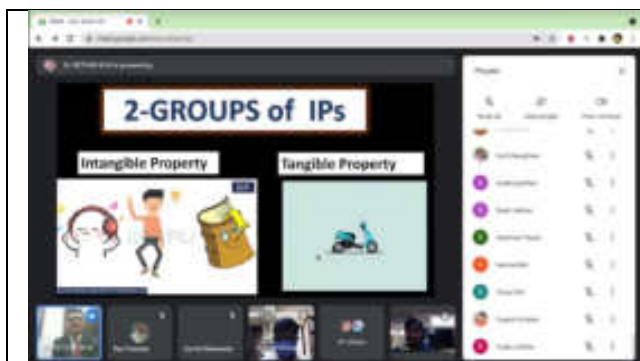
**Dr. S.K. Shinde**  
**Organizing Committee Member**



**Participant attending the online session**

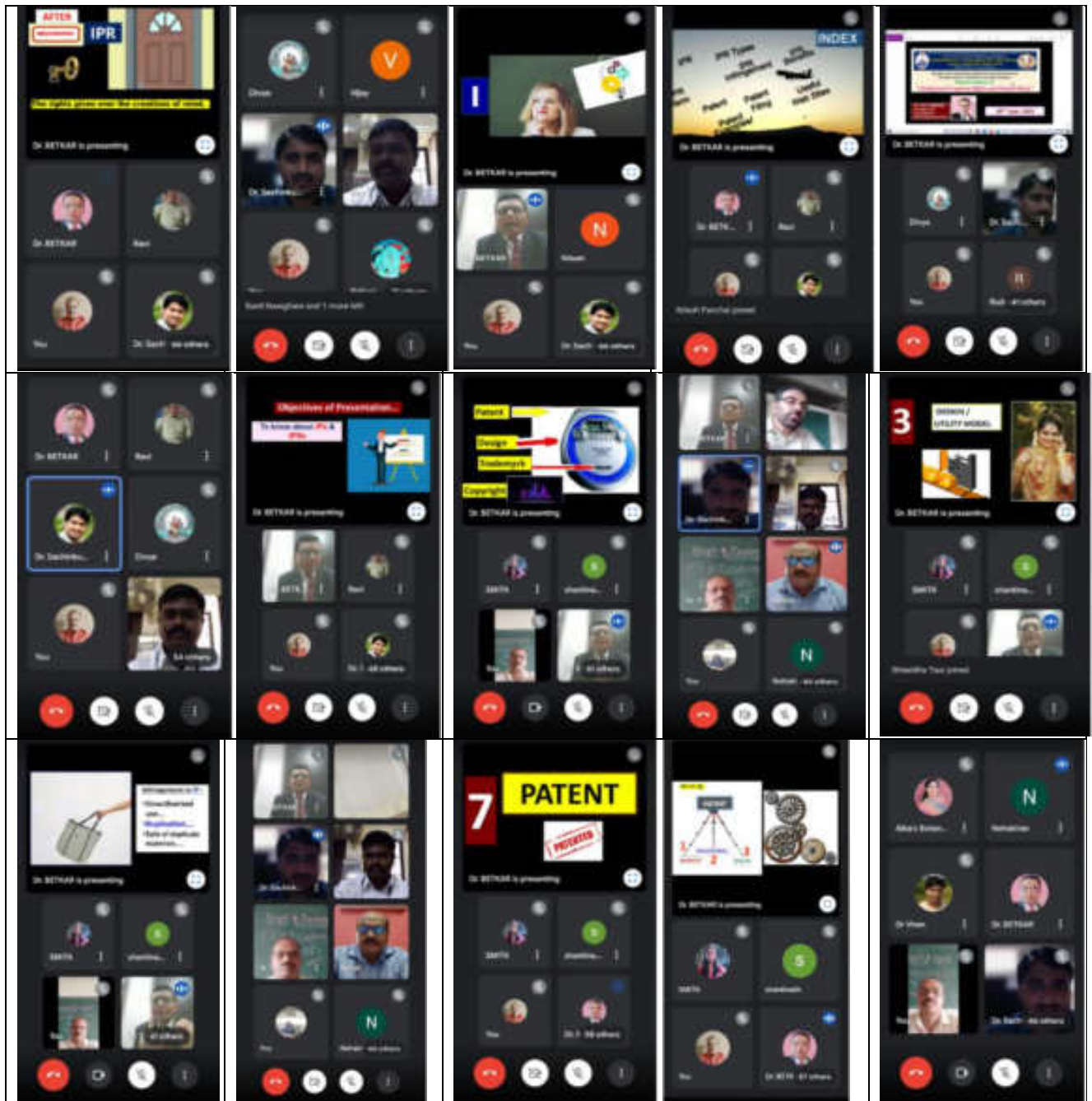


# Photo Gallery





# Photo Gallery



# Registration

**IPR Webinar PDVP**

**Add group description**

**Media, links, and files**

**Mute notifications**

**Custom notifications**

**Media visibility**

**Participants:**

- Dr Ghodake PDVP
- Dr Megha Palli Mann
- Dr Rahul Kamble
- Dr S K Khadia
- Dr V D Kumbhar PDVP
- Koh Priyanka TY
- Milind Gakwad
- Nawghare Sr
- Yadav Sr P D V P
- +91 70285 25347
- +91 70288 49509
- +91 70585 92760
- +91 70967 98510
- +91 72182 96210
- +91 72196 10652
- +91 72198 95672
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- +91 73006 04518
- +91 73006 18272
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- +91 93289 41118
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- +91 93561 31402
- +91 93755 70184
- +91 93710 92684
- +91 93736 89078
- +91 94001 38878
- +91 94001 38201





# Registration

No. Pendaftaran		Nama Pemohon		No. Bilik Pendaftaran		No. Bilik		No. Bilik		No. Bilik	
917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01	917001-01-01

# Feedback

Feedback ID	Feedback Title	Feedback Content	Feedback Status	Feedback Date	Feedback Author	Feedback Category	Feedback Priority	Feedback Resolution
FB001	Feedback on the new website design	The new website design is very user-friendly and easy to navigate.	Completed	2023-10-26	John Doe	Website	High	Website updated with new design.
FB002	Feedback on the mobile app	The mobile app is slow and crashes frequently.	In Progress	2023-10-27	Jane Smith	Mobile App	Medium	Performance optimization in progress.
FB003	Feedback on the customer support	The customer support team is very helpful and responsive.	Completed	2023-10-28	Mike Johnson	Customer Support	Low	Customer support team praised.
FB004	Feedback on the pricing	The pricing is too high for the quality of the product.	Under Review	2023-10-29	Sarah Lee	Pricing	High	Pricing strategy under review.
FB005	Feedback on the user interface	The user interface is cluttered and confusing.	Completed	2023-10-30	David Kim	User Interface	Medium	User interface simplified.

Feedback ID	Feedback Title	Feedback Content	Feedback Status	Feedback Date	Feedback Author	Feedback Category	Feedback Priority	Feedback Resolution
FB006	Feedback on the product quality	The product quality is excellent and meets my expectations.	Completed	2023-10-31	Emily White	Product Quality	Low	Product quality praised.
FB007	Feedback on the shipping process	The shipping process is slow and unreliable.	In Progress	2023-11-01	Chris Brown	Shipping	Medium	Shipping process optimization in progress.
FB008	Feedback on the customer service	The customer service is excellent and helpful.	Completed	2023-11-02	Alex Green	Customer Service	Low	Customer service team praised.
FB009	Feedback on the website performance	The website performance is slow and needs improvement.	In Progress	2023-11-03	Mia Black	Website Performance	Medium	Website performance optimization in progress.
FB010	Feedback on the product variety	The product variety is limited and needs more options.	Under Review	2023-11-04	Noah Grey	Product Variety	Medium	Product variety expansion under review.

Feedback ID	Feedback Title	Feedback Content	Feedback Status	Feedback Date	Feedback Author	Feedback Category	Feedback Priority	Feedback Resolution
FB011	Feedback on the website security	The website security is robust and secure.	Completed	2023-11-05	Oliver Blue	Website Security	Low	Website security praised.
FB012	Feedback on the mobile app updates	The mobile app updates are frequent and useful.	Completed	2023-11-06	Sophia Purple	Mobile App Updates	Low	Mobile app updates praised.
FB013	Feedback on the customer support hours	The customer support hours are convenient and helpful.	Completed	2023-11-07	Liam Yellow	Customer Support Hours	Low	Customer support hours praised.
FB014	Feedback on the website navigation	The website navigation is intuitive and easy to use.	Completed	2023-11-08	Ava Orange	Website Navigation	Low	Website navigation praised.
FB015	Feedback on the product packaging	The product packaging is eco-friendly and secure.	Completed	2023-11-09	Ethan Green	Product Packaging	Low	Product packaging praised.

Feedback ID	Feedback Title	Feedback Content	Feedback Status	Feedback Date	Feedback Author	Feedback Category	Feedback Priority	Feedback Resolution
FB016	Feedback on the website content	The website content is informative and engaging.	Completed	2023-11-10	Isabella Blue	Website Content	Low	Website content praised.
FB017	Feedback on the mobile app features	The mobile app features are useful and easy to use.	Completed	2023-11-11	Mason Purple	Mobile App Features	Low	Mobile app features praised.
FB018	Feedback on the customer support team	The customer support team is professional and helpful.	Completed	2023-11-12	Charlotte Yellow	Customer Support Team	Low	Customer support team praised.
FB019	Feedback on the website design	The website design is modern and visually appealing.	Completed	2023-11-13	Lucas Orange	Website Design	Low	Website design praised.
FB020	Feedback on the product quality	The product quality is consistent and reliable.	Completed	2023-11-14	Hannah Green	Product Quality	Low	Product quality praised.

**About this list**

Showing 20 items

Showing page 1 of 1

Search for a customer feedback

Customer Name	Feedback Title	Feedback Content	Feedback Status	Feedback Date	Feedback Author	Feedback Category	Feedback Priority	Feedback Resolution
Dr. S. Srinivasan (Voc)	Feedback on the new website design	The new website design is very user-friendly and easy to navigate.	Completed	2023-10-26	John Doe	Website	High	Website updated with new design.
Dr. S. Srinivasan (Voc)	Feedback on the mobile app	The mobile app is slow and crashes frequently.	In Progress	2023-10-27	Jane Smith	Mobile App	Medium	Performance optimization in progress.
Dr. S. Srinivasan (Voc)	Feedback on the customer support	The customer support team is very helpful and responsive.	Completed	2023-10-28	Mike Johnson	Customer Support	Low	Customer support team praised.

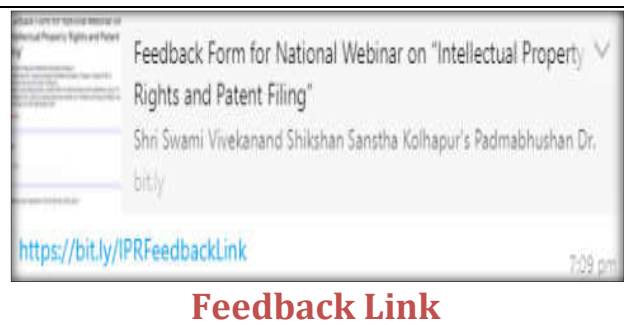
Customer Name	Feedback Title	Feedback Content	Feedback Status	Feedback Date	Feedback Author	Feedback Category	Feedback Priority	Feedback Resolution
Dr. S. Srinivasan (Voc)	Feedback on the product quality	The product quality is excellent and meets my expectations.	Completed	2023-10-31	Emily White	Product Quality	Low	Product quality praised.
Dr. S. Srinivasan (Voc)	Feedback on the shipping process	The shipping process is slow and unreliable.	In Progress	2023-11-01	Chris Brown	Shipping	Medium	Shipping process optimization in progress.
Dr. S. Srinivasan (Voc)	Feedback on the customer service	The customer service is excellent and helpful.	Completed	2023-11-02	Alex Green	Customer Service	Low	Customer service team praised.







**Registration link**




**Feedback Link**



**Program Schedule**



  
**Dr. Ajay N. Ambhore**  
 Convener  
 Research and Innovation Committee

  
**Prin. Dr. Milind S. Hujare**  
 Principal  
 Padmabhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Targan (Sangli).



"ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार"

- शिक्षणमहर्षी डॉ. बापूजी साळुंखे



**Shri Swami Vivekanand Shikshan Sansths Kolhapur**

**PADMABHUSHAN DR. VASANTRAODADA PATIL**

**MAHAVIDYALAYA, TASGAON. DIST – SANGLI**

(Affiliated to Shivaji University, Kolhapur)

**Research and Innovation Committee**

*Organize*

**Intellectual Property Awareness  
Quiz-2021**

*To celebrate*



**In association with  
Internal Quality Assurance Cell**

**29<sup>th</sup> April 2021**

**Report**

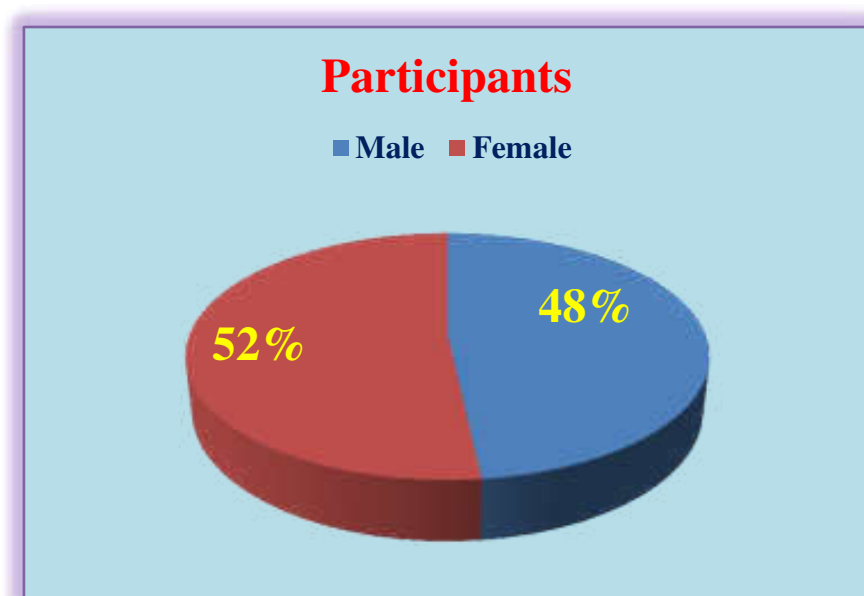


## Intellectual Property Awareness Quiz-2021

➤ Event	Intellectual Property Awareness Auiz-2021
➤ Date	29 <sup>st</sup> April 2021
➤ Organizer	College Research and Innovation Committee
➤ Mode	Online through Google form

### PARTICIPANTS

Participant	Male	Female	Total
	56	60	116



## **World Intellectual Property Day 2021:**

It is also known as **World IP Day**. Due to coronavirus pandemic, it is necessary to be safe therefore, WIPO is not organizing any physical events, and encourages the community of World IP Day to celebrate via virtual channels. The day is celebrated to make people know how intellectual property (IP) rights encourage innovation and creativity. This year World IP Day puts innovation and supports the efforts to create a green future. It is a need to care for our earth our home.

It was established by the World Intellectual Property Office (**WIPO**). It promotes the role of IP in stimulating innovation and creativity. In fact, World Intellectual Property Day provides an opportunity for IP offices, inventors and enterprises whether big or small to discuss and connect each other about the emerging various innovations that will help in shaping the world and also improves the living of people.

On the occasion of this, our college Research and Innovation Committee decided to celebrate world IPR day for the awareness about IPR in society. From that view, we designed a quiz regarding the information about IPR. Our principal Dr. Milind Hujare permits regarding the same and supports us. College IQAC coordinator Dr. Alka Inamdar madam suggest all the necessary directions for this celebration. Finally, we design the quiz, provide the link to the teachers and students. Near about 116 participants solve the quiz within two days. We thank all the participants for celebrating world IPR day with us.



**Quiz Link**

➔ Forwarded

**Quiz 2021 - On Occasion of World Intellectual Property Day**

“ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार” - शि...  
docs.google.com

<https://forms.gle/ArQ97C3pw1GUKHLh6>

“ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार”  
- शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan  
Santha's, Kolhapur

Padmabhushan Dr. Vasantraodada Patil  
Mahavidyalaya, Tasgaon Dist. Sangli

All respected dignitaries, Colleagues,  
Friends and my dear students, to create  
awareness about intellectual property  
rights in society, College Research and  
Innovation Committee in association  
with college IQAC, organize a Quiz-2021  
on IPR to celebrate the World Intellectual  
Property Day.

Kindly fill the google form and answer the  
questions. you will receive certificate in  
your email after successfully submission  
of this form.

Thanking You....

(Only 100 certificates are distributer per  
day)

10:34 am ✓✓

## Quiz Result

1	Timestamp	Email	Score	Name	Name of Institution	Designation	City	State
2	4/30/2021 10:20:35	ambhoreajay@gmail.com	38 / 40	Dr. Ajay N. Ambhore	PDVP, College Tasgaon	Faculty	Miraj	Maharashtra
3	4/30/2021 11:15:43	dralkapatil1@gmail.com	34 / 40	Dr. Alka Inamdr	PDVP College Tasgaon	Faculty	Tasgaon	Maharashtra
4	4/30/2021 11:32:15	ppriya.patil@rediffmail.co	30 / 40	Dr. Priya Digambar Patil	Vivekanand College, Kolh	Faculty	Kolhapur	Maharashtra
5	4/30/2021 11:32:40	bharatbhogale702@gmail	22 / 40	Bharat chandrakant Bhog	New English school & jr.	Other	Pandharpur	Maharashtra
6	4/30/2021 11:34:46	mupatil30@gmail.com	30 / 40	Dr Megha Uday Patil	Padmabhushan Dr. Vasai	Faculty	Tasgaon	Maharashtra
7	4/30/2021 11:34:46	mupatil30@gmail.com	30 / 40	Dr Megha Uday Patil	Padmabhushan Dr. Vasai	Faculty	Tasgaon	Maharashtra
8	4/30/2021 11:38:32	bjkadam1132@gmail.com	26 / 40	Dr.Bandu Jayshing Kadar	P D V P College Tasgaon	Faculty	Kolhapur	Maharashtra
9	4/30/2021 11:40:52	rp3192898@gmail.com	8 / 40	patil Rutuja Shivaji	pdvp collage Tasgaon	Student	Tasgaon	Maharashtra
10	4/30/2021 11:44:21	arjunwagh2011@gmail.co	34 / 40	Dr	Dr.Arjun Shivaji Wagh	Faculty	Satara	Maharashtra
11	4/30/2021 11:46:34	prakum2001@yahoo.co.ir	12 / 40	Dr.B.S.Raikumar	AVK College for women	Faculty	Hassan	Karnataka
12	4/30/2021 11:48:05	ies.nes.shobhana@gmail	40 / 40	Shobhana Nandu Pawar	IES New English School	Faculty	Mumbai	Maharashtra
13	4/30/2021 11:49:08	arjunwagh2011@gmail.co	36 / 40	Dr.Arjun Shivaji Wagh	PDVP Mahavidyalaya Tas	Faculty	Satara	Maharashtra
14	4/30/2021 11:56:31	rajeshroman@gmail.com	20 / 40	Rajesh Wamanrao Romar	P D V P college, Tasgaon	Faculty	Tasgaon	Maharashtra
15	4/30/2021 11:59:35	ij3174491@gmail.com	38 / 40	Jadhav Jyoti Ajinkya	P.D.V.P. college,Tasgaon	Student	Tasgaon	Maharashtra
16	4/30/2021 12:02:20	prabhakarpatilmath@yahc	28 / 40	Prabhakar Vinayak Patil	Padmabhushan Dr Vasan	Faculty	Tasgaon	Maharashtra
17	4/30/2021 12:03:17	ruksanamujawar0307@gn	28 / 40	Mujawar Ruksana Gouspr	Shivaji university kolhapur	Student	Kithe Mahankal	Maharashtra
18	4/30/2021 12:04:27	archanarajmane1396@gn	8 / 40	Archana sanjay rajmane	Pdvp tasgaon	Faculty	Sangli	Maharashtra
19	4/30/2021 12:09:44	hvp27399@gmail.com	12 / 40	Himali Patil	BVDU MEDICAL COLLEGE	Student	Islampur	Maharashtra
20	4/30/2021 12:11:46	vp28643@gmail.com	40 / 40	Vijay Patil	PDVP college tasgaon	Faculty	Islampur	Maharashtra
21	4/30/2021 12:16:00	mvp9924@gmail.com	40 / 40	Dr.Megha Vijay Patil	Malati Vasantdada Patil	Faculty	Islampur	Maharashtra
22	4/30/2021 12:35:25	ashwinmail6062@gmail.c	22 / 40	Mali Ashwini Ramchandra	p.d.v.p.college Tasgaon	Student	Tasgaon	maharashtra
23	4/30/2021 12:45:58	pratibham7912@gamil.co	20 / 40	Pratibha manik mane	P. D. V. P. College tasga	Student	Tasgaon	Maharashtra
24	4/30/2021 12:55:08	pratikshabhandare@gmai	26 / 40	Dr.Pratiksha Bhandare	P.D.V.P. Mahavidyalaya	Faculty	Sangli	Maharashtra
25	4/30/2021 13:20:31	manjeet kukreja@yahoo.c	12 / 40	Dr Manjeet kour Arora	Kasturbagam Rural instit	Other	Indore	MP
26	4/30/2021 13:22:17	manohar2210@gmail.com	28 / 40	Dr Manohar V Lokhande	Sathaye College Mumbai	Faculty	Mumbai	Maharashtra
27	4/30/2021 13:24:29	swati_kadam205@gmail.c	28 / 40	SWATI ASHOK KADAM	Dr Ambedkar college of la	Other	Mumbai	Maharashtra
28	4/30/2021 13:34:11	akarshprabhakar@gmail.c	18 / 40	Akarsh Prabhakar Palliku	Akarsh Prabhakar Palliku	Student	Mumbai	Maharashtra
29	4/30/2021 13:35:57	rahulupadhyay14581@gn	18 / 40	Rahul Upadhyay	Sathaye college	Student	Mumbai	Maharashtra
30	4/30/2021 13:36:12	swati.kadam205@gmail.c	32 / 40	SWATI ASHOK KADAM	Dr Ambedkar college of la	Other	Mumbai	Maharashtra
31	4/30/2021 13:37:23	shreyasnirgude50@gmail	10 / 40	Nirgude Shreyas Digambar	PDVP COLLEGE TASGA	Student	Tasgaon	Maharashtra
32	4/30/2021 13:37:30	prakashshay31@gmail	18 / 40	Jadhav prakash shrinivas	PDVP College Tasgaon	Student	Tasgaon	Maharashtra
33	4/30/2021 13:38:11	shubhamrk7310@gmail.c	22 / 40	Rankhambe Shubham Pri	P.D.V.P. TASGAON	Student	Tasgaon	Maharashtra
34	4/30/2021 13:38:30	priyagadade3592@gmail.	24 / 40	Gadade Priyanka Namdev	PDVP college Tasgaon	Student	Tasgaon	Maharashtra
35	4/30/2021 13:38:31	amol.avadan@gmail.com	6 / 40	AVADAN AMOL RAMCH	PDVP COLLEGE TASGA	Student	Tasgaon	Maharashtra
36	4/30/2021 13:39:31	landagesuraj7099@gmail	30 / 40	Landage Suraj Vitthal	P. D. V. P COLLEGE, TA	Student	Tasgaon	Maharashtra
37	4/30/2021 13:41:11	advabain@gmail.com	38 / 40	Adv A B Jain	Ashok Balchand Jain	Student	Mumbai	Maharashtra
38	4/30/2021 13:53:33	subhashsingh7452@gmai	8 / 40	Subhash Singh	Kamkus College of law	Student	New Delhi	Maharashtra
39	4/30/2021 14:00:25	shahajipatil70@gmail.co	24 / 40	Dr shahaji jaganntha patil	Padmabhushan doctor va	Faculty	Tasgaon	Maharashtra
40	4/30/2021 14:05:05	dipali982000@gmail.com	26 / 40	Patil Dipali Ramchandra	Shivaji University Kolhapu	Student	Tasgaon	Maharashtra



41	4/30/2021 14:08:43	dipali982000@gmail.com	36 / 40	Patil dipali Ramchandra	Shivaji University Kolhapur Student	Tasgaon	Maharashtra
42	4/30/2021 14:13:15	vishantlokhandemv@gmail	24 / 40	Vishant Lokhande	Sathaye college Student	Mumbai	Maharashtra
43	4/30/2021 14:13:50	lokhandemayuni44@gmail	40 / 40	Mayuni Lokhande	Atharva college of engines Student	Mumbai	Maharashtra
44	4/30/2021 14:32:54	supriyakhatal99@gmail.c	36 / 40	Supriya bapuso khatal	Shivaji university kolhapur Student	Kolhapur	Maharashtra
45	4/30/2021 14:32:57	anekarsmita@gmail.com	36 / 40	Dr. Anekar Smita Dilip	S.G.M.College, Karad Faculty	Karad	Maharashtra
46	4/30/2021 14:36:39	maneanakita782@gmail.cc	26 / 40	Mane Ankitadhikrao	Pdvp college Tasgaon Student	Visapur Tasgaon	Maharashtra
47	4/30/2021 14:37:46	ankitamahajan0105@gme	38 / 40	Mahajan Ankit Sanjay	Shivaji University Kolhapur Student	Kolhapur	Maharashtra
48	4/30/2021 14:40:20	2015.milindpatil@gmail.c	22 / 40	Mr. Milind Ganapati Patil	Padmabhushan Dr. Vas Other	Tasgaon.	Maharashtra
49	4/30/2021 15:04:28	drmahadksc@rediffmail.c	12 / 40	Dr. Shama Mahadik	R. P. College, Osmanaba Faculty	Osmanabad	Maharashtra
50	4/30/2021 15:32:39	tushars.pcp@gmail.com	16 / 40	Tushar shendage	P. D. V p Student	Tasgaon	Maharashtra
51	4/30/2021 15:54:28	sujoyvasekar100@gmail.c	30 / 40	Vasekar Sujay Balasaheb	D.Y.PATIL ACS, PINPRI Student	Pune	Maharashtra
52	4/30/2021 16:09:18	mvgaikwad76@gmail.com	10 / 40	MILIND VITHALRAO GAW	Dr D Y Patil ACS College Student	Pune	Maharashtra
53	4/30/2021 16:24:12	bhamaremilind39@gmail.	22 / 40	Milind Ravisheeb bhanare	Dr D. Y. Patil ACS colleg Student	Pune	Maharashtra
54	4/30/2021 16:28:54	poojaurani974@gmail.c	12 / 40	Umrani Pooja Pradhan	Pdvp cig tasgaon Student	Tasgaon	Maharashtra
55	4/30/2021 16:32:47	sonujamadkar276@gmail.c	20 / 40	Shukrana vhanwad	Pdvp Student	Tasgaon	Maharashtra
56	4/30/2021 16:39:17	unicornsweet2000@gmail	6 / 40	Manali Rambhau Puyad	Dr. D. Y. Patil Arts, Comr Student	Pune	Maharashtra
57	4/30/2021 16:54:50	sppanchal2020@gmail.co	14 / 40	Shubham Pandit Panchal	Dr. D. Y. Patil ACS Colle Student	Pune	Maharashtra
58	4/30/2021 17:14:38	kajalshinde1599@gmail.c	8 / 40	Shinde Kajal Dadaso	Pdvp college Tasgaon Student	Tasgaon	Maharashtra
59	4/30/2021 17:39:42	pchavan7194@gmail.com	16 / 40	Chavan Prathamesh pand	Padmabhushan Dr. Vasar Student	Tasgaon	Maharashtra
60	4/30/2021 18:14:33	sujatapatil22732273@gm	26 / 40	Patil sujata dilip	P.d.v.p college tasgaon Student	Tasgaon	Maharashtra
61	4/30/2021 18:28:17	arjunwagh2011@gmail.co	22 / 40	Dr.Arjun Shivaji Wagh	PDVP Mahavidyalaya Ta Student	Tasgaon	Maharashtra
62	4/30/2021 18:46:42	ypebooks@gmail.com	28 / 40	Yogesh Pradip Patil	Dr D Y Patil ACS College Student	Pune	Maharashtra
63	4/30/2021 18:53:51	vaibhavamajre62@gmail.co	32 / 40	Vaibhav prakash majre	Dr dy patil acs college pir Student	Pune	Maharashtra
64	4/30/2021 18:55:49	gadekarbhimashankar66@	12 / 40	Gadekar Bhimashankar T	Dr.D Y Patil college pimp Student	Pune	Maharashtra
65	4/30/2021 18:59:40	pchavan7194@gmail.com	24 / 40	Chavan Prathamesh pand	Padmabhushan Dr vasant Student	Tasgaon	Maharashtra
66	4/30/2021 19:03:13	ankitaapatil99@gmail.com	16 / 40	Ankita Anil Patil	D. Y. Patil ACS College, I Student	Pune	Maharashtra
67	4/30/2021 19:09:19	kk66946563@gmail.com	32 / 40	Khilari kiran Dhondiram	PDVP college tasgaon Student	Tasgaon	Maharashtra
68	4/30/2021 19:14:55	pranij00@gmail.com	14 / 40	Jadhav Pranit shahaji	Pdvp College tasgaon Student	Tasgaon	Maharashtra
69	4/30/2021 19:17:13	komalpatil6168@gmail.co	18 / 40	Patil komal Shashikant	Pdvp college Tasgaon Student	Tasgaon	Maharashtra
70	4/30/2021 19:20:42	kamble7131@gmail.com	26 / 40	Sandip Vijay Kamble	Gramin science vocationa Student	Nanded	Maharashtra
71	4/30/2021 19:24:36	harshada25112@gmail.cc	20 / 40	Jadhav Harshada Mahade	PDVP college , Tasgaon Student	Tasgaon	Maharashtra
72	4/30/2021 19:27:48	skgavadenogra@gmail.co	22 / 40	Dr. Sandip Kisan Garade	Dattajirao Kadam Arts, St Faculty	Icahikaranji	Maharashtra
73	4/30/2021 19:31:21	shafiqat02@gmail.com	34 / 40	Dr SHAFQAT ALAUDDIN SHIBLI	NATIONAL COLLE Faculty	Tasgaon	Maharashtra
74	4/30/2021 19:35:30	snioasis@yahoo.com	18 / 40	Prof. Shabbir Numahmm	Miraj Mahavidyalaya Miraj Faculty	Tasgaon	Maharashtra
75	4/30/2021 19:46:12	pp272689@gmail.com	20 / 40	Patil Pranali Ankush	Pdvp college, Tasgaon Student	Tasgaon	Maharashtra
76	4/30/2021 19:37:14	ashkatkar2599@gmail.co	26 / 40	Katkar Ashwini Vishwasr	PDVP COLLEGE TASGA Student	Tasgaon	Maharashtra
77	4/30/2021 19:37:31	koreishwarya000@gmail	38 / 40	Kore Aishwarya Bhagvan	P.D.V.P.C. Tasgaon Student	Tasgaon	Maharashtra
78	4/30/2021 19:37:56	vishalind1001@gmail.com	20 / 40	Patil Vishal Ankush	Padmabhushan Dr. Vasar Student	Tasgaon	Maharashtra
79	4/30/2021 19:38:19	dnyaneshvanhingmire@gr	24 / 40	Dnyaneshvani Jitendra Hin	Padmabhushan Dr vasant Student	Tasgaon	Maharashtra
80	4/30/2021 19:39:10	pratikshashinde1318@gm	22 / 40	Pratiksha Rajendra shinde	Pdvp, Tasgaon Student	Tasgaon	Maharashtra



81	4/30/2021 19:50:19	sachinshinde888@gmail.com	26 / 40 Dr. Sachinkumar Kisan S	PDVP College Tasgaon	Faculty	Tasgaon	Maharashtra
82	4/30/2021 19:51:14	babarsanka522@gmail.com	18 / 40 Sarika Ganpati Babar	P.D.V.P.COLLAGE	Student	Tasgaon	Maharashtra
83	4/30/2021 19:51:30	mddhanu254@gmail.com	28 / 40 Dhanshree Dattatray Mair	Pdvp collage tasgaon	Student	Tasgaon	Maharashtra
84	4/30/2021 19:52:03	nikpawar594@gmail.com	20 / 40 Pawar Nikhil Nandkumar	PDVP Collage Tasgaon	Student	Tasgaon	Maharashtra
85	4/30/2021 19:52:25	mohitepranali749@gmail.com	6 / 40 Mohite Pranali Adhikrao	PDVP clg Tasgaon	Student	Tasgaon	Maharashtra
86	4/30/2021 19:52:42	rajanyajadhav324@gmail.com	14 / 40 Rajanya Mohan Jadhav	PDVP College Tasgaon	Student	Tasgaon	Maharashtra
87	4/30/2021 19:53:12	sumitshinde09961@gmail.com	10 / 40 Sumit Ravasaheb Shinde	PDVP college tasgaon	Student	Dahiwadi	Maharashtra
88	4/30/2021 19:53:35	thorwataniket69@gmail.com	18 / 40 Thorwat Aniket sanjay	P.d.v.p collage tasgaon	Student	Vayfale	Maharashtra
89	4/30/2021 19:53:48	moreanjal219@gmail.com	22 / 40 Anjali Ramesh More	P.D.V.P.tasgavon	Student	Sangli	Maharashtra
90	4/30/2021 19:54:15	manisha17kharade@gmail.com	10 / 40 Manisha sanjay kharade	pdvp college tasgaon	Student	Miraj	Maharashtra
91	4/30/2021 19:54:29	omonkar18@gmail.com	8 / 40 Mali onkar narayan	P.d.v.p college tasgaon	Student	Tasgaon	Maharashtra
92	4/30/2021 19:55:02	nvasudha2018@gmail.com	16 / 40 Nalawade Vasudha Balav	Padmbhushan Dr. Vasant	Student	Tasgaon	Maharashtra
93	4/30/2021 19:55:22	khatajyoti3@gmail.com	14 / 40 Jyoti kundlik khatal	P D V P collage tasgaon	Student	Sangli	Maharashtra
94	4/30/2021 19:55:45	nikpawar594@gmail.com	20 / 40 Pawar Nikhil Nandkumar	PDVP collage Tasgaon	Student	Tasgaon	Maharashtra
95	4/30/2021 19:54:52	shubhaminayakpatil932@gmail.com	26 / 40 Patil Shubham Vinayak	PDVP college Tasgon	Student	Tasgaon	Maharashtra
96	4/30/2021 19:55:20	shwetankaskamble@gmail.com	12 / 40 Shweta vikas kamble	P.d.v.p college	Student	Tasgaon	Maharashtra
97	4/30/2021 19:55:50	komalsalunkhe764@gmail.com	10 / 40 Komal Sunil Salunkhe	Padmabhushan Dr. Vasar	Student	Tasgaon	Maharashtra
98	4/30/2021 19:56:11	shahistamulan45@gmail.com	28 / 40 Shahista Maheeb Mullan	P.D.V.P Collage aravade	Student	Tasgaon	Maharashtra
99	4/30/2021 19:56:42	rutwikpatil2122@gmail.com	6 / 40 PATIL RUTWIK TANAJI	P.D.V.P College Tasgaon	Student	Tasgaon	Maharashtra
100	4/30/2021 19:57:20	mayurpatil250499@gmail.com	16 / 40 Mayur Ramesh Patil	Dr. D. Y. Patil ACS College	Student	Pune	Maharashtra
101	4/30/2021 19:57:33	shubhampalkar2091998@gmail.com	12 / 40 Shubham shashikant	pal Dr. D. Y. Patil college of	Student	Pune	Maharashtra
102	4/30/2021 19:58:27	avinashgurav8292@gmail.com	6 / 40 Gurav Avinash Bajrang	Shivaji University,Kolhapur	Student	Kolhapur	Maharashtra
103	4/30/2021 20:03:47	koresaurabh27@gmail.com	24 / 40 Saurabh Subhash kore	Dr.bapuji salunkhe mahar	Student	Miraj	Maharashtra
104	4/30/2021 20:12:23	kajalmagdum0@gmail.com	14 / 40 Kajal chidanand magdum	Miraj Mahavidyalaya miraj	Student	Miraj	Maharashtra
105	4/30/2021 20:13:16	koresaurabh27@gmail.com	36 / 40 Saurabh Subhash kore	Dr.bapuji salunkhe mahar	Student	Miraj	Maharashtra
106	4/30/2021 20:21:02	sonalimagdum13@gmail.com	28 / 40 Sonali Anil Magdum	Miraj Mahavidyalaya Miraj	Student	Miraj	Maharashtra
107	4/30/2021 20:26:40	paroj143@gmail.com	40 / 40 Paroj Kumar Basappa	Miraj mahavidyalaya,Miraj	Student	Miraj	Maharashtra
108	4/30/2021 20:31:42	paroj143@gmail.com	36 / 40 Paroj kumar Basappa	Miraj mahavidyalaya ,miraj	Student	Miraj	Maharashtra
109	4/30/2021 20:37:40	wkamble70@gmail.com	30 / 40 Dr. Vilas Vikram Kamble	Dahiwadi College Dahiwad	Faculty	Dahiwadi	Maharashtra
110	4/30/2021 20:45:35	divyaakshay2411@gmail.com	4 / 40 Divya Akshay Patil	Miraj mahavidyalaya miraj	Student	Miraj	Maharashtra
111	4/30/2021 20:48:32	firojeology@gmail.com	30 / 40 Dr. Firoj Yasin Shaikh	Miraj Mahavidyalaya Miraj	Faculty	Miraj	Maharashtra
112	4/30/2021 21:26:15	nikitamagdum18@gmail.com	20 / 40 NIKITA SAMBHAJI MAGE	MIRAJ MAHAVIDHYALAY	Student	Miraj	Maharashtra
113	4/30/2021 21:26:37	prakashm461998@gmail.com	24 / 40 Mali Prakash Ashok	Yashvant shikashan savar	Student	Sangli	Maharashtra
114	5/1/2021 10:26:50	shankarmane.dr@gmail.com	34 / 40 Shankar Bhagwan Mane	P. D. V. P. College, Tasg	Faculty	Tasgaon	Maharashtra
115	5/1/2021 14:39:24	jafsana@gmail.com	34 / 40 Prof. Mrs. Afsana Shabbir	Willingdon College Sangli	Faculty	Sangli	Maharashtra
116	5/1/2021 16:45:03	2015.milindpatil@gmail.com	20 / 40 Mr. Milind Ganapati Patil	Padmabhushan Dr. Vasar	Other	Tasgaon	Maharashtra
117	5/7/2021 21:30:50	paroj143@gmail.com	36 / 40 Paroj kumar Basappa	Miraj mahavidyalaya,miraj	Student	Miraj	Maharashtra



## Quiz Certificate

“ज्ञानं, विज्ञानं अस्मि सुखसकारं प्राप्तुमीति शिक्षणप्रसार” - शिक्षणमन्त्रालय, मापूजी साठुंबी  
Swami Vivekanand Shikshan Sanstha's Kolhapur

**Padmabhushan Dr. Vasantrodada Patil Mahavidyalaya,  
Tasgaon, Sangli-416412, (MS) India**


College Research and Innovation Committee in association with IQAC, Celebrate  
**World Intellectual Property Day**  
**Certificate for Appreciation**

This to certify that, {{full Name}}  
of {{other identifier}} has solemnly pledged  
and participated in online “Intellectual Property Awareness Quiz-2021” held on 29th April 2021, organized by  
College Research and Innovation Committee in association with IQAC, PDVP Mahavidyalaya, Tasgaon, on occasion  
of World Intellectual Property Day.

  
Dr. Ajay N. Ambhore  
Organizer

  
Dr. A. P. Inamdar  
IQAC, Coordinator

  
Dr. Milind S. Hujare  
Principal

  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon (Sangli).

**Dr. Ajay N. Ambhore**  
Convenor  
Research and Innovation Committee



*“Dissemination of Education through Knowledge, Science and Culture”*

*- Shikshanmaharshi Dr. Bapuji Salunkhe*

**Shri Swami Vivekanand Shikshan Sanstha Kolhapur's**

**PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST- SANGLI  
416 312 (Maharashtra) Phone No: (02346-250665)**

*(Affiliated to Shivaji University, Kolhapur)*

**Report on**

**33 KOTI TREE PLANTATION PROGRAMME**

**Organized By**



**NATIONAL SERVICE SCHEME  
(N. S. S.)**





**8<sup>th</sup> JULY 2019**



<b>Event:</b>	<b>33-KOTI TREE PLANTATION PROGRAMME -2019</b>
<b>Organizing Department</b>	<b>National Service Scheme (N.S.S.)</b>
<b>Date</b>	<b>8<sup>th</sup> JULY 2019</b>
<b>Venue</b>	<b>College Campus</b>
<b>Total Participants</b>	<b>304</b>
<b>Male</b>	<b>163</b>
<b>Female</b>	<b>141</b>

## NOTICE

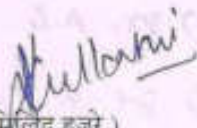



"ज्ञान, विद्याम जगति सुखकारं योग्यं विद्याधरम्"  
 - शिक्षणमंडळी डॉ. बापूजी साहू  
 श्री स्वामी विवेकानंद शिक्षण संस्था, कोल्हापूर संघसिद्ध  
 पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय  
 तामगाव, जि- सांगली  
 राष्ट्रीय सेवा योजना २०१९-२०२०  
 ३३ कोटी वृक्ष लागवड अभियान  
 सूचना

दि. ५/७/२०१९

महाविद्यालयातील सिनिअर विभागातील प्राध्यापक व प्रशासकीय कर्मचारी यांना सूचित करण्यात येते की, सोमवार दि. ८/७/२०१९ रोजी आपल्या महाविद्यालयाच्या परिसरात सकाळी १० वा. विभागीय सहसंचालक, उच्च शिक्षण, यांच्या आदेशानुसार राष्ट्रीय सेवा योजनेच्यावतीने ३३ कोटी वृक्षलागवड अभियान अंतर्गत वृक्षारोपणाचा उपक्रम आयोजित केला आहे.

तरी या उपक्रमास आपण वेळेवर उपस्थित राहावे.

  
 (डॉ. मिलिंद हुजरे)  
 प्राध्यापक  
 पद्मभूषण डॉ. वसंतरावदादा पाटील  
 महाविद्यालय, तामगाव, जि. सांगली, ४०११०१

1) Dr. P. B. Telgi - Telgi  
 2) Dr. P. B. Telgi - Telgi  
 3) Dr. P. B. Telgi - Telgi  
 4) Dr. P. B. Telgi - Telgi



"ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षणयंत्रण"

-सिद्धगुरुजी श्री. बागुची मातुंवे

श्री स्वामी विवेकानंद शिक्षण संस्था, कोल्हापूर संचलित

पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय

तासगाव, जि- सांगली

राष्ट्रीय सेवा योजना २०१९-२०२०

३३ कोटी वृक्ष लागवड अभियान

सूचना

दि. ५/७/२०१९

महाविद्यालयातील सिनिअर विभागातील प्राध्यापक व प्रशासकीय कर्मचारी यांना सूचित करण्यात येते की, सोमवार दि. ८/७/२०१९ रोजी आपल्या महाविद्यालयाच्या परिसरात सकाळी १० वा. विभागीय सहसंचालक, उच्च शिक्षण, यांच्या आदेशानुसार राष्ट्रीय सेवा योजनेच्यावतीने ३३ कोटी वृक्षलागवड अभियान अंतर्गत वृक्षारोपणाचा उपक्रम आयोजित केला आहे.

तरी या उपक्रमास आपण वेंळेश्वर उपस्थित राहावे.

( डॉ. मिलिंद हुजरे )

for

पद्मभूषण डॉ. वसंतरावदादा पाटील  
महाविद्यालय, तासगाव, जि. सांगली (२)

- १) डॉ. श्री. वसंत - *[Signature]*
- २) डॉ. शंभूजी पी. एम. - *[Signature]*
- ३) डॉ. सुभाष डी. ए. - *[Signature]*
- ४) डॉ. चंद्रकांत पी. डी. - *[Signature]*
- ५) डॉ. प्रभाकर भांडारी - *[Signature]*
- ६) डॉ. प्रदीप शंकर - *[Signature]*
- ७) डॉ. जयदेव लक्ष्मी - *[Signature]*
- ८) डॉ. राजेश्वरी एम. के. - *[Signature]*
- ९) डॉ. साठ्या के. एम. - *[Signature]*
- १०) डॉ. के. के. सी. पी. - *[Signature]*

- १०) डॉ. देवदास जी. एम. - *[Signature]*
- ११) डॉ. गणेश पी. एम. - *[Signature]*
- १२) डॉ. गोपाळ पु. ए. - *[Signature]*
- १३) डॉ. कृष्णोटे पी. डी. - *[Signature]*
- १४) डॉ. कदम सी. के. - *[Signature]*
- १५) डॉ. मधुसूदन एम. ए. - *[Signature]*
- १६) डॉ. गोवंत एम. जी. - *[Signature]*
- १७) डॉ. गजानन जीव - *[Signature]*





**Hon. Prin. (Dr.) Milind Hujare With Faculties & N.S.S. Students Are Involved  
In The Tree Plantation Programme**



**Tree Plantation By Hon. Principal (Dr.) Milind S. Hujare**





**Hon. Principal (Dr.) Milind S. Hujare With College Staff**



**Hon. Principal (Dr.) Milind S. Hujare**





**N.S.S. Programme Officer Dr. Amol Sonwale with Principal & College staff**

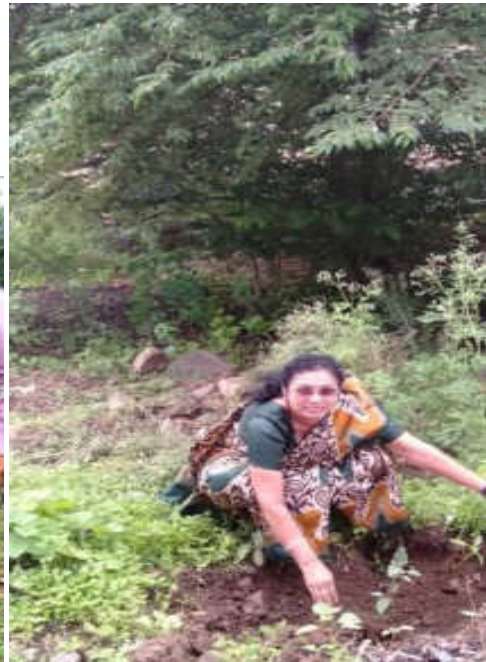


**N.S.S. Programme Officer Dr. T. K. Badame with Principal & College staff**





**N.S.S. Programme Officer Dr. P. B. Teli with N. S. S. Students & College staff**



**Plantation BY Dr. Maya Patil, Dr. S. D. Jadhav, Dr. Megha Patil & Dr. Alka Inamadr**





**Dr. Alka Patil With N.S.S. Students & Programme Officer**



**Vijay Jadhav HOD-Political Department**



**A.S. Pachore (HOD-English Dept.)**



**Prof. (Dr.) N. A. Kulkarni  
HOD-Department of Botany**



**Dr. S. A. Khabade  
HOD-Department of Zoology**





**Tree Plantation by College Teaching staff with N. S. S. Students**



On the occasion of **33-Koti Tree Plantation Programme** Dr. T. K. Badame narrated the tree plantation Programme in detail and Hon. Principal (Dr.) Milind Hujare sir highlighted the importance of tree plantation, economic importance of tree, conservation of biodiversity etc.

Tree plantation is one of the best activities for making the **Campus Greener, Livelier and Healthier**. Planted trees help our biodiversity, ensure the supply of Oxygen for the next generations and provide us with various resources. Without trees, the existence of human life as well as other species on earth is impossible. So we should plant more and more trees.

Our Motto is “**College Campus Goes Green**”. On the occasion of **33 – Koti Tree Plantation Programme**, about 50 plants are planted in the college campus by Hon. Principal (Dr.) Milind Hujare sir, teaching and non teaching staff. Also N.S.S. students are actively involved in the plantation of tree in college campus. The 40 plants includes different varieties such as Tamarind (Chinch), Azadiracta indica (Neem), Ficus (banyan tree), Gulmohar, Jamun, Wild Cherry plant, Ashoka tree, Ramphal, Peepal tree and Arjun trees are planted in the college campus area. Today our college goes to green campus. Our college campus consists of varies of plants includes flowering and non flowering plants, herbs, shrubs and trees etc.


About more than 1000 plants are currently present in the college campus. Most of these plants grow under less water content. Every year our college engage plantation of varieties of plants.

Today’s percentage of forest area is reduced due to urbanization, deforestation, highway development, Dam construction etc. Due to this above cause plantation is

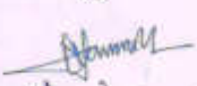







required. Trees greatly contribute to their environment by providing oxygen, supporting wildlife, improving air quality, conserving water, preserving soil and climate amelioration.

This programme successfully organized by N. S. S. Programme Officer **Dr. T. K. Badame, Dr. Amol Sonawale and Dr. P. B. Teli**. For this programme college teaching, non teaching and N.S.S. students are present. Finally **Anna Bagal** expressed vote of thanks.

### List of Participants in Tree Plantation Programme

  
"मान, विद्याम ज्ञानि सुसम्पन्न वासादी शिक्षणप्रसार"  
-विद्यार्थ्यां वी.बापूजी साठुंघे  
श्री स्वामी विवेकानंद शिक्षण संस्था, कोल्हापूर संचलित  
पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय  
कामगाव, जि- सांगली  
राष्ट्रीय सेवा योजना २०१९-२०२०  
३३ कोटी वृक्ष लागवड अभियान  
उपस्थिती पत्रक  
सोमवार, दि. ८/७/२०१९

मा. विभागीय सहसंचालक, उच्च शिक्षण, कोल्हापूर यांच्या आदेशानुसार महाविद्यालय परिसरात राष्ट्रीय सेवा योजनेच्या वतीने सोमवार, दि. ८/७/२०१९ सकाळी १० वा. घेण्यात आलेल्या ३३ कोटी वृक्षलागवड अभियान अंतर्गत वृक्षारोपणाच्या उपक्रमास खालील प्राध्यापक, प्रशासकीय कर्मचारी व विद्यार्थी उपस्थित होते. या उपक्रमास प्रमुख पाहुणे मा. प्राचार्य डॉ. मिलिंद हुजरे होते, तर अध्यक्षस्थानी उपप्राचार्य के. एस. पाटील होते. सदर उपक्रमाचे संयोजन एन. एस. एस. कार्यक्रम अधिकारी प्रा. डॉ. टी. के. बदामे, डॉ. पी. बी. तेली तसेच रा. से. यो. सदस्यांनी केले.

अ.क्र.	नाव	पद/वर्ग	सही
१.	डॉ. मिलिंद हुजरे	प्राचार्य	
२.	प्रा. डॉ. एन. ए. कुमठणी	प्राध्यापक	
३.	प्रा. डॉ. श्री. जी. सुब्रह्मण्यम	प्राध्यापक	
४.	डॉ. रवडे. एस्. के.	प्रसो - ११	
५.	प्रा. पाटील ए. के.	अध्यापक	
६.	Dr. A. S. Kumbhar		
७.	Dr. Thorbole D. B.		
८.	Dr. Wagh A. S.		



अ.क्र.	नाव	पद/वर्ग	सही
४.९.	Dr. Jadhav	S.D. Assi. Prof.	<u>Jadhav</u>
४.१०	Dr. Patil	M. A. Assi. prof	<u>Patil</u>
४.११.	Patil	M. U. Assi. Prof (chem)	<u>Patil</u>
४.१२	Thavare	T. U. Lab Assit	Thavare
४.१३	Khale	P. R. Asst. Prof.	<u>Khale</u>
४.१४	Dr Patil	S. J. Assi.	<u>Patil</u>
४.१५	Prof	K. S. Patil	<u>Patil</u>
४.१६	Dr.	B. T. Kulkarni	<u>Kulkarni</u>
४.१७	<del>Dr.</del> Mr.	A. S. Pachore	<u>Pachore</u>
४.१८	Dr	S. A. Khabade	<u>Khabade</u>
४.१९	Prof.	A. R. Patil	<u>Patil</u>
४.२०	Prof.	N. R. Waghmare	<u>Waghmare</u>
४.२१	Dr.	Y. Y. Pawar	<u>Pawar</u>
४.२२	Prof	B. S. Kasale	<u>Kasale</u>
४.२३	Dr.	A. N. Ambhore	<u>Ambhore</u>
४.२४.	Dr.	A. D. Nadaf	<u>Nadaf</u>
३०.२५	Shri	S. D. Kolekar Lab Assit	<u>Kolekar</u>
२६	Dr.	J. S. Ghosale	<u>Ghosale</u>
२७		S. R. Khogane	<u>Khogane</u>

अ.क्र.	नाम	पद/वर्ग	सही
२८३९.	Prof. Bagel A. S.		<u>Bagel</u>
२९३९.	Dr. A. G. Sonawale	Asst. Prof.	<u>(Sonawale)</u>
३०३९.	Prof. M. D. Patil	ASSO. PROF.	<u>Patil</u>
३१३९.	Prof. G. R. Patil	Asst. Prof.	<u>G</u>
३२३९.	प्र. वी. लुकराट		<u>प्र. वी. लुकराट</u>
३३३९.			
३४३९.	Dr. Aika Inamdar	Botany	<u>Aika</u>
३५३९.	Sarkar S. A.	-	<u>Sarkar</u>
३६३९.	Patil Akshay. A.	-	<u>Patil</u>
३७३९.	Dr. P. B. Teg	-	<u>Teg</u>
३८३९.	जगताप सुख सुख	-	<u>Sukh</u>
३९३९.	Dr. T. K. Badame	Prof.	<u>Badame</u>
४०३९.	स्वातंत्र्य उत्तम वाघ	BA-II	<u>Swat</u>
४१३९.	सिध्वांत सुखस माने	BA-II	<u>Siddhant</u>
४२३९.	ओपंकार जगदीश पाटील	BA-II O.S. Patil	
४३३९.	माने अजिंक्य यशवंत	BA-II	<u>Mane</u>
४४३९.	न्यायलाल रमिक अजय	BA-I	<u>Nyalal</u>
४५३९.	लोहाळ V. R.	-	<u>Lohar</u>



Sr.No.	Name	Class	Gender		Signature
			Male (✓)	Female (✓)	
1	Karande Anali Dilip	B.com III		✓	<u>IA Karande</u>
2.	Zambare Swati Mansing	B.com II		✓	<u>Swati</u>
3.	Nalavade Asmita Bhimrao	B.com III		✓	<u>Asmita</u>
4.	Sutar Harshada Suresh	B.com III		✓	<u>Harshada</u>
5.	Patil Nilam Narendra	-11-		✓	<u>Nilam</u>
6.	Mali Veushali Natayan	-11-		✓	<u>Veushali</u>
7.	Velhal Sargali Ramchandra	-11-		✓	<u>Sargali</u>
8.	Javre Pratiksha Vinayak	-11-		✓	<u>Pratiksha</u>
9.	Dound Patil Dilip	B.com I		✓	<u>Dilip</u>
10]	Khadat Shivani Mohan	B.com I		✓	<u>S.M. Khadat</u>
11]	Khat Shital Dattatray	B.com I		✓	<u>Shital</u>
12]	Kharmate Swapnali Satish	B.com I		✓	<u>S.S. Kharmate</u>
13]	Patil Shivani Rajendra	B.com I		✓	<u>Shivani</u>
14]	More Bhagyashri Sudhakar	B.com I		✓	<u>Bhagyashri</u>
15]	Mali Kajal Krishna	B.com I		✓	<u>Kajal</u>
16]	Patil Anuradha Yashwant	B.com I		✓	<u>Anuradha</u>

	Name	class	Gender		Signature
			Male	Female	
17]	chavan swati popat	B.com-I		✓	<u>Swati</u>
18]	Patil Rutuja Dilip	B.com-I		✓	<u>Rutuja</u>
19]	nalavade shubhangi Bhimrao	B.com-I		✓	<u>SNV</u>
20]	Kharade nikita Ghodiram	B.com-I		✓	<u>Nikita</u>
21]	Kadam Jyoti Dilip	B.com-I		✓	<u>Jyoti</u>
22]	Ghotkar Shivani Shivaji	B.com-I		✓	<u>Ghotkar</u>
23]	Mohite Rutuja Nandkumar	B.com-I		✓	<u>RNMohite</u>
24]	shinde nikita rajeev	B.com-I		✓	<u>Shinde</u>
25]	Mali Mamata Balaram	B.com-I		✓	<u>Mali</u>
26]	Mali Shivani Bapu	B.com-I		✓	<u>Mali</u>
27]	Waghmare Meghazani Sudam	B.com-I		✓	<u>ms waghmare</u>
28]	Jadhav AKSHITA Dilip	B.com-I		✓	<u>Jadhav</u>
29]	chavan ANUJA AMAR	B.com-I		-	<u>Chavan</u>
30]	Pawar Aditi Dilip	B.com-I		✓	<u>Pawar</u>
31]	chavan Savali Anil	B.com-I		✓	<u>Savali</u>
32]	Kumbhar Anushka Vasant	B.com-I		✓	<u>Kumbhar</u>
33]	Gurav madhura Nivas	B.com-I		✓	<u>Gurav</u>
34]	Gaikwad Atantsha Mahadev	B.com-I		✓	<u>Gaikwad</u>
35]	Gaikwad shubhangi Sopan	B.com-I		✓	<u>shubhangi</u>
36]	Kadam Siddhi Anil	B.com-I		✓	<u>Kadam</u>
37]	Gaikwad Shweta Ashok	B.com-I		✓	<u>Gaikwad</u>
38]	Jadhav Poornam Vilas	B.com-I		✓	<u>Jadhav</u>
39]	Kambhakar Anjali Prakash	B.com-I		✓	<u>Kambhakar</u>



	Name	class	Gender		Signature
40]	Chougute Swapnali Satish	B.com I	Male	Female	
40]	chougute Swapnali satish	B.com III		✓	
41]	chougute Gayatri Jagadish	B.com III		✓	
42]	Mulla Aiyesh Babu	B.com III		✓	
43)	Raste Reshma Ramchandra	B.com I		✓	
44]	Kamble Jyoti Dipak	B.com I		✓	
45]	Phalake Pratiksha Vinod	B.com I		✓	
46]	Rampise Peiyankazumza	B.com I		✓	
47]	Kamble Astha Shashikant	B.com I		✓	
48]	Jadhav Sneha Jagannath	B.com III		✓	
49]	Chavan Manasi Krishnadev	B.com III		✓	
50)	Sapkal Swapnali Bharat	B.com I		✓	
51	Sakte Shruti Keshavev	B.com I		✓	
52	Jadhav Shilpa Hanmant	B.com I		✓	
53	Patil Pratiksha Manik	B.com I		✓	
54	Pol Aishwarya Shankar	B.com I		✓	
55	Gasavi Rupali Manik	B.com III		✓	
56	Wagh Anupa Tanaji	B.com III		✓	
57.	Gaikwad Shivani Sampat	B.com III		✓	
58	Chavan Sujata Vitthal	B.com III		✓	chavan.s.v
59	Gaikwad Bhagyashri Hanmant	B.com I		✓	
60.	Yamgar sonali Sadashiv	B.com I		✓	s.s.yamgar
61	Pailwan Neha Anil	B.com I		✓	
62.	Tupsoundary sonali Maruti	B.com I		✓	

	Name	class	Gender		Signature
			Male	Female	
63	Yogini Ramesh Jadhav	B.Com I		✓	Y.R. Jadhav
64	Gurav Swapnali Shekari	B.Com I		✓	Swapnali
65	Gaikwad Pooja Vasant	B.Com I		✓	Pooja
66	Shendage Shripali Dilip	B.Com I		✓	Shendage
67	Khot Dipali Dilip	B.Com I		✓	Dhot
68	Patil Pradnya Ramchandra	B.Com I		✓	Pradnya
69	Mulani Reshma Lalasaheb	B.Com III		✓	Mulani
70	Patil Nilam Nivasa	B.Com III		✓	N.N. Patil
71	Jadhav Pratiksha Prakash	B.Com III		✓	Pratiksha
72	Patil Rutuja Ramesh	B.Com III		✓	Rutuja
73	M. Jawar Sabiya Ayub	B.Com I		✓	M. Jawar
74	Jadhav Sonali Baban	B.Com I		✓	Sonali
75	Jamadar Mijba Arshad	B.Com I		✓	Mijba
76	Gayatri Yuvraj Dhotre	B.Com I		✓	Gayatri
77	Gayatri Suresh Kamble	B.Com I		✓	Gayatri
78	Pawar Samiksha Ravato	B.Com I		✓	Samiksha
79	Godbole Sanjivani Santosh	B.Com I		✓	Sanjivani
80	Monika Sanjay Pawar	B.Com I		✓	M.S. Pawar
81	Madhuri bhavati autade	B.Com I		✓	Madhuri
82	Ankita Ashok Kove	B.Com I		✓	Ankita
83	Sushant Subhash Chavan	B.Com I	✓		Sushant
84	Nitish Suresh Sutar	B.Com I	✓		Nitish
85	Patil Rushikesh Rajendra	B.Com I	✓		Rushikesh



	Name	Class	Gender		Signature
			Male	Female	
86	Rushikesh Jayant charan	B.com	✓		<del>Pabare</del>
87	Pruthviraj Mahadar Patil	B.com	✓		P.M.P
88	vibhav Sadashtu Patil	B.com	✓		<del>V. Patil</del>
89	Prathmesh Satish Patil	B.com	✓		<del>P.P.</del>
90	Mulla Sahil suraj	B.com	✓		<del>S.S.</del>
91	Paawar sasgar Rajendra.	B.com	✓		<del>S.P.</del>
92	Patil Ajay Sudhakar	B.com	✓		<del>A.P.</del>
93	Suryawanshi Amit Jeelendra	B.com	✓		<del>A.</del>
94	Kshirsagar Rohit Vikas	B.com	✓		<del>R.</del>
96	Mali vijay Mayur	B.com	✓		<del>M.</del>
97	Mali Mayur Sanjay	B.com	✓		<del>M.</del>
98	Mane Shikhar Vishalendra	B.com	✓		<del>M.</del>
99	Patil shubham Suresh	B.com	✓		<del>S.</del>
100	Chendage Akash Sambhaji	B.com	✓		<del>A.</del>
101	Sawant Abhishek Vitthal	B.com	✓		<del>A.U.</del>
102	Bhosale Sujay Anand	B.com	✓		<del>S.</del>
103	Nyaynit Preraj Ajay.	B.com	✓		<del>N.</del>
104	Talwar Pratik Suresh	B.com	✓		<del>T.</del>
105	Deshmukh Mahendra Ranjeet	B.com	✓		<del>D.</del>
106	Patil Prafull Kundlik	B.com	✓		<del>P.</del>
107	Mankar Asitkumar Rajendra	B.com	✓		<del>M.</del>
108	Adake Shital Mohan	B.com	✓		<del>S.</del>
109	Patil Aniket Anil	B.com	✓		<del>P.</del>
110	Mane Abhijeet Ashok.	B.com	✓		<del>M.</del>
111	Zambare Sustant Tanaji	B.com	✓		<del>Z.</del>

Name	Roll NO	sign.
1) Mohite Shweta Machindra	5634	<u>s.m.mohite</u>
2) Patil Akshada Ganapati	5636	<u>Apatil</u>
3) zarekar snehal Mahadev	5658	<u>zarezkar</u>
4) Patil snehal prakash	5641	<u>Patil</u>
5) Patil Bhagyashai Ramesh	5640	<u>Patil BR</u>
6) Powar Aishwarya Dhonaji	5646	<u>Powar</u>
7) Shinde Dipali Shamtao	5782	<u>Dshinde</u>
8) Patil Ankita Shankar	5638	<u>Patil</u>
9) Sakhasse Pallavi Mahadev	5650	<u>Pa</u>
10) Dabhoole Rani Pandharinath	5618	<u>Dabhoole</u>
11) Patil Asavari Shivaji	5639	<u>Asavari</u>
12) Jambade Rutuja Vijay	5625	<u>Jambade</u>
13) Mohite Dipti Dinkar	5633	<u>Mohite</u>
14) Makare Neha Bharat	5630	<u>Makare</u>
15) Patil Sonali Balasa	5642	<u>Satir</u>
16) Patil Ameeta Anil	5637	<u>Patil</u>
17) Sabale Swapnali Rajendra	5649	<u>S.R. Sabale</u>
18) Suryavanshi snehal Asun	5656	<u>Snehal</u>
19) Mane Mohini sandip	5631	<u>Mane</u>
20) Mane Nilam Sampat	5632	<u>Mane</u>
21) Mathankar Aditi. sunesh	5657	<u>ASIMathankar</u>
22) Mujalla Misba Jamirahmad	5635	<u>Mujalla</u>
23) Gajkumar Prajakti Nagesh	5622	<u>Gajkumar</u>
24) Jadhav Jadhav Jyoti S. 5623	5623	<u>Jadhav</u>
25) Patil Yashoda Yashwant	5644	<u>Patil</u>



Sr. No.	Name of student	Roll No.	Sign.
1	Patil Vausha Ananda	6321	<u>V. Patil</u>
2	Kale Vijay Bhagwan	6306	<u>V. Kale</u>
3	Jadhav Gansob shahaji	6303	<u>G.S. Jadhav</u>
4	Ingate Mamoj Hommat	6300	<u>I. Ingate</u>
5	Mali Sadanand Sanjay	6312	<u>S.S. Mali</u>
6	Patil Vishvajit J.	6322	<u>V. Patil</u>
7	Shinde Pooja Anil	6328	<u>P. Shinde</u>
8	Nanavare Pooja Anil	6317	<u>P. Nanavare</u>
9	Gaikwad Nikita Satish	6295	<u>N. Gaikwad</u>
10	Lengare Pratiksha Jagannath	6309	<u>L. Lengare</u>
11	Potdar Akshata Ramesh	6324	<u>A. Potdar</u>
12	Patil Mayuri Dattatray	6319	<u>M. Patil</u>
13	Gaikwad snehal Bhadrat	6296	<u>S. Gaikwad</u>
14	Jadhav Amruta vitthal	6307	<u>A. Jadhav</u>
15	Tandate Poochi Abasa	6329	<u>P. Tandate</u>
16	Mahomuni Rutuja Rajendra	6310	<u>M. Mahomuni</u>
17	Maske Mohini Balaso	6316	<u>M. Maske</u>
18	Jamdade Pratiksha Madhukar	6305	<u>P. Jamdade</u>
19	Mali Prandli Mahadev	6311	<u>P. Mali</u>
20	<del>Patil</del>		

- |      |                             |                     |
|------|-----------------------------|---------------------|
| 1    | Jadhav Amruta Vitthal       | <del>Alhal</del>    |
| 2    | Mali Pranali Mahadev        | <del>Pranali</del>  |
| 3    | Patil Mayuri Dattatray      | <del>Patil</del>    |
| 4    | Babar Payal Tanaji          | <del>Babar</del>    |
| 5    | Patil Vansha Ananda         | <del>Vansha</del>   |
| 6    | Tandale Prachi Abasa        | <del>Tandale</del>  |
| 7.   | Maske Mohini Balaso         | <del>Maske</del>    |
| 8.   | Jamdade Pratiksha Madhukar  | <del>Jamdade</del>  |
| 9.   | Gaikwad Nikita Ganish       | <del>Gaikwad</del>  |
| 10.  | Shinde Pooja Anil           | <del>Shinde</del>   |
| 11.  | Nanavare Pooja Anil         | <del>Nanavare</del> |
| 12.  | Shinde Nilam Sadashiv       | <del>Shinde</del>   |
| 13   | Patil Munali Mohan          | <del>Patil</del>    |
| 14)  | Shendage Supriya Suresh.    | <del>Shendage</del> |
| 15)  | <u>Ingle Manoj Hanamant</u> | <del>Ingle</del>    |
| 16)  | Jadhav Ganesh Shobaji       | <del>Jadhav</del>   |
| (17) | Pawar Dipak Dagado          | <del>Pawar</del>    |
| 18]  | Jadhav Vishal Manik         | <del>Jadhav</del>   |
| 19]  | Mali Sadanand Sanjay        | <del>Mali</del>     |
| 20]  | Chavan Arjun Maruti         | <del>Chavan</del>   |
| 21]  | Gujale Tushar Kakaso        | <del>Gujale</del>   |
| 22)  | NIHAM ANASH SADANAND        | <del>NIHAM</del>    |
| 23)  | Kate Vijay Bhagwat          | <del>Kate</del>     |



1. Shrutī Ashok Chigare.
2. Lengare Pratiksha Jagannath
3. Maske Mohini Balaso
4. Jamdade Pratiksha Madhukar
5. Mahamuni Rutuja Rajendra
6. Gaikwad snehal Bhaskar
7. Patil Vaysha Ananda
- 8) Tandale Prachi Abasa
- 9) Babar Payal Tanaji
- 10) Patil Mayuri Dattatray
- 11) Shendage Supriya Suresh.
- 12) Shinde Nilam Sadashiv
- 13) patil Mrunali mohun
- 14) Ghodake Sanchita Mahadev
- 15) Mali Pranali Mahadev
- 16) Jadhav Ananda vittal
- 17) Mali Suhas Dasharath
- 18) Mali Sदानand Sanjay
- 19) kate vijay Bhagwat
- 20) Patil Vishvajit Jagannath
- 21) Pawar Dipak Dagadu
- 22) Jadhav Vishal Manik
- 23) Gwale Tushar Kakasa
- 24) Chavan Anjun Manuti
- 25) mane Sujit Suryakant
- 26) mane Aniket Ravisahab

S.A. Chigare

Lengare . 9

Maske

Jamdade

Mahamuni

Gaikwad

Patil

Tandale

Babar

Patil

Shendage

Shinde

Patil

Sanchita

Mali

Jadhav

Mali

S.S.Mali.

Kate

Patil

Pawar

Jadhav

Gwale

Chavan

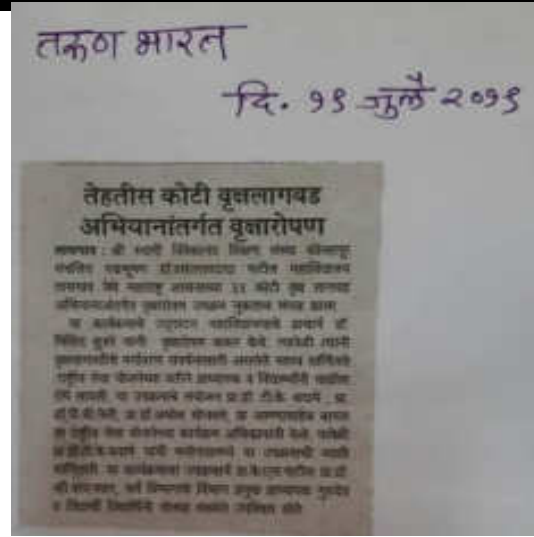
Mane

Mane

Roll No.	Name	Sign.	
6319	Patil Mayuri Dattatray.	<u>Patil</u>	2
6292	Babar Payal Tanaji	<u>Babar</u>	23
6294	Chigase Shrutti Ashok	S.A. Chigase.	
6320	Patil Anurani Mohan	<u>Anurani</u>	
6295	Gaikwad Nikita Satish	<u>Nikita</u>	1
6321	Patil Vaysha Anand	<u>Vaysha</u>	
6322	Patil Vishvajit Jagannath	<u>Vishvajit</u>	
6296	Gaikwad snehal Bhasat	<u>Gaikwad</u>	
6297	Ghodake Sanchita Mahadev	<u>Sanchita</u>	
6223	Pawar Dipak Dagada	<u>Dipak</u>	
6298	Gujale Tushar Kakasa	<u>Tushar</u>	
6324	Potdar Akshata Ramesh	<u>Akshata</u>	
6299	Gurav Pavan Jagdish.	<u>Pavan</u>	
6326	shendage Supriya Suresh.	<u>Supriya</u>	
6327	Shinde Nitam Sadashiv	<u>Shinde</u>	
6300	Jyale Manoj Hanmant	<u>Manoj</u>	
6301	Jadhav Amruta Vitthal	<u>Amruta</u>	
6328	Shinde Pooja Anil	<u>Pooja</u>	1
6329	Tandale Prachi Abasa	<u>Prachi</u>	2
6302	Jadhav Dhanashree Dilip.	<u>Dhanashree</u>	
6303	Jadhav Ganesh Chahaji	<u>G.S. Jadhav</u>	
6314	Mone Aniket Ravsaheb	<u>Aniket</u>	0
6305	Jandade Pratiksha Madhukar	<u>Pratiksha</u>	10
6306	Kate Vijay Bhegwar	<u>Vijay</u>	2
6315	Mane Sujit Suryakant	<u>Sujit</u>	1
6309	Lengare Pratiksha Jagannath	<u>Lengare</u>	
6310	Mahamuni Rutuja Rajendra	<u>Rutuja</u>	
6311	Mali Prandli Mahadev	<u>Prandli</u>	



Name	Sign
1) Patil Mayuri Dattatray	<u>Patil</u>
2) Babar Payal Tanaji	<u>Babar</u>
3) Patil Vaisha Ananda	<u>Patil</u>
4) Chigare Shruti Ashok	S.A. Chigare.
5) Shinde Pooja Anil	<u>Shinde</u>
6) Nanavare Pooja Anil	<u>Nanavare</u>
7) Maske Mohini Balaso	<u>Maske</u>
8) Jambade Pratiksha Madhukar	<u>Jambade</u>
9) Gaikwad Snehal Bhasat	<u>Gaikwad</u>
10) Jadhav Dhanashree Dilip	<u>Jadhav</u>
11) Patil Manali Mohan	<u>Manali</u>
12) Shinde Nilam Sadashiv	<u>Shinde</u>
13) Shendage Supriya Suresh	<u>Shendage</u>
14) Ghodake Sanchita Mahadev	<u>Ghodake</u>
15) Mali Suhel Dasharath	<u>Mali</u>
16) Gurav Pavan Jagdish	<u>Gurav</u>
17) <del>Kate</del> Kate Vijay Bhagwat	<u>Kate</u>
18) Jadhav Ganesh Shantaji	<u>Jadhav</u>
19) Ingale Manoj Hanmant	<u>Ingale</u>
20) Mane Sujit Suryakant	<u>Mane</u>
21) Mane Aniket Ramesh	<u>Mane</u>
22) Patil Vishvajit Jagannath	<u>Patil</u>
23) Pawar Dipak Dagadu	<u>Pawar</u>
24) Jadhav Vishal Manik	<u>Jadhav</u>
25) Charan Arjun Manuti	<u>Charan</u>
26) Akshata Ramesh Potdar	<u>Akshata</u>
27) Lengare Pratiksha Jagannath	<u>Lengare</u>



**Principal**

**Dr. Milind S. Hujare**

**N. S. S. Programme Officer**

**Dr. T. K. Badame**

**Dr. A. G. Sonawale**

**Dr. P. B. Teli**



“Dissemination of Education for Knowledge, Science, and Culture”  
-Shikshanmaharshi Dr. Bapuji Salunkhe  
Shri Swami Vivekanand Shikshan Sanstha,  
Kolhapur  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon

## DEPARTMENT OF ZOOLOGY

### WORKSHOP

#### “Vermicomposting Bitotechnology”

2018-2019

<b>Name of the activity-</b>	<b>Report of “One day workshop on “Vermicomposting Bitotechnology”</b>
<b>Date</b>	27 <sup>th</sup> / 12/2018
<b>Number of participants</b>	81
<b>VENUE</b>	Room No. 6



"ज्ञान, विज्ञान आणि सुसंस्कार यांचाही शिक्षणप्रसार" - शिक्षणमहर्षी डॉ. बापूजी साखुंबे  
श्री स्वामी विवेकानंद शिक्षण संस्था, कोल्हापूर संघालित

**पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय**

सासगाव, जिल्हा - सांगली, पिन - ४१६ ३१२ ☎ STD : ०२३४६-२५०६६५, २५०५४५ FAX : २५०५४५

● शिवाजी विद्यापीठ, कोल्हापूर संलग्न ●

ई-मेल : san.pdvpm.tas@gmail.com वेबसाईट : www.pdvpm.tasgaon.edu.in

नेक पुर्नमूल्यांकन श्रेणी 'A' (2.75)

● स्थापना सन - जून १९६२ ● पी.बी.नं. १४ ● ज्यु. कॉलेज नं. जे २२-१०-००१ ● शिक्षि. कॉलेज कोड नं.



SIACIA  
Jr. C-8

शिक्षणमहर्षी डॉ. बापूजी साखुंबे  
पी.बी.सी.सी.सी.  
संस्थापक

भा. वसंतराव (दादा) पाटील  
अध्यक्ष  
पी.बी.सी.  
सहायक प्र. सान, संयोजक श्री. महाधर सान

साधारण अमलदुरुभाट साखुंबे  
स.स.  
साधारण

साधारण श्री. शुभान्नी नावडे  
स.स.सी. पी.बी.  
साधारण

डॉ. आर. आर. कुम्भार  
स.स.सी. स.स.सी. पी.बी.  
साधारण

जाचक क्र. : पी.बी.सी.पी.एम.टी. / 1477 / 18-19

दिनांक : 26/12/18

To,  
Dr. S. S. Patil  
Department of Zoology,  
A. C. S. College,  
Palus, Dist.-Sangli.

**Subject: Regarding Chief Guest**

Respected Sir

Department of Zoology of our college has organized a one day workshop on "Vermicomposting Biotechnology" on Thursday, 27<sup>th</sup> December 2018.

We therefore request you to kindly accept our invitation as "Chief Guest" and oblige.

Thanking you,

  
(Dr. R. R. Kumbhar)  
Principal,

\*Dr. Vasantadas Dr. Vasantadas Patil  
Mahavidyalaya Trustee; / Sangli





"ज्ञान, विज्ञान आणि सुसंस्कार संसाधनी शिक्षणप्रकार" - शिक्षणमहर्षी डॉ. बापूजी साहूंचे  
श्री स्वामी विवेकानंद शिक्षण संस्था, कोल्हापूर संघलित

## पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय



तासगाव, जिल्हा - सांगली, पिन - ४१६ ३१२ ☎: STD : ०२२२६-२५०६६५, २५०५८५ FAX : २५०५८५

• शिवाजी विद्यापीठ, कोल्हापूर संलग्न •

ई-मेल : san.pdvpm.tas@igmail.com वेबसाईट : www.pdvpm.tasgaon.edu.in

• स्थापना सन - जून १९६२ • पी.बी.नं. १४ • ज्यु. कॉलेज नं. जे २२-१०-००१ • सिपि, कॉलेज कोड नं. <sup>SHACIN</sup>X Jr: C-8

ऑनक पुनर्मूल्यांकन बोधी "बी" (2.70)

श्री. बापूजी साहूंचे श्री. वी.जी. वी.सि. संस्थापक	मन. वसंतराव (दादा) पाटील ज्योत्सना संस्थापक	प्रधान अश्वत्थकुमार साहूंचे ज्योत्सना संस्थापक	प्रधान्या डॉ. शुभांगी नावडे ज्योत्सना, वी.एस. संस्थापक	डॉ. आर. आर. कुम्भार ज्योत्सना, ज्योत्सना, वी.एस.टी. संस्थापक
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जावक क्र. : पी.बी.व्ही.पी.एम.टी. / १५७६ / २०१८-१९

दिनांक : २६/१२/२०१८

To,  
Prof. (Dr.) S. S. Patil  
Krishna Mahavidyalaya,  
Rethre (B), Tal - Karad,  
Dist.-Satara.


**Subject: Regarding Resource person**

Respected Sir,

Department of Zoology of our college has organized a one day workshop on "Vermicomposting Biotechnology" on Thursday, 27<sup>th</sup> December 2018.

We therefore request you to kindly accept our invitation as "Resource Person" and oblige.

Thanking you,

  
(Dr. R. R. Kumbhar)  
Principal,  
Padmabhushan Dr. Vasantaraddada Patil  
Mahavidyalaya, Tasgaon, (Sangli)



"ज्ञान, विज्ञान आणि सुरक्षित वातावरण" - विराणमहर्षी डॉ. बापूजी साहूंचे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli. Pin- 416 312 ☎ - STD : 02346-250665, 250575 FAX : 250575

• Affiliated to Shivaji University, Kolhapur •

E-mail : san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in



NAAC Reaccredited 'B' (27)

Established Year : June 1962 P. B. No. : 14 Jr. College No. : 22-10-001 Sr. College Code No. :  $\frac{SVACH}{X}$  Jr. C-3

Shikshanmaharshi  
Dr. Bapuji Salunkhe  
B.A., B.T., D.Lit.  
FOUNDER

Hon. Chandrakant (Dada) Patil  
PRESIDENT  
B.Com.  
Minister of Revenue, Public Works  
Govt. of Maharashtra

Prin. Abhaykumar Salunkhe  
MA  
CHAIRMAN

Prin. Mrs. Shubhangi Gawade  
M.Sc. B.Ed.  
SECRETARY

Dr. R. R. Kumbhar  
M.Sc., M.Phil., Ph.D.  
PRINCIPAL

Ref.No. : PDVPMT /

Date :

**A Students Initiative, Skill Development Programme  
Lead College Activity  
One Day Workshop for Students and Parents  
On  
VERMICOMPOSTING BIOTECHNOLOGY**

**27<sup>th</sup> December, 2018**

**Organized by**

**DEPARTMENT OF ZOOLOGY**

P.D.V.P. Mahavidyalaya, Tasgaon, Dist-Sangli

Phone No. 02346-250665

E-mail: san.pdvpm.tas@gmail.com

**Objectives of the workshop:**

Today's India is focusing mainly on skill development. Main objectives of the workshop are:

- 1) Study of different species of earthworms
- 2) Study of earthworm biology
- 3) Small scale vermiculture technique
- 4) Large scale commercial vermiculture farming
- 5) Applications of vermin composting/vermiculture
- 6) Economic importance of earthworms and vermicomposting technology

**Eligible Participants:**

Undergraduate Postgraduate Students, Researchers and Layman Parents.

**Poster & Model Competition for Students:**

Posters and models should be related to the theme. Posters and models should not exceed 3ft x 2.5ft size.

Presentation time: 5 min.

**\* Address for Correspondence:**

Sursandhya09@rediffmail.com

rmganeshwade@gmail.com

drpbteji15@gmail.com

Contact No. 9822396895, 9766924683, 9822866577

Co-ordinator

(Dr.R.M. Ganeshwade)

Convener

(Dr. S.A. Khabade)

(Dr.R.R. Kumbhar)  
Principal

Padmabhusan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon, (Sangli) (O.S.)



"Dissemination of Education through Knowledge, Science and Culture" Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami VivekanandShikshanSanstha's, Kolhapur

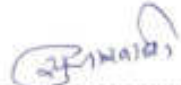
Padmbhushan Dr. Vasantrodada Patil Mahavidyala, Tasgaon, Dist- Sangli.  
Department of Zoology

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Date : 24/12/2018

## Notice

All B.Sc. B group students hereby informed that we are going to organize "One day workshop on "Vermicomposting Biotechnology" Department of zoology in 27<sup>th</sup> December 2018 .It is compulsory to all students to participate in this activity.

  
Head of Department

**HEAD**  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRODADA PATIL  
MAHAVIDYALAYA, TASSGAON, DIST, SANGLI

**"One Day Workshop On Vermicomposting Biotechnology"**

Department of Zoology,  
Padmbhushan Dr. Vasantodada Mahavidyalaya, Tasgaon, Sangli.

**Programme Schedule**

**Day & Date : Thursday, 27<sup>th</sup> December 2018**

**Registration** : 10.00 ~ 11.00 am,

**Inaugural Function and Key Note Address** : 11.00 ~ 12.30 pm.

**CHIEF GUEST**

**Dr. S. S. Patil**

A. C. S. College, Palus

**PRESIDENT**

**Dr. R. R. Kumbhar**

Principal  
P.D.V.P. Mahavidyalaya, Tasgaon.

**First Session (12.30 – 1.30pm)**

**Prof.(Dr.) S. S. Patil**

Department of Zoology,  
Krishna Mahavidyalays, Rethre,  
Tal – Karad (Satara)

**Topic : Biotechnology based new Vermiwash model**



**LUNCH BREAK (1.30 – 2.30PM)**

Second Session (2.30 – 3.30pm)

**Prof.( Dr.) S. S. Patil**

Department of Zoology,  
Krishna Mahavidyalaya, Rethre,  
Tal – Karad (Satara)

**Topic : Biotechnology based new Vermicomposting Model**

Campus visit/Poster session: 3.30 – 4.30pm

**VALEDICTORY FUNCTION**

4.30-5.00pm

**Chief Guest: Prof. (Dr.) N. A. Kulkarni**

Department of Botany  
P. D. V. P. Mahavidyalaya, Tasgaon

**President: Dr. V. Y. Pawar**

Department of Statistics  
P. D. V. P. Mahavidyalaya, Tasgaon

**Contact Numbers:**

Dr. S. A. Khabade (HOD) – 9822596895

Dr. R. M. Ganeshwade – 9766924683

Dr. P. B. Tell - 9822866577

Our Country faces soil and water pollution due to agricultural inorganic fertilizers, Fungicide and pesticides. Indiscriminate use of these chemicals causes many effects on living organism. Keeping in view above fact scientist manufactured so any organic fertilizers, fungisides and pesticides which are harmful and non-polluted.

Keeping in view above fact one day workshop on “Vermicomposting Biotechnology” was organized by Department of Zoology, P.D.V.P Mahavidyalaya, Tasgaon.

One day Workshop on “Vermicomposting Biotechnology” was held on 27.12.2018. The 52 students of B.Sc. III Zoology and Botany subject were present in this workshop. The 12 students and staff from Balwant College, Vita were also present in this workshop. There are about 05 non teaching staff was present in the workshop. Thus there was 70 registrations for the workshop.

For this workshop Dr.R.R Kumbhar (Principal) of our college was a president Dr.S.S. Patil (Head of Zoology Department), A.C.S. College Palus was chief guest and Prof S. S. Patil Head of Zoology Department Krishna Mahavidyalaya Rethare Budruk was a resource person. He delivered two lectures namely-1. Biotechnology based new vermiwash model 2.Biotechnology Based new Vermicomposting model. During afternoon session “Poster Presentation Session was completed and 3 number are drawn.

During afternoon session Dr N. A. kulakarni Prof and Head of Botany Department P.D.V.P Mahavidyalaya Tasgaon. Dr. Suryawanshi V.D. Prof and Head, Chemistry Department P.D.V.P Mahavidyalaya Tasgaon, were worked heartly for the workshop completion by Dr Teli P.B., Department of Zoology of our college.

### **Outcome of the Workshop**

Due to This workshop new model of vermiwash and Vermicompost were known to the participants and students. These models were very fruitful for vermiwash and Vermicompost production and easily made by



anybody, it was also new to the participants. Making these models will be a new business which gives more production of vermiwash and Vermicompost.



One Day workshop- vermicomposting Biotechnology- Chief Guest Dr.S.S. Patil



One Day workshop- vermicomposting Biotechnology- Participants Teachers and Students.

27 Dec 2020

Registration For One Day Workshop  
on "Vermicomposting Biotechnology"

Sr No.	Name of the student	Name of the College	Contact No.	Signature
✓1)	Ms. Pagade Jyoti. Sh.	P.D.V.P. College, Tasgaon.	9689069538	Pagade
✓2)	Bodake Manal S.	P.D.V.P. college Tasgaon	8605951104	Bodake
✓3)	Patil Anjali S.	P.D.V.P. college Tasgaon	9890694047	A.S. Patil
✓4)	Patil Prajakta. K.	P.D.V.P. college Tasgaon	9970371067	Patil
✓5)	Manojkumar Asawari. B.	P.D.V.P. College Tasgaon	9146655742	Manojkumar
✓6)	Patil Prajakta Ankush	P.D.V.P. College Tasgaon	9834638752	Patil
✓7)	Patil Promila P.	P.D.V.P. college Tasgaon	8975561587	Patil
✓8)	Shendage Ashwini A.	P.D.V.P. college Tasgaon	7057186409	Shendage
✓9)	Shendage Hemlata D.	P.D.V.P. college Tasgaon	9595235362	Shendage
✓10)	Shinde Kajal. C.	P.D.V.P. college Tasgaon	7083181372	Shinde
✓11)	Chavan Omkar S.	P.D.V.P. College Tasgaon	8530100570	Chavan
✓12)	Shendage Sanjay V.	P.D.V.P. College Tasgaon	9552757809	Shendage
✓13)	Jadhav Utkarsh. N.	P.D.V.P. college Tasgaon	8007686059	Jadhav
✓14)	Chavan Vikas B.	P.D.V.P. College Tasgaon	7719041472	Chavan
✓15)	Mursal Inzamom. M.	P.D.V.P. college Tasgaon	8928249090	Mursal
✓16)	Sande Kajal D.	P.D.V.P. college Tasgaon	9970259177	Sande
✓17)	Salokhe Meera Deepak	P.D.V.P. college Tasgaon	9723100551	Salokhe
✓18)	Sagore Pooja Dilip.	P.D.V.P. college Tasgaon	8208226459	Sagore
✓19)	Salunke Pashma G.	P.D.V.P. college Tasgaon	7387887656	Salunke
✓20)	Patil Snehal Ankush	P.D.V.P. college Tasgaon	9156827756	Patil
✓21)	Wagh Sonali. T.	P.D.V.P. college Tasgaon	9975618712	Wagh
✓22)	Shendage Prajakta J.	P.D.V.P. college Tasgaon	9158237847	Shendage
✓23)	Patil Seema Sanjeeva	P.D.V.P. college Tasgaon	7218447292	Patil
✓24)	Mohikar Parnali Tashwant	P.D.V.P. college Tasgaon	7558622984	Mohikar
✓25)	Mohikar Ambuta Manohar	P.D.V.P. college Tasgaon	9881464599	Mohikar
✓26)	Mohite Shital Jaywant	P.D.V.P. college Tasgaon	9975809042	Mohite
✓27)	Bhat Usalka Rajaram	P.D.V.P. college Tasgaon	9623554386	Bhat
✓28)	Mane Ashokkumar B.	P.D.V.P. college Tasgaon	8308189519	Mane
✓29)	Dabe Amit B.	P.D.V.P. college Tasgaon	8605969666	Dabe
✓30)	Jadhav Swapnali S.	P.D.V.P. college Tasgaon	7558515235	Jadhav
✓31)	Hatikor Komal J.	P.D.V.P. college Tasgaon	7875482438	K.J. Hatikor
✓32)	Patil Nisha M.	P.D.V.P. college Tasgaon	8806638566	Patil
✓33)	Ghadage Arati R.	P.D.V.P. college Tasgaon	7218782058	Arati Ghadage



Sl. No.	Name of the student	Name of the college	Contact No.	Sign
35	Miss. Patil Yogita Rahul	Balwant college, Vita	9834063603	Yogita
36	Miss. Bhasale Kavita K.	B.C.V. College Vita	7083843447	Kavita
37	Miss-Desai Vaishnavi S.	B.C.V. College Vita	7721932930	Desai
38	Miss-Gaikwad Komal V.	B.C.V. College Vita	934418592	Komal
39	Jadhav Trupti V	B.C.V. Vita	7263827975	Jadhav
40	Kambale Nisha M	B.C.V. Vita	859289074	Nisha
41	Mandale Komal K	B.C.V. Vita	9834353045	Komal
42	Mandle Laxmi U	B.C.V. - 11 -	7875224817	L.U. Mandle
43	Pawar Nayan D	B.C.V. - 11 -	7448129675	Nayan
44	Jadhav Swapnali G	B.C.V. - 11 -	7039574508	Swapnali
45	Salunkhe Monika S	B.C.V. - 11 -	917525094	Salunkhe
46	Shikalgare Tansif	B.C.V. - 11 -	8007200872	Tansif
47	Sonali Patil	<del>B.C.V.</del> P.D.V.P. college	8990201826	Sonali
48	Patil Rohini P.	P.D.V.P. college	9314678976	Rohini
49	Patil Dhanashree P.	P.D.V.P. college	7219051968	Dhanashree
50	Jadhav Komal G.	P.D.V.P. college	8880838008	Komal
51	Patil Yashgini C.	P.D.V.P. college	8530104542	Yashgini
52	Patil Rahul J.	B.C.V. Vita	9421309704	Rahul
53	Mulla Riyaz Akram	P.D.V.P. College	9766209626	Riyaz
54	Patil Nehal Vilas	P.D.V.P. college	7387562511	Nehal
55	Mali Praykta Ashok	P.D.V.P. college,	9889540560	Praykta
56	Pardeshi Rukmesh Anandha	P.D.V.P. college Targan	8009305906	Rukmesh
57	Salunkhe Ankita Satish	P.D.V.P. college Targan	8956122733	Ankita
58	Pawar snehal madhukar	P.D.V.P. college Targan	7068330972	Snehal
59	Pirjade Mahin Shafik	P.D.V.P. college Targan	7972763313	Mahin
60	Yadav. Aishwaryaya Santosh	P.D.V.P. college Targan	7772912561	Aishwaryaya
61	Gulig Snehal Hanmant	P.D.V.P. college Targan	9156817616	Snehal
62	Patil Shweta Popat	P.D.V.P. college Targan	8684029177	Shweta
63	Patil. sneha. vilas	P.D.V.P. college, Targan	7420962096	Sneha
64	Deshmukh. Purva Surendra	P.D.V.P. college Targan	9325134055	Purva
65	Mare Anvita madhukar	P.D.V.P. college Targan	9075839368	Anvita
66	Kamade Surendra satgaur	P.D.V.P. College Targan	7758013825	Surendra
67	Patil. Swapnali. Sampat Rao	P.D.V.P. College Targan	9309779601	Swapnali
68	Kumbhar Kausar Popat	P.D.V.P. college Targan	8669774290	Kausar

male - 07  
female - 06

Staff.

Sr. No.	Name of the Person Staff.	Name of the Village Town / Address	Contact No.	Sign
-2)	Dr. Khabde S.A.	P.D.V.P. college, Talgaon	9822596295	Joshi
✓3)	Dr. Ganeshwade R.M.	"	9766924683	
-3)	Dr. Teli P.B.	"	9822866577	Teli
-4)	Dr. Kulkarni J.J.	"	9881929365	Kulkarni
5)	Miss. Jadhav S.S.	"	9970005021	Jadhav
✓6)	" Garali C.S.	"	7020370520	Garali
✓7)	" Bhandare P.B.	"	8624888288	Bhandare
8)	" Kumbhar R.B.	"	8999364277	Kumbhar
9	Mr. Jadhav V.M.	"	8423091606	Jadhav
✓10	Dr. S.K. Khadke	"	9890044600	Khadke
✓11	Prof. (Dr.) N.A. Kulkarni	"	9881429061	Kulkarni
✓12	Miss. Mane J.S.	"	9820032581	Mane
✓13	Dr. Andoji Y.S.	"	8275377137	Andoji



male - 05

Non-Teaching Staff

No.	Name of Non-Teaching	Contact No.	Sign.
11	Shri. Kadam Chandrakant D.	9975250696	Kadam
23	Shri. Sapkal Shashikant A	9763877701	Sapkal
33	Shri. Koli Vasant P.	9011404414	Koli
47	Shri. Vijay Ramchandra	8662462486	Vijay
57	Shri. Rajendra	8630349949	Rajendra

Total = 70







*“Dissemination of Education through Knowledge, Science and Culture”*

*- Shikshanmaharshi Dr. Bapuji Salunkhe*

**Shri Swami Vivekanand Shikshan Sanstha Kolhapur's**

**PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST- SANGLI  
416 312 (Maharashtra) Phone No: (02346 - 250665)**

*(Affiliated to Shivaji University, Kolhapur)*

**Report On**

**“HANDS ON TRAINING ON APICULTURE”**

**Organized By**

**DEPARTMENT OF ZOOLOGY**

**&**

**Internal Quality Assurance Cell**



**27<sup>th</sup>  
October  
2021**



**NOTICE**

"Dissemination of Education for Knowledge, Science & Culture"

- Shikshanmaharshi Dr. Bapuji Saiunkhe

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's



Padmabhushan Dr. Vasantodada Patil Mahavidyalaya,

Tasgaon, Dist.-Sangli (MS).

(NAAC Reaccredited B++)



## DEPARTMENT OF ZOOLOGY & IQAC Organizes



### "Hands On Training On Apiculture"



Name of Trainer: Shri Dayawan Patil

(Madhu Amrut Honey Bee Conservation & Research, Kaneri, Kolhapur)

Date : 27/10/2021

Time : 11.30

**Dr. P. B. Teli**  
Coordinator

**Dr. S. A. Khabade**  
Prof. & Head  
Department of Zoology

**Dr. Milind S. Hujare**  
Principal

Event:	"Hands On Training On Apiculture"
Organizing Department	Department of Zoology & IQAC
Date	27 <sup>th</sup> October 2021
Venue	College Auditorium
Total Participants	99 (Teaching Staff & Students)
Male	56
Female	43





**All Dignitaries & Participants are Welcomed By Dr. Shahaji Patil (Staff Secretary)**



**Apiculture Trainer Mr. Dayawan Patil Introduced By Dr. P. B. Teli**



**Bee Hive Worshipped By Prn. Milind Hujare & Organizing Committee**



**Mr. Dayawan Patil Falcitated By Prin. Dr. Milind Hujare**



**Hon. Prin. (Dr.) Milind Hujare Falcitated By Prof. S. A. Khabade**



**All Participants (Faculty & Students)**



**Mr. Dayawan Patil Delivered Speech on Apiculture & Hands on Training**





**Presidential Speech On Apiculture By Hon. Principal (Dr.) Milind Hujare**





**Indoor Demonstration to Faculties & Students By Dayawan Patil**



**Votes of Thanks Expressed By Prof. (Dr.) S. A. Khabade**





**Mr. Dayawan Patil Giving Information On Bee Hive**







**Hands On Training On Apiculture In Field By Dayawan Patil  
With Prin. (Dr.) Milind Hujare**







**Honey Comb With Prin. (Dr.) Milind Hujare & Dayawan Patil**



**Honey Comb With Dr. P. B. Teli, Prin. (Dr.) Milind Hujare, Vice Prin. Dr. S. A. Khade, Anna Bagal & Dr. K. N. Patil**

Department of Zoology, P. D. V. P. Mahavidyalaya, Tasgaon and IQAC organised “**Hands On Training On Apiculture**”. Dr. Shahaji Patil welcomed all the Dignitaries, teaching Staff, Farmers & Students. The Hands On Training Trainer Mr. Dayawan Patil (**Madhu-Amrut Honey Bee Conservation & Research Centre Kaneri, Tal Karveer, Dist Kolhapur**) introduced by **Training Coordinator Dr. P. B. Teli**. Mr. Dayawan Patil felicitated by Prin. (Dr.) Milind S. Hujare, Hon. Prin. (Dr.) Milind Hujare felicitated By Prof. (Dr.) **S. A. Khabade** (Head, Department of Zoology).

On the occasion of Hands on training on apiculture Mr. Dayawan Patil said that Honey Bees are God Gift to Nature & Farmers. Honey bees are most important insects in the nature, if they reduce their number, no life on earth surface because they are involved in the transfer of pollen grains from one plant to other, it helps for formation fruits & seed or grains. They are required for human being daily. He also explained the economic importance of Honey bees, their types, Uses honey, wax etc. as well as structure of Bee



Hive apparatus. Each Bee Hive consists of 15000 to 25000 bees (bees includes Female Queen, Male Drones, worker bees) it contains brood chamber, honey chamber etc. In India, Apiculture Industries **Apis cerana indica** bee is used for production of Honey & wax. Apis cerana is less aggressive and produce large amount of honey, it also acclimatise in natural condition of India. In India total 11 to 15000 tons honey will be obtained by Apiculture Industry per year. But requirement is more than 15000 ton of honey. Apiculture is allied business, it gives more money to farmers along with agriculture.

On **Presidential** speech, **Prin. Milind Hujare** explained the detail information of pollination and their benefits. He also give assurance to farmers we are preparing framework of Apiculture, how to train to farmers and production honey.

Lastly vote of thanks expressed by Dr. S. A. Khabade (Professor & Head, Department of Zoology), Vice Prin. Dr. S. K. Khade (Science Wing), Vice Prin. J. A. Yadav, Prof. (Dr.) N. A. Kulkarni (Head, Botany Department), NAAC Coordinator Dr. Alka Inamdar, Staff Secretary Dr. Shahaji Patil, Dr. P. S. Bhandare, Miss. Punam Patil, Mr. V. M. Jadhav, Miss. S. P. Kusarkar, Miss. Chaitali Gavali & B. Sc Students are present. The programme was end on 2.00 pm.

### List of Participants

PADMABHUSAIN DR VASANTRODADA PATIL MAHAVIDYALAYA, TANGAON DIST, SANGLI  
DEPARTMENT OF ZOOLOGY  
"HANDS ON TRAINING ON APICULTURE"

Date : 27/10/2021 Time: 11.30AM Onward

Sl. No.	Name of the Participants	Gender	Occupation	Signature
1	Dr. Pradiksha Suresh Bhandare	Female	Asst. Prof.	[Signature]
2	Pati Sujata Shahaji	Female	C.H.B.	[Signature]
3	More Ruthuja Rajaram	Female	C.H.B.	[Signature]
4	Dr. Shahaji Jagannath Patil	M	Asst. Prof.	[Signature]
5	Pradiksha Suresh Bhandare	Female	Asst. prof. in Bot.	[Signature]
6	Dattatraya Yashwantrao Sakhare	—	Asst. Prof. in Chem.	[Signature]
7	Srinjay Ravindra Patil	—	Geography	[Signature]
8	Dr. Vinod Kumar Bhandare	—	Sociology	[Signature]
9	Dr. Sanjivkumar Arjun Gawade	—	Asst. Prof. in Chemistry	[Signature]
10	Dr. Ajay Nishantkumar Ambhase	Male	Asst. Prof. in Chemistry	[Signature]
11	Mr. Sunil Sunil Gawade	Male	Asst. Geography	[Signature]
12	Mr. Yashwantrao Bhandare	Male	Economics	[Signature]
13	Mr. Gajendra Kishor Gawade	Male	Mathematics	[Signature]
14	Dr. Kunal P. Marayam Patil	Male	Asst. Prof. in Economics	[Signature]
15	Dr. Arjun Shivaji Wagh	Male	Asst. Prof. in Geography	[Signature]
16	Dr. S. P. Kusarkar	Female	Asst. Prof. in Chemistry	[Signature]
17	Dr. P. S. Bhandare	Male	Asst. Prof. in Chemistry	[Signature]
18	Dr. Tatoba Kallappa Badane	Male	Asst. Prof.	[Signature]
19	Miss. Anuradha Shivaji Nimbalkar	Female	Asst. Prof.	[Signature]

Sr. No.	Name of the Participants	Gender	Occupation	Signature
20	Fatih S.D	Male	Jr college teacher	[Signature]
21	Patil A.R	male	Teaching	[Signature]
22	Mr. Sanjay V. Mali	Male	Assoc. Teacher	[Signature]
23	Mr. Valankar F.B	male	Jr college teacher	[Signature]
24	Mr. P.A. Khade	male	Asst. Professor	[Signature]
25	Mr. Kulkar R.G	male	Jr. College Teacher	[Signature]
26	Ms. Ramkharat S.B.	male	Laboratory Assistant	[Signature]
27	Shri. Kotekar. S.D	male	Lab. Assistant	[Signature]
28	Shri. Sathe A. P.	male	Jr. college Teacher	[Signature]
29	Shri. Anurath B. Warble	male	Jr college teacher	[Signature]
30	Shri. Dhanraj Nivrutti Yadav. Patil	male	Jr. College Teacher	[Signature]
31	Shri. Rajaram B. Manekar	male	Teacher	[Signature]
32	Dr. Rajesh S. Kumbhar	Male	Asst. Professor	[Signature]
33	Mr. Anil M. Mali	Male	Asst. Professor	[Signature]
34	Mr. Gajanan S. Pawar	male	—	[Signature]
35	Dr. Bandu Jayshing Kadum	Male	Asst. Prof.	[Signature]
36	Mr. Fahad Ashoknath Rangoo	male	Asst. prof	[Signature]
37	Mr. Pankaj Sunil Manikoo	male	Asst. prof	[Signature]
38	Prof. Kavita Hindraj Kambale	female	Asst. prof	[Signature]
39	Dr. A.S. Kumbhar	Male	Asst. prof	[Signature]
40	Miss. A.S. Yadav	female	Asst. Prof.	[Signature]
41	Mr. Patil Deepak Vitthal	male	Jr. colle. teacher	[Signature]
42	Mr. Anvesh Satish Pulse	male	student	[Signature]
43	Miss. Ankita Yadav	Female	Asst. Prof	[Signature]

Sr. No.	Name of the Participants	Gender	Occupation	Signature
44	J.V. Gurav	Female	P.D. V.P. college	[Signature]
45	S.V. Chavan	Female	P.D. V.P. college	[Signature]
46	V.V. Ghatge	Female	P.D. V.P. college	[Signature]
47	A.A. Patil	Female	P.D. V.P. college	[Signature]
48	P.S. Patil	Female	P.D. V.P. college	[Signature]
49	Sanika Chavan	Female	P.D. V.P. college	[Signature]
50	P.P. Ghatge	Female	P.D. V.P. college	[Signature]
51	A.R. Attar	Female	P.D. V.P. college	[Signature]
52	Miss. Chaitali Sanjay Gawali	Female	P.D. V.P. College	[Signature]
53	Dr. P.B. Tale	Male	Faculty	[Signature]
54	Dr. N.A. Kulkarni (Prof)	Male	Professor	[Signature]
55	Prof. Khabane S.A.	Male	Professor	[Signature]
56	Miss. Kusarkar S.P.	Female	P.D. V.P. college	[Signature]
57	Miss. Nehal P.P.	Female	P.D. V.P. college	[Signature]
58	CHAVAN ROHAN RAJENDRA	male	P.D. V.P. college	[Signature]
59	Shendage Ajit	male	—	[Signature]
60	Sudat Manohar Shakti	—	—	[Signature]
61	Dhale Manali Jagan	female	P.D. V.P. college	[Signature]
62	Patil Poojam Rajaram	male female	P.D. V.P. college	[Signature]
63	Kumbale Anupama Avinash	female	P.D. V.P. college	[Signature]
64	Murali Tasmira Majid	Female	P.D. V.P. College	[Signature]
65	Pawar Rutuja Suresh	Female	P.D. V.P. college	[Signature]
66	Shetale Rubina Suresh	Female	P.D. V.P. college	[Signature]
67	Umari Pooja Pradhan	female	P.D. V.P. college	[Signature]



Sr. No.	Name of the Participants	Gender	Occupation	Signature
68	Abhaya Pratiksha Adhikar	Female	P.D.V.P. College	Abhaya
69	Kavathekar Aaditi Sudhakor	Female	P.D.V.P. college	Aaditi
70	Pawar Pooja Kishor	Female	P.D.V.P. college	<del>Pawar</del>
71	Jadhav Rina Rajendra	Female	P.D.V.P. college	Rajadhav
72	Jadhav Sima Anandras	Female	P.D.V.P. college	Simadhav
73	Chavan Kajal Sahadev	Female	P.D.V.P. college	Chavan
74	Jadhav Supriya Mahesh	Female	P.D.V.P. college	Supriya
75	Khade S.K.	Male	P.D.V.P. Tasgaon	Khade
76	Mali Shanta Sunil	Female	P.D.V.P. Tasgaon	Mali
77	Patil Divya Dattaji	Female	P.D.V.P. Tasgaon	Patil
78	Patil Priyanka Annasaheb	Female	P.D.V.P. Tasgaon	P. B. Patil
79	Patil Tejaswini Vinayak	Female	P.D.V.P. Tasgaon	Patil
80	Guyale Rupali Mahadev	Female	P.D.V.P. Tasgaon	Rupali
81	Patil Sanika Sudam	Female	P.D.V.P. Tasgaon	Patil
82	Bhagyashri Anil Patil	Female	P.D.V.P. Tasgaon	Bhagyashri
83	Joshi Shreya Ganesh	Female	P.D.V.P. Tasgaon	S.G. Joshi
84	Patil Rutuja Dadasa	Female	P.D.V.P. Tasgaon	R.D. Patil
85	Patil Rajani Ram	Female	P.D.V.P. Tasgaon	Rajani
86	Patil Sakshi Umesh	Female	P.D.V.P. College Tasgaon	Sakshi
87	Chavan Rohit Sambhaji	Male	P.D.V.P. College Tasgaon	Rohit
88	Chavan Shubham Rajendra	Male	P.D.V.P. College	Shubham
89	Chavan Bhatmesh Dhandiram	Male	P.D.V.P. College	Bhatmesh
90	Mani Tushar Bhaat	Male	P.D.V.P. College	Tushar
91	Jombade Rohan Sonjay	Male	P.D.V.P. College	Rohank

Sr. No.	Name of the Participants	Gender	Occupation	Signature
92	Kore Ajit Navinrao	Male	P.D.V.P. Tasgaon	Kore
93	Sarvesh Palase	Male	P.D.V.P. Tasgaon	Palase
94	Pratmesh Dhandiram Chavan	Male	P.D.V.P. Tasgaon	P.D. Chavan
95	Suraj Nandedu Chavan	Male	P.D.V.P. Tasgaon	Suraj
96	Ruturaj Dattatray Mohite	Male	P.D.V.P. Tasgaon	Ruturaj
97	Vishal Vikas Mohite	Male	P.D.V.P. Tasgaon	Vishal
98	Sagar Shivaji Mohite	Male	P.D.V.P. Tasgaon	Sagar
99	Vikas Manik Jadhav	Male	P.D.V.P. Tasgaon	Vikas
100				

# तरुण भारत मधमाशी निसर्गाला समृद्ध करते : पाटील

वसंतरावदादा पाटील महाविद्यालयात मधुमक्षिका पालन विषयावर कार्यशाळा

प्रतिनिधी

वाचनात

मधमाशी नष्ट झाली तर सृष्टी संपुष्टात येईल, मधमाशी वाचणारे ही काळाची गरज आहे. मधमाशी निसर्गाला समृद्ध करते, असे प्रतिपादन मधू अमृत हनी बी कॉन्ग्रेशन अँड रिसर्च सेंटरचे दयावान पाटील यांनी केले.

वेधील पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय वीजे प्राणीशास्त्र व आयक्यूपएची विभागाच्या वतीने आयोजित केलेल्या मधुमक्षिका पालन विषयावरील एक दिवसीय कार्यशाळेत पाटील बोलत होते. कार्यक्रमाच्या अख्यक्षेत्रांनी महाविद्यालयाचे प्राचार्य डॉ. मिलिंद हुजरे होते.

पाटील पुढे म्हणाले, मधमाशीच्या पालनातून शेतीचे उत्पन्न वाढवणे शक्य आहे. मधमाशी मखरंद गोळा करताना पराधीमपन पडू शकते. आणखी आणखीला निरामे वाचविण्याची शक्यता तय्यार करायची लागेल. शेतकऱ्यांमध्ये



तासगाव : वेधील पी. बी. वी. महाविद्यालयात मधुमक्षिका पालन कार्यशाळेत असलेली प्रास्ताविक करताना दयावान पाटील, प्राचार्य डॉ. मिलिंद हुजरे व इतर शिक्षक.

मधमाशा पालनासंदर्भात जागृता निर्माण होऊ लागली आहे.

जंगले वगैरे प्राण्यांमुळे आम्हा मधमाशा मखरंदाकडे सरकू लागल्या आहेत. मधमाशी तिथ्या निराशापासून जवळ जवळ तीन किलोमीटर पर्यंत प्रवास करते तिला कुडीतली असे म्हटले जाते.

मधमाशांचे फायदे लक्षात घेऊन सर्वांनी मधमाशीला वाचविण्याच्या चळवळीत सहभागी

वावे, असे आवाहन त्यांनी केले. ताकदीपटीमध्ये मधमाशांचे पालन कसे करावे हे प्रास्ताविक सादर केले.

अख्यक्षेत्रांना वगैरे डॉ. मिलिंद हुजरे यांनी मधमाशा पराधीमपनाचे काय कसे करतात हे समजून घ्यायला, तासगाव तालुक्यातील शेतकऱ्यांशी आणखी चळवळ घेऊन आणखी असल्याचे सांगितले. कार्यक्रमाचे प्रास्ताविक

समन्वयक डॉ. पी. बी. तेली यांनी केले तर आभार प्राणीशास्त्र विभागप्रमुख प्रा. एस. ए. खाबडे यांनी मानले. सूत्रसंचालन प्रा. अण्णासाहेब बागल यांनी केले.

कार्यक्रमाला नैक समन्वयक डॉ. अलका इनामदार, उपप्राचार्य डॉ. एस. के. खाडे, प्रा. जे. ए. यादव सर्व विभागाचे विभाग प्रमुख उपस्थित होते.

## मधमाशी निसर्गाला समृद्ध करणारे माध्यम

दयावान पाटील : वसंतरावदादा महाविद्यालयामध्ये कार्यशाळा

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हे.  
ची  
होत  
केले  
मंतून

लोकमत न्यूज नेटवर्क

तासगाव : मधमाशी नष्ट झाली तर सृष्टी संपुष्टात येईल मधमाशी वाचविणे ही काळाची गरज आहे. मधमाशी निसर्गाला समृद्ध करते, असे प्रतिपादन मधू अमृत हनी बी कॉन्ग्रेशन अँड रिसर्च सेंटरचे दयावान पाटील यांनी केले.

तासगाव येथील पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालयात

प्राणीशास्त्र व आयक्यूपएसी विभागाच्या वतीने आयोजित केलेल्या मधुमक्षिका पालन या विषयावरील एकदिवसीय कार्यशाळेत ते बोलत होते. महाविद्यालयाचे प्राचार्य डॉ. मिलिंद हुजरे अख्यक्षेत्रांनी होते.

दयावान पाटील म्हणाले की, मधमाशीच्या पालनातून शेतीचे उत्पन्न वाढविणे शक्य आहे. मधमाशांचे फायदे लक्षात घेऊन सर्वांनी

मधमाशीला वाचविण्याच्या चळवळीत सहभागी व्हावे.

समन्वयक डॉ. पी. बी. तेली यांनी प्रास्ताविक केले. प्रा. आण्णासाहेब बागल यांनी सूत्रसंचालन केले. प्राणीशास्त्र विभागप्रमुख प्रा. एस. ए. खाबडे यांनी आभार मानले. यावेळी डॉ. अलका इनामदार, उपप्राचार्य डॉ. एस. के. खाडे, प्रा. जे. ए. यादव, आदी उपस्थित होते.



# मधमाशी निसर्गाला समृद्ध करते : दयावान पाटील

वसंतरावदादा पाटील महाविद्यालयात मधुमक्षिका पालन या विषयावर एक दिवसीय कार्यशाळा

प्रतिध्वनी : दृशसेवा

तासगाव : मधमाशी नष्ट झाली तर सुष्टी संपुष्टात येईल मधमाशी वाचवणे ही काळाची गरज आहे. मधमाशी निसर्गाला समृद्ध करते असे उदार मधू अमृत हनी बी कॉन्झर्वेशन अँड रिसर्च सेंटरचे श्री.दयावान पाटील यांनी पद्मभूषण डॉ.वसंतरावदादा पाटील महाविद्यालय तासगाव येथे प्राणीशास्त्र व आयक्युएसी विभागाच्या वतीने आयोजित केलेल्या मधुमक्षिका पालन या विषयावरील एक दिवसीय कार्यशाळेत बोलताना काढले. कार्यक्रमाच्या अध्यक्षस्थानी महाविद्यालयाचे प्राचार्य डॉ. मिलिंद हुजरे होते.

पाटील पुढे म्हणाले मधमाशीच्या पालनातून शेतीचे उत्पन्न वाढवणे शक्य



आहे.मधमाशी मकरंद गोळा करताना परागीभवन घडवून आणते.तासगावला निसर्ग वाचविण्याची चळवळ तयार करावी लागेल. शेतकऱ्यांमध्ये मधमाशा पालना संदर्भात जागृकता निर्माण होऊ लागली आहे. जंगले कमी झाल्यामुळे आग्या मधमाशा शहराकडे सरकू लागल्या आहेत.मधमाशी तिथ्या निवासापासून जवळ जवळ दोन

किलोमीटर पर्यंत प्रवास करते तिला 'कुशीलक्ष्मी' असे म्हटले जाते.मधमाशांचे फायदे लक्षात घेऊन सर्वांनी मधमाशींना वाचविण्याच्या चळवळीत सहभागी व्हावे असे आवाहन रवानी केले. लाकडीपेटी मध्ये मधमाशांचे पालन करणे करायचे हे प्रात्यक्षिकासह दाखविले.

अध्यक्षस्थानावरून बोलताना प्राचार्य डॉ.मिलिंद

हुजरे यांनी मधमाशा परागीभवनाचे काम कसे करतात हे समजून सांगितले.तासगाव तालुक्यातील शेतकऱ्यांपर्यंत आणणे ही चळवळ घेऊन जाणार असल्याचे सांगितले. कार्यक्रमाचे प्रास्ताविक समन्वयक डॉ.पी.बी.तेली यांनी केले तर आभार प्राणीशास्त्र

विभाग प्रमुख प्रा. एस.ए.खावडे यांनी मानले. सूत्रसंचालन प्रा. आण्णासाहेब बागल यांनी केले.कार्यक्रमाला नैक समन्वयक डॉ.अलका इनामदार, उपप्राचार्य डॉ. एस.के.खाडे, व प्रा.जे.ए. पादव ,सर्व विभागाचे विभाग प्रमुख , प्राध्यापक , प्रशासकीय सेवक व विद्यार्थी मोठ्या संख्येने उपस्थित होते.

PRATIDWANI NEWS PAPER

# मधमाशी निसर्गाला समृद्ध करते : दयावान पाटील

जनप्रवास | प्रतिनिधी

इस्तामपूर : मधमाशी नष्ट झाली तर सुष्टी संपुष्टात येईल मधमाशी वाचवणे ही काळाची गरज आहे. मधमाशी निसर्गाला समृद्ध करते असे उदार मधू अमृत हनी बी कॉन्झर्वेशन अँड रिसर्च सेंटरचे श्री.दयावान पाटील यांनी पद्मभूषण डॉ.वसंतरावदादा पाटील महाविद्यालय तासगाव येथे प्राणीशास्त्र व आयक्युएसी विभागाच्या वतीने आयोजित केलेल्या मधुमक्षिका पालन या विषयावरील एक दिवसीय कार्यशाळेत बोलताना काढले.

कार्यक्रमाच्या अध्यक्षस्थानी महाविद्यालयाचे प्राचार्य डॉ. मिलिंद हुजरे होते. पाटील पुढे म्हणाले मधमाशीच्या पालनातून शेतीचे उत्पन्न वाढवणे शक्य आहे.मधमाशी मकरंद गोळा करताना परागीभवन घडवून आणते असल्याला निसर्ग वाचविण्याची चळवळ तयार करावी लागेल. शेतकऱ्यांमध्ये



तासगावचे डॉ. वसंतरावदादा पाटील महाविद्यालयात आयोजित मधुमक्षिका पालन विषयावरील कार्यशाळेत संदर्भित करताना दयावान पाटील.

मधमाशा पालना संदर्भात जागृकता निर्माण होऊ लागली आहे. जंगले कमी झाल्यामुळे आग्या मधमाशा शहराकडे सरकू लागल्या आहेत.मधमाशी तिथ्या निवासापासून जवळ जवळ दोन किलोमीटर पर्यंत प्रवास करते तिला 'कुशीलक्ष्मी' असे म्हटले जाते.मधमाशांचे फायदे लक्षात घेऊन सर्वांनी

मधमाशीला वाचविण्याच्या चळवळीत सहभागी व्हावे असे आवाहन त्यांनी केले. लाकडीपेटी मध्ये मधमाशांचे पालन कसे करायचे हे प्रात्यक्षिकासह दाखविले.

अध्यक्षस्थानावरून बोलताना प्राचार्य डॉ. मिलिंद हुजरे यांनी मधमाशा परागीभवनाचे काम कसे करतात हे समजून सांगितले.तासगाव तालुक्यातील शेतकऱ्यांपर्यंत आणणे ही चळवळ घेऊन जाणार असल्याचे सांगितले. कार्यक्रमाचे प्रास्ताविक समन्वयक डॉ.पी.बी.तेली यांनी केले तर आभार प्राणीशास्त्र विभाग प्रमुख प्रा.

एस.ए.खावडे यांनी मानले. सूत्रसंचालन प्रा. आण्णासाहेब बागल यांनी केले.कार्यक्रमाला नैक समन्वयक डॉ.अलका इनामदार,उपप्राचार्य डॉ. एस.के.खाडे, व प्रा.जे.ए. पादव ,सर्व विभागाचे विभाग प्रमुख , प्राध्यापक , प्रशासकीय सेवक व विद्यार्थी मोठ्या संख्येने उपस्थित होते.



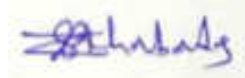
**Principal**

**Dr. Milind S. Hujare**

**P. D. V. P. Mahavidyalaya, Tasgaon**



**Dr. P. B. Teli**  
**Training Coordinator**



**Dr. S. A. Khabade**  
**Professor & Head**  
**Department of Zoology**



“Dissemination of Education for Knowledge, Science, and Culture”  
-Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha,  
Kolhapur  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon

**DEPARTMENT OF  
ZOOLOGY**

**CERTIFICATE COURSE ON  
“SERICULTURE”**

**2020-2021**

"Dissemination of Education through Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe  
Shri Swami Vivekanand Shikshan Sanstha's, Kolhapur


Padmbhushan Dr. Vasantodada Patil Mahavidyala, Tasgaon,  
**Department of Zoology**

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## Notice

15/02/2021

All staff members of zoology here by informed that the committee of B.O.S. will be decided in this meeting so that the presence of all staff should be essential. The meeting will be started on 16/2/2021



Head of Department  
**HEAD**

DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI



"Dissemination of Education through Knowledge, Science and Culture"

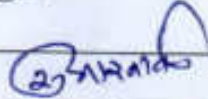





-Shikshanmaharshi Dr. Bapuji Salunkhe  
Shri Swami Vivekanand Shikshan Sanstha's, Kolhapur

Padmbhushan Dr. Vasanttraodada Patil Mahavidyala, Tasgaon,  
Department of Zoology

MEETING FOR SYLLABUS SETTING COMMITTEE  
(B.O.S.)

16/02/2021

The meeting of syllabus setting committee (B.O.S.) will be organized for the syllabus formation of "SERICULTURE" certificate course on 17/2/2021. The following members of the committee have to present for the syllabus setting.

Sr. No.	Name of Faculty	Designation	Sign.
1	Dr. Khabade S.A.	Chairman	
2	Dr. Teli P.B.	Member	
3	Dr. Bhandare P.S.	Member	
4	Miss Patil P.P.	Member	
5	Miss Gavali C.S.	Member	
6	Miss Kusarkar S.P.	Member	

Yours Faithfully



Course coordinator

HEAD

DEPARTMENT OF ZOOLOGY,  
PADMBHUSHAN DR. VASANTRAO DADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI

"Dissemination of Education through Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe

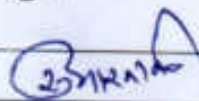





Shri Swami Vivekanand Shikshan Sanstha's, Kolhapur

Padmabhushan Dr. Vasanttraodada Patil Mahavidyala, Tasgaon,

Department of Zoology

### MINUETS OF MEETING

In the meeting of B.O.S. syllabus setting committee for " SERICULTURE" certificate course have decided and conformed the syllabus for this certificate course.

Sr. No.	Name of Faculty	Designation	Sign.
1	Dr. Khabade S.A.	Chairman	
2	Dr. Teli P.B.	Member	
3	Dr. Bhandare P.S.	Member	
4	Miss Patil P.P.	Member	
5	Miss Gavali C.S.	Member	
6	Miss Kusarkar S.P.	Member	

  
Head of Department

HEAD  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAO DADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI



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Shri Swami Vivekanand Shikshan Sanstha's, Kolhapur

**Padmbhushan Dr. Vasantodada Patil Mahavidyala, Tasgaon,  
Department of Zoology**

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## Notice

All the students of B.Sc. Part III are hereby informed that the certificate course in "SERICULTURE" is started from **17/02/2021** up to **22/03/2021**. The presence of this course is compulsory so attain the same.



**Head of Department**

**HEAD**

**DEPARTMENT OF ZOOLOGY,  
PADMBHUSHAN DR. VASANTODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI**

Type of course unit : Compulsary  
Duration of Course : six week  
17 February 2021 to 22 March 2021  
Fees of the course :  
Delivery model : Face to face  
Language of Instruction : English / Marathi  
Course Co-ordinator : Prof. (Dr.) Khabade S. A.  
Course Co-coordinator : Dr. Teli P.B.  
Intake capacity : 25  
Who will apply : 10+2, B.Sc., B.Com., B.A., M.Sc., M.Com., M.A.,  
Computer Science.  
Hourse of work : 33hrs.  
Total hourse : Theory- 24, Practical- 09



Details of the course:

- Name of the course : Certificate course in "Sericulture"
- Level : Certificate
- Stream : Science and any stream
- Eligibility criteria : 10+2, B.Sc., B.Com., B.A., M.Sc., M.Com., M.A.,  
Computer Science.
- Duration of the course : 1.5 Months i.e 6weeks i.e 45 days
- Fees of the course : Free
- Delivery model : Face to face
- Language of Instruction : English / Marathi
- Selection ?admission criteria : First come first serve.
- Lecture/ Practical Time : 5.00 to 6.00 PM.

**Available infrastructure:** Well equipped laboratory, small and large Scale Vermiculture units.

**Teaching staff** : Well qualified, experienced Guest Lecturers and Eminent professors will be invited

**Non teaching staff** : 01 Laboratory Assistant and 02 Laboratory Attendants

### **Examination structure & schedule:**

At the end of course the examination will be conducted. Its notice & time table will be displayed for communication to the students at least before 10 days of the date of examination.

1. Course VBT-01 Theory paper (objective/short answer type/Long answer type) = 50marks, Two hours duration.
2. Course VBT-02 Practical paper =50 marks, two hours duration

Marking scheme & Award of grades: Average of the marks obtained in each paper will be calculated as:  $50+50=100/2 = 50$ ;

- i) 8-10 marks = 1point, C' grade – pass;
- ii) 10-20 marks = 2 points, B' grade;
- iii) 20-30 marks = 3points, B+ grade;
- iv) 30-40 marks =4points, A' grade;
- v) 40-50 marks =5points, A+ grade

Award of Certificate carrying grades: after successful completion of course colorful certificate indicating grade will be awarded to the candidate.

**Reservation:** NA



## Course Content: Syllabus/Program SCHEME

Vermicomposting Biotechnology as one of the Certificate Course at Undergraduate, graduate and Post graduate students level

<b>Credit to be earned</b>	<b>04 credit</b>
Theory paper	03 credit
Practical course /paper	01 credit

### Proposed distribution of the course structure

Sr.No.	Code	Title of the paper Vermicomposting Biotechnology	Credit pattern in L:T:P	Credit value
1	VBTT-01	VBT Theory Related	3:0:0	03
2	VBTP-02	VBT Practical Related	0:0:1	01

Open selective course for any students enrolled in the College from different Disciplines

**PADMBHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,  
TASGAON  
DEPARTMENT OF ZOOLOGY**

**CERTIFICATE COURSE IN SERICULTURE**

**Syllabus of Certificate Course in Sericulture**

**Paper-I: INTRODUCTION TO SERICULTURE**

**Unit- I:History and scope of Sericulture. (10)**

Mulberry and non-mulberry sericulture and its Life Cycle.

Geographical distribution of Distribution.scope of sericulture in India.

**Unit- II: soil management and cultivation of mulberry (10)**

Agro climatic zones and agro climatic conditions for mulberry cultivation, Site suitability for mulberry garden establishment, Soil Management.

**Mulberry crop production-** Planning for establishment of mulberry garden, Concept and establishment of mulberry garden for chawki& late age worms.

**Paper-II: SILKWORM REARING & ITS ECONOMICS**

**Unit I: Pre-requisites for rearing (05)**

Selection of silkworm breeds for rearing, Disinfecting silkworm rearing house and appliances, silkworm rearing house, characteristics of rearing house.

**Unit II: Egg handling, Incubation,Chawkiand Late Age Rearing (15)**



Pre-incubation care of silkworm eggs, incubation, black boxing, hatching, brushing of larvae, chawki rearing, Characteristics of late age silkworms, environmental conditions for late age silkworm rearing, leaf harvest, transportation and preservation.

<b>Sr. No</b>	<b>Code</b>	<b>Paper Title</b>	<b>Theory Hours</b>	<b>Practical Hours</b>	<b>External Marks</b>	<b>Internal Marks</b>	<b>Total</b>
1	Paper I	Introduction to Sericulture	20	10	80	20	100
2	Paper II	Silkworm Rearing & its economics	20	10	80	20	100

## B.Sc III Zoology Presentee(2020-21)

Sr.No	Name of the Students	Date	Date	Date	Date	Date
		17/2/21	18/2/21	19/2/21	22/2/21	23/2/21
1.	Bodake Sakshi Shankar	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>
2.	Erandole Shubhangi Mahadev	<u>Erandole</u>	<u>Erandole</u>	<u>Erandole</u>	<u>Erandole</u>	<u>Erandole</u>
3.	Ghagare Komal Bhairu	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>
4.	Jadhav Gouri Raghunath	<u>GRJadhav</u>	<u>GRJadhav</u>	<u>GRJadhav</u>	<u>GRJadhav</u>	<u>GRJadhav</u>
5.	Jamadade Mayuri Vishnu	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>
6.	Kamble Prachi Vijay	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>
7.	Kamble Shweta Vikas	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>
8.	Mali Aishwarya Abaso	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>
9.	Mohite Priti Shankar	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>
10.	Patil Prasad Kailas	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>
11.	Patil Pratiksha Ravsaheb	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>
12.	Patil Preeti Rajendra	<u>PRPatil</u>	<u>PRPatil</u>	<u>PRPatil</u>	<u>PRPatil</u>	<u>P.R.Patil</u>
13.	Patil Rupali Parasharam	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>
14.	Patil Shivani Avinash	<u>SPatil</u>	<u>SPatil</u>	<u>SPatil</u>	<u>SPatil</u>	<u>SPatil</u>
15.	Pawar Surbhi Rajendra	<u>SPawar</u>	<u>SPawar</u>	<u>SPawar</u>	<u>SPawar</u>	<u>SPawar</u>
16.	Taure Shiraddha Kailas	<u>STaure</u>	<u>STaure</u>	<u>STaure</u>	<u>STaure</u>	<u>STaure</u>
17.	Jadhav Suhas Shivaji	<u>SJadhav</u>	<u>SJadhav</u>	<u>SJadhav</u>	<u>SJadhav</u>	<u>SJadhav</u>
18.	Thorat Dipti Laxman	<u>DTorat</u>	<u>DTorat</u>	<u>DTorat</u>	<u>DTorat</u>	<u>DTorat</u>



## B.Sc III Zoology Presentee(2020-21)

Sr.No	Name of the Students	Date	Date	Date	Date	Date
		24/2/21	25/2/21	26/2/21	1/3/21	2/3/21
1.	Bodake Sakshi Shankar	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>
2.	Erandole Shubhangi Mahadev	<u>erandole</u>	<u>erandole</u>	<u>erandole</u>	<u>erandole</u>	<u>erandole</u>
3.	Ghagare Komal Bhairu	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>
4.	Jadhav Gouri Raghunath	<u>GRTachav</u>	<u>GRTachav</u>	<u>GRTachav</u>	<u>GRTachav</u>	<u>GRTachav</u>
5.	Jamadade Mayuri Vishnu	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>
6.	Kamble Prachi Vijay	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>
7.	Kamble Shweta Vikas	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>
8.	Mali Aishwarya Abaso	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>
9.	Mohite Priti Shankar	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>
10.	Patil Prasad Kailas	<u>P.Patil</u>	<u>P.Patil</u>	<u>P.Patil</u>	<u>P.Patil</u>	<u>P.Patil</u>
11.	Patil Pratiksha Ravsaheb	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>
12.	Patil Preeti Rajendra	<u>P.R.Patil</u>	<u>P.R.Patil</u>	<u>P.R.Patil</u>	<u>P.R.Patil</u>	<u>P.R.Patil</u>
13.	Patil Rupali Parasharam	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>
14.	Patil Shivani Avinash	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>
15.	Pawar Surbhi Rajendra	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>
16.	Taur Shraddha Kailas	<u>Taur</u>	<u>Taur</u>	<u>Taur</u>	<u>Taur</u>	<u>Taur</u>
17.	Jadhav Suhas Shivaji	<u>Suhas</u>	<u>Suhas</u>	<u>Suhas</u>	<u>Suhas</u>	<u>Suhas</u>
18.	Thorat Dipti Laxman	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>



## B.Sc III Zoology Presentee(2020-21)

Sr.No	Name of the Students	Date	Date	Date	Date	Date
		4/3/21	8/3/21	9/3/21	12/3/21	15/3/21
1.	Bodake Sakshi Shankar	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>
2.	Erandole Shubhangi Mahadev	<u>Erandole</u>	<u>Erandole</u>	<u>Erandole</u>	<u>Erandole</u>	<u>Erandole</u>
3.	Ghagare Komal Bhairu	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>	<u>Ghagare</u>
4.	Jadhav Gouri Raghunath	<u>G.R.Jadhav</u>	<u>G.R.Jadhav</u>	<u>G.R.Jadhav</u>	<u>G.R.Jadhav</u>	<u>G.R.Jadhav</u>
5.	Jamadade Mayuri Vishnu	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>
6.	Kamble Prachi Vijay	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>
7.	Kamble Shweta Vikas	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>	<u>Kamble</u>
8.	Mali Aishwarya Abaso	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>	<u>Mali</u>
9.	Mohite Priti Shankar	<u>P.mohite</u>	<u>P.mohite</u>	<u>P.mohite</u>	<u>P.mohite</u>	<u>P.mohite</u>
10.	Patil Prasad Kailas	<u>P.Patil</u>	<u>P.Patil</u>	<u>P.Patil</u>	<u>P.Patil</u>	<u>P.Patil</u>
11.	Patil Pratiksha Ravsaheb	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>
12.	Patil Preeti Rajendra	<u>P.P.Patil</u>	<u>P.P.Patil</u>	<u>P.P.Patil</u>	<u>P.P.Patil</u>	<u>P.P.Patil</u>
13.	Patil Rupali Parasharam	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>
14.	Patil Shivani Avinash	<u>S.Patil</u>	<u>S.Patil</u>	<u>S.Patil</u>	<u>S.Patil</u>	<u>S.Patil</u>
15.	Pawar Surbhi Rajendra	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>
16.	Taur Shraddha Kailas	<u>Taur</u>	<u>Taur</u>	<u>Taur</u>	<u>Taur</u>	<u>Taur</u>
17.	Jadhav Suhas Shivaji	<u>S.Jadhav</u>	<u>S.Jadhav</u>	<u>S.Jadhav</u>	<u>S.Jadhav</u>	<u>S.Jadhav</u>
18.	Thorat Dipti Laxman	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>



## B.Sc III Zoology Presentee(2020-21)

Sr.No	Name of the Students	Date	Date	Date	Date	Date
		16/3/21	17/3/21	18/3/21	19/3/21	22/3/21
1.	Bodake Sakshi Shankar	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>	<u>Bodake</u>
2.	Erandole Shubhangi Mahadev	<u>merandole</u>	<u>merandole</u>	<u>merandole</u>	<u>merandole</u>	<u>merandole</u>
3.	Ghagare Komal Bhairu	<u>Bhagare</u>	<u>Bhagare</u>	<u>Bhagare</u>	<u>Bhagare</u>	<u>Bhagare</u>
4.	Jadhav Gouri Raghunath	<u>GhRachav</u>	<u>GhRachav</u>	<u>GhRachav</u>	<u>GhRachav</u>	<u>GhRachav</u>
5.	Jamadade Mayuri Vishnu	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>	<u>Jamadade</u>
6.	Kamble Prachi Vijay	<u>mbaias</u>	<u>mbaias</u>	<u>mbaias</u>	<u>mbaias</u>	<u>mbaias</u>
7.	Kamble Shweta Vikas	<u>Bkamle</u>	<u>Bkamle</u>	<u>Bkamle</u>	<u>Bkamle</u>	<u>Bkamle</u>
8.	Mali Aishwarya Abaso	<u>Amal</u>	<u>Amal</u>	<u>Amal</u>	<u>Amal</u>	<u>Amal</u>
9.	Mohite Priti Shankar	<u>Psmohite.</u>	<u>Psmohite.</u>	<u>Psmohite.</u>	<u>Psmohite.</u>	<u>Psmohite.</u>
10.	Patil Prasad Kailas	<u>Rkavir</u>	<u>Rkavir</u>	<u>Rkavir</u>	<u>Rkavir</u>	<u>Rkavir</u>
11.	Patil Pratiksha Ravsaheb	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil</u>	<u>P.patil.</u>
12.	Patil Preeti Rajendra	<u>P.RPatil</u>	<u>P.RPatil</u>	<u>P.RPatil</u>	<u>P.RPatil</u>	<u>P.RPatil</u>
13.	Patil Rupali Parasharam	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>	<u>R.P.Patil</u>
14.	Patil Shivani Avinash	<u>Spattil</u>	<u>Spattil</u>	<u>Spattil</u>	<u>Spattil</u>	<u>Spattil.</u>
15.	Pawar Surbhi Rajendra	<u>Spawar</u>	<u>Spawar</u>	<u>Spawar</u>	<u>Spawar</u>	<u>Spawar</u>
16.	Taur Shraddha Kailas	<u>Staur</u>	<u>Staur</u>	<u>Staur</u>	<u>Staur</u>	<u>Staur</u>
17.	Jadhav Suhas Shivaji	<u>Sudav</u>	<u>Sudav</u>	<u>Sudav</u>	<u>Sudav</u>	<u>Sudav</u>
18.	Thorat Dipti Laxman	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>

"Dissemination of Education through Knowledge, Science and Culture"

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Shri Swami Vivekanand Shikshan Sanstha's, Kolhapur

Padmabhushan Dr. Vasantodada Patil Mahavidyala, Tasgaon,  
Certificate course on "SERICULTURE"

## Department of Zoology

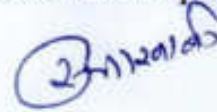
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### Notice

22/03/2021

All the B.Sc. III students of Zoology department are hereby informed that the exam on "Sericulture Certificate Course" will be held on 24/03/2021. The attendance should be compulsory.

Head of Department



Prof. (Dr.) S.A. Khabade)

**HEAD**  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI



Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student Patil Shivani Avinash
2. Subject Zoology class III
3. Date of birth 10-4-2001
4. Caste Hindu maratha
5. Permanent address Vrundavan colony, Tasgaon
6. Contact Number 8010142071
7. E-mail Patil Shivani Avinash 123 @ gmail . com
8. Paid the fees of Rs 100 on

Shivani  
Signature of the student

Course co-ordinator

Shri. Salunkhe  
Head of the Department

Principal

DEPARTMENT OF ZOOLOGY  
HEAD  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

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**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student ..... Jadhav Gauri Raghunath .....
2. Subject..... Zoology ..... class..... Bsc III .....
3. Date of birth..... 11-4-2000 .....
4. Caste..... open .....
5. Permanent address..... Alp Karoji (M) .....
- ..... Tal- Miraj Dist- sangli .....
6. Contact Number..... 7507002118 .....
7. E-mail..... gourijadhav890@gmail.com .....
8. Paid the fees of Rs..... 100 ..... on.....

G.R. Jadhav

Signature of the student

Course co-ordinator

(Signature)

Head of the Department

Principal

**HEAD  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI**



Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr.Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**



**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**

1. Name of the student ..... Erandale Shubhangi Mahadev.....
2. Subject..... Zoology.....class..... B.Sc. - III.....
3. Date of birth..... 18-08-2000.....
4. Caste..... OBC.....
5. Permanent address..... At/P. Manerajuri, Tal-Tasgaon.....  
Dist - Sangli.....
6. Contact Number..... 8605341999.....
7. E-mail..... erandale.shubhangi.m@gmail.com.....
8. Paid the fees of Rs..... 100.....on.....

Smerandale

Signature of the student

Course co-ordinator

Head of the Department

Principal

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr.Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**



**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**

1. Name of the student ..... Jamadade mayuri vishnu .....
2. Subject..... Zoology .....class..... B.SC-III .....
3. Date of birth..... 4/9/2000 .....
4. Caste..... open .....
5. Permanent address..... A/P Manerajuri Tal - Tasgaon .....
- ..... Dist - sangli .....
6. Contact Number..... 9158441000 .....
7. E-mail..... mayurijamdade121@gmail.com .....
8. Paid the fees of Rs..... 100 .....on.....

Jamadade

Signature of the student

Course co-ordinator

(Signature)

Head of the Department

Principal

**HEAD**  
**DEPARTMENT OF ZOOLOGY,**  
**PADMABHUSHAN DR. VASANTRAD DADA PATIL**  
**MHAVIDYALAYA, TASGAON, DIST, SANGLI**



Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

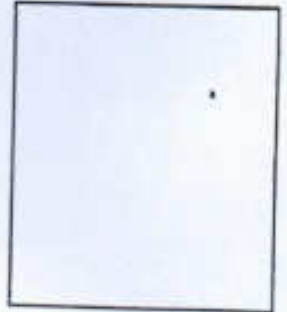
**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA )**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student ..... Mali Aishwarya Abaso .....
2. Subject..... Zoology ..... class..... BSc-III .....
3. Date of birth..... 9-08-2000 .....
4. Caste..... ABC Hindu Mali .....
5. Permanent address..... Aamrai mala, kavalapur .....
- ..... Tal- mitraj dist - Sangli .....
6. Contact Number..... 9249151633 .....
7. E-mail..... aishwarya.mali.2000@gmail.com .....
8. Paid the fees of Rs..... on.....

Aamrai  
Signature of the student

Course co-ordinator

[Signature]  
Head of the Department

Principal

**HEAD  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI**

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

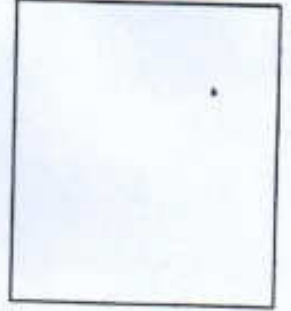
**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student Thorat Dipti laxman
2. Subject ZOOLOGY class B.sc-III
3. Date of birth 5/10/1998
4. Caste NT-C Hindu-Dhanger
5. Permanent address A/P- Kavathe-ekand  
Tal- Tasgaon, Dist - sangli
6. Contact Number 9766903936
7. E-mail thoratdipti1@gmail.com
8. Paid the fees of Rs 100 on

Thorat  
Signature of the student

Course co-ordinator

[Signature]  
Head of the Department

Principal

**HEAD**  
**DEPARTMENT OF ZOOLOGY**  
**PADMABHUSHAN DR. VASANTRAODADA PATIL**  
**MAHAVIDYALAYA, TASGAON, DIST. SANGLI**



Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

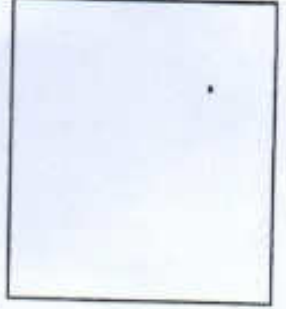
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**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**  
**CERTIFICATE COURSE IN**  
**SERICULTURE 2020-21**



1. Name of the student ..... Patil. Rupali parasharam .....
2. Subject..... zoology ..... class..... B.Sc III .....
3. Date of birth..... 23-June-2000 .....
4. Caste..... Hindu - Maratha .....
5. Permanent address..... A/p. Aravade Tal-Tasgaon .....
- ..... Dist - Sangli .....
6. Contact Number..... 9766380742 .....
7. E-mail..... rupalipatil4671@gmail.com .....
8. Paid the fees of Rs..... 100 ..... on.....

R.P. Patil

Signature of the student

Course co-ordinator

(Signature)

Head of the Department

Principal

**HEAD**

**DEPARTMENT OF ZOOLOGY,**  
**PADMABHUSHAN DR. VASANTRAODADA PATIL**  
**MAHAVIDYALAYA, TASGAON, DIST: SANGLI**

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr.Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student ..... Jadhav Suhag Shivaji .....
2. Subject..... Zoology ..... class..... B.Sc. III .....
3. Date of birth..... 26/07/1999 .....
4. Caste..... Hindu - Maratha .....
5. Permanent address..... At- Narsewadi Po- Ped .....
- ..... Tal- Tasgaon Dist:- Sangli PinCode: 416312. .....
6. Contact Number..... 7057353772 / 9765785268 .....
7. E-mail..... jadhavs2157@gmail.com. .....
8. Paid the fees of Rs..... 100 ..... on.....

Jadhav  
Signature of the student

Course co-ordinator

B. Mendhe  
Head of the Department  
HEAD

Principal

DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAO DADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI



Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**



**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**

1. Name of the student ..... Patil Prasad Kailas .....
2. Subject B.sc-III, zoology class B.sc-III .....
3. Date of birth 10/02/2000 .....
4. Caste Hindu (Parit) .....
5. Permanent address Kharale, Post: Kalundre  
Tal- shirala Dist- sangli .....
6. Contact Number 9158291722 .....
7. E-mail Prasad.kpatil58@gmail.com .....
8. Paid the fees of Rs 100/- on .....

R. K. Patil

Signature of the student

Course co-ordinator

(Signature)

Head of the Department

Principal

**HEAD**

**DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI**

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

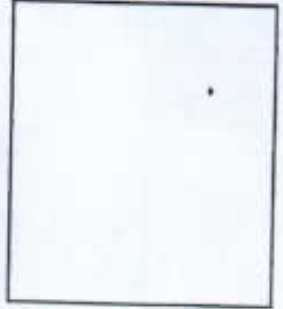
**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student MISS-Surbhi Rajendra Pawar
2. Subject..... Zoology ..... class..... B.SC-III .....
3. Date of birth..... 10/08/2000 .....
4. Caste..... Hindu-Maratha .....
5. Permanent address..... A/P. Kavajapur .....
- .....
6. Contact Number..... 9503971778 .....
7. E-mail..... pawarsurbhi02000@gmail.com .....
8. Paid the fees of Rs..... 1000 ..... on.....

Saurk

Signature of the student

Course co-ordinator

S. Mend

Head of the Department

Principal

**HEAD**

**DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI**



Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr.Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

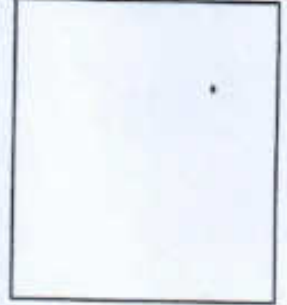
**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student ..... Patil Preeti Rajendra .....
2. Subject..... zoology ..... class..... B.Sc III .....
3. Date of birth..... 28-6-2001 .....
4. Caste..... Hindu - Maratha .....
5. Permanent address... A.P. - chinchani Tal - Tasgaon  
..... Dist - sangli .....
6. Contact Number..... 8830905652 .....
7. E-mail..... PreetiPatil1438@gmail.com .....
8. Paid the fees of Rs..... 1000 ..... on.....

P.R.Patil .

Signature of the student

Course co-ordinator

Head of the Department

Principal

**HEAD**  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI

Dr. Bapuji Salunkhe

Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,

TASGAON, TAL. TASGAON, DIST: SANGLI

( MAHARASHTRA)

PIN. 416312



## ADMISSION FORM

### CERTIFICATE COURSE IN SERICULTURE 2020-21

1. Name of the student ..... Bodake Sakshi Shankar .....
2. Subject..... Zoology .....class.....
3. Date of birth..... 24/11/2000 .....
4. Caste..... Hindu lingayat varni .....
5. Permanent address... ALP. Hatnur, Tal. Tasgaon .....
- ..... Dist- Sangli .....
6. Contact Number .. 7498048504 .....
7. E-mail..... bodakesakshi2411@gmail.com .....
8. Paid the fees of Rs..... 100/- .....on.....

Bodake  
Signature of the student

Course co-ordinator

Head of the Department

Principal

HEAD  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI



Dr. Bapuji Salunkhe

Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,

TASGAON, TAL. TASGAON, DIST: SANGLI

( MAHARASHTRA)

PIN. 416312



## ADMISSION FORM

### CERTIFICATE COURSE IN SERICULTURE 2020-21

1. Name of the student ..... Mohite Priti shankar......
2. Subject..... ZOOLOGY..... class..... B.Sc - III.....
3. Date of birth..... 7-01-2001.....
4. Caste..... Hindu - Mang......
5. Permanent address..... A/P. kavala Pur. Tal. MIRAJ.  
Dist. sangli......
6. Contact Number..... 8767434116......
7. E-mail..... Pritimohite 544@gmail.com......
8. Paid the fees of Rs. 100/-..... on.....

P. Mohite.

Signature of the student

Course co-ordinator

[Signature]

Head of the Department

Principal

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

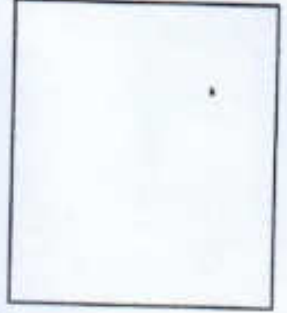
**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**  
**CERTIFICATE COURSE IN**  
**SERICULTURE 2020-21**



1. Name of the student ..... Kamble Shweta Vikas .....
2. Subject..... Zoology ..... class..... BSc III .....
3. Date of birth..... 01-01-2000 .....
4. Caste..... Hindu - Mahar .....
5. Permanent address..... A.t. Bhilawadi, Vasantdada Nagar,  
Nagar, tal - Palus, Dist - Sangli .....
6. Contact Number..... 996768271 .....
7. E-mail..... shweta.vikas.kamble@gmail.com .....
8. Paid the fees of Rs..... 100 ..... on.....

Kamble  
Signature of the student

Course co-ordinator

Swami Vivekanand  
Head of the Department

Principal

**HEAD**  
**DEPARTMENT OF ZOOLOGY,**  
**PADMABHUSHAN DR. VASANTRAODADA PATIL**  
**MAHAVIDYALAYA, TASGAON, DIST. SANGLI**



Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

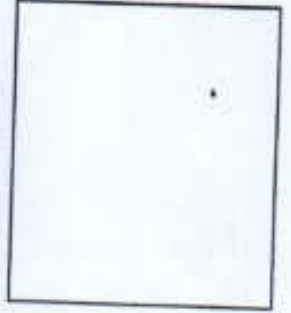
**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA )**

**PIN. 416312**

## ADMISSION FORM

### CERTIFICATE COURSE IN SERICULTURE 2020-21



1. Name of the student ..... Ghagare Komal Bhairu .....
2. Subject..... Zoology ..... class..... B. Sc. III .....
3. Date of birth..... 20/11/2000 .....
4. Caste..... Hindu - Dhongar .....
5. Permanent address..... At. Malwadi, Post - Bhilawadi  
..... Tal. Palus, Dist. Sangli .....
6. Contact Number..... 9307401809 .....
7. E-mail..... k9320283@gmail.com .....
8. Paid the fees of Rs..... 100 ..... on.....

Ghagare

Signature of the student

Course co-ordinator

25/12/20

Head of the Department

Principal

**HEAD**  
**DEPARTMENT OF ZOOLOGY,**  
**PADMABHUSHAN DR. VASANTRAODADA PATIL**  
**MAHAVIDYALAYA, TASGAON, DIST. SANGLI**

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**



## ADMISSION FORM

### CERTIFICATE COURSE IN SERICULTURE 2020-21

1. Name of the student ..... Kamble Prachi Vijay .....
2. Subject..... Zoology ..... class..... Bsc III .....
3. Date of birth..... 13/2/2001 .....
4. Caste..... SC .....
5. Permanent address..... At. Malawadi (shivajinagar) .....
- ..... post. Bhilawadi Tal. Palus. Dist. Sangli. .....
6. Contact Number..... 9975958311 .....
7. E-mail..... Kambleprachi1112@gmail.com .....
8. Paid the fees of Rs..... 100/- ..... on.....

*Prachi*

Signature of the student

Course co-ordinator

*[Signature]*

Head of the Department

Principal

**HEAD**  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI



Dr. Bapuji Salunkhe

Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,

TASGAON, TAL. TASGAON, DIST: SANGLI

( MAHARASHTRA)


PIN. 416312



## ADMISSION FORM

### CERTIFICATE COURSE IN SERICULTURE 2020-21

1. Name of the student Miss. Shradha Kailas Taur
2. Subject Zoology class B.Sc. III
3. Date of birth March 17th, 2000
4. Caste Open Hindu - Maratha
5. Permanent address Near Bharati School, Tasgaon
6. Contact Number 8767464139
7. E-mail shradhataur17@gmail.com
8. Paid the fees of Rs. ₹ 100/- on -

  
Signature of the student

Course co-ordinator

  
Head of the Department

Principal

DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI

Dr. Bapuji Salunkhe

**Shri. Swami Vivekanand Shikshan Sanstha, Kolhapur.**

(The Centenary Year of Shikshanmaharshi Dr. Bapuji Salunkhe)

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,**

**TASGAON, TAL. TASGAON, DIST: SANGLI**

**( MAHARASHTRA)**

**PIN. 416312**

**ADMISSION FORM**

**CERTIFICATE COURSE IN  
SERICULTURE 2020-21**



1. Name of the student ..... *Patil Pratiksha Ravsaheb* .....
2. Subject..... *Zoology* ..... class.....
3. Date of birth..... *30 - November 1998* .....
4. Caste..... *Hindu Maratha* .....
5. Permanent address..... *Near Renuka mandir* .....
- ..... *vijaynagar gali no. 1, vishrambag Sangli* .....
6. Contact Number..... *9359093850* .....
7. E-mail..... *pratikshapatil@gmail.com* .....
8. Paid the fees of Rs..... *100/-* ..... on.....

*P. patil*

Signature of the student

Course co-ordinator

*(Signature)*

Head of the Department

Principal

**HEAD  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI**



## Zoology Certificate Course In Zoology 2020-21

### Student Enrollment List For Certificate course in "Sericulture"


Sr.No	Roll No.	Name of The Students	Signature
1	6101	BODAKE SAKSHI SHANKAR	<u>Bodakass</u>
2	6103	ERANDOLE SHUBHANGI MAHADEV	<u>E.S.M.</u>
3	6104	GHAGARE KOMAL BHAIRU	<u>KB Ghagare</u>
4	6105	JADHAV GOURI RAGHUNATH	<u>Gauri J</u>
5	6106	JADHAV SUHAS SHIVAJI	<u>S.S. Jadhav</u>
6	6107	JAMADADE MAYURI VISHNU	<u>Jamada</u>
7	6108	KAMBLE PRACHI VIJAY	<u>P.V. Kamble</u>
8	6109	KAMBLE SHWETA VIKAS	<u>S. Kamble</u>
9	6110	MALI AISHWARYA ABASO	<u>A. Mali</u>
10	6111	MOHITE PRITI SHANKAR	<u>P. Mohite</u>
11	6112	PATIL PRASAD KAILAS	<u>P. Patil</u>
12	6113	PATIL PRATIKSHA RAVSAHEB	<u>P.R. Patil</u>
13	6114	PATIL PREETI RAJENDRA	<u>P.R. Patil</u>
14	6115	PATIL RUPALI PARASHARAM	<u>P. Patil</u>
15	6116	PATIL SHIVANI AVINASH	<u>S. Patil</u>
16	6117	PAWAR SURBHI RAJENDRA	<u>S.R. Pawar</u>
17	6118	TAUR SHRADDHA KAILAS	<u>Taur</u>
18	6119	THORAT DIPTI LAXMAN	<u>D. Thorat</u>
19	5756	MALI NIVEDITA GAJANAN	<u>N. G. Mali</u>
20	5757	MALI SAKSHI MILIND	<u>M. Mali</u>
21	5758	MANE PALLAVI APPASO	<u>P.A. Mane</u>
22	5759	MANE SAYALI SHAHAJI	
23	5760	MANE SONALI SUDHAKAR	<u>S.D. Mane</u>
24	5761	MANE SWAPNALI PRAKASH	<u>M. Mane</u>
25	5762	MOHITE AISHWARYA VINOD	<u>M.A. Mohite</u>
26	5763	MOHITE PRANALI ADHIKRAO	<u>P.A. Mohite</u>
27	5764	MORE ADARSH POPAT	<u>More A.P.</u>
28	5765	PARALE ASAWARI ADINATH	<u>P. Parale</u>
29	5766	PATHAN SWALIYA JAMIRKHAN	<u>P.S. Jamir Khan</u>

30	5767	PATIL AJAY SAMBHAJI	A. S. Patil
31	5768	PATIL AKSHADA SUNIL	Akshy
32	5769	PATIL KISHOR RAOSAHEB	Kishor Patil
33	5770	PATIL KSHITIJA ASHOK	KSHITIJA
34	5771	PATIL NIKITA LAXMAN	Patil / N
35	5772	PATIL PANKAJ PRAKASH	Pankaj
36	5773	PATIL PRATIKSHA POPAT	Pratiksha
37	5774	PATIL SACHIN BHAUSO	Patil SB
38	5775	PATIL SADHANA NANASAHEB	S. Patil
39	5776	PATIL SHUBHAM VINAYAK	S. V. Patil
40	5777	PATIL SNEHA MADHUKAR	SPatil
41	5778	PATIL SNEHAL SANJAY	S. S. Patil
42	5779	PATIL SUJAY SURESH	Sujay
43	5780	PATIL SWAPNALI ADHIK	Patil S
44	5781	PATIL TEJAS GIRISH	T. Girish
45	5782	PATIL VAISHNAVI BHANUDAS	V. B. Patil
46	5783	PAWAR NIKHIL NANDKUMAR	N. Pawar
47	5784	PAWAR PRATHAMESH CHANDRAKANT	P. Pawar
48	5785	POTDAR ABHISHEK POPAT	Abhishek
49	5786	SALUNKHE PRANITA VISHNU	P. V. Salunkhe
50	5787	SALUNKHE ROHIT RAMESH	R. Salunkhe
51	5788	SAWANT SHIVANI RAMESH	S. R. Sawant
52	5789	SHELAKHE ANJALI ADHIKRAO	A. D. Shelake
53	5790	SHENDAGE AJIT RAJARAM	A. R. Shendage
54	5791	SHENDAGE PRATIKSHA SANJAY	
55	5792	SHENDAGE SMITA SURESH	
56	5793	SHINDE AKASH ANANDA	A. A. Shinde
57	5794	SHINDE DIPTI MANIK	D. M. Shinde
58	5795	SHINDE KASTURI NARAYAN	
59	5796	SHINDE ROHIT CHANDRAKANT	R. Shinde
60	5797	SHINDE SAYALI SANJAY	S. Shinde
61	5798	SHINDE SHUBHADA VASANT	S. V. Shinde
62	5799	SHINDE SHUBHAM DHANAJI	Shinde
63	5800	THORAT APURVA BALASO	A. Thorat
64	5801	THORWAT ANIKET SANJAY	A. Thorwat
65	5802	UMRANI POOJA PRADHAN	P. Umrani



66	5803	WAGH KULDEEP SHIDU	<u>Kuldeep</u>
67	5804	YADAV VARADRAJ ASHOK	
68	5805	YAMGAR SHWETA MAHADEV	<u>Y.M. Shweta</u>
69	5806	YEDAGE SAMBHAJI DASHRATH	
70	5807	ZAMBRE SHRADDHA SAYAJI	<u>Szambre</u>
71	5904	MOHITE PRATIK BHARAT	
72	5905	PATIL TEJASHRI SURESH	<u>Patil</u>
73	5906	JADHAV SUDIKA DINESH	<u>Jadhav</u>
74	5909	KAVATHEKAR ADITI SUDHAKAR	
75	5001	BABAR SARIKA GANPATI	<u>Babar</u>
76	5002	BHOSALE DNYANESHWARI PARAMANAND	<u>P.P. Bhosale</u>
77	5003	BHOSALE PALLAVI DILIP	<u>P.B.</u>
78	5004	CHAVAN PRATHMESH POPAT	<u>Chavamp</u>
79	5005	CHAVAN YASHWANT SANJAY	
80	5006	CHOUGULE NIKITA NAMDEV	<u>Chougule</u>
81	5007	DAGADE TEJASHRI ADHIKARAO	<u>Dagade</u>
82	5008	DEVKULE NIKITA NISHIKANT	
83	5009	EDAKE POOJA TUKARAM	<u>Edake</u>
84	5010	GADVIR MANALI DIPAK	
85	5011	GAIKWAD NIKHIL SHANKAR	<u>G.N.S.</u>
86	5012	GHORAPADE SAKSHI BALASO	<u>Ghor</u>
87	5013	GOSAVI DEEPAK MANIK	<u>Gosavi</u>
88	5014	GURAV JYOTI UTTAM	<u>Gurav</u>
89	5015	JADHAV RATNADIP SANJAY	<u>Jadhav</u>
90	5016	JADHAV SNEHAL SADANAND	<u>SJADHAV</u>
91	5017	JADHAV SUSHAMA SAHEBRAV	<u>Kamble</u>
92	5018	KAMBLE HARSH DILIP	<u>Khale</u>
93	5019	KHARMATE JYOTI DIPAK	<u>Kharmate</u>
94	5020	KOLI PRATHAMESH SANJAY	<u>RSKoli</u>
95	5021	LANDAGE ABHIJEET ANNASO	<u>Landage</u>
95	5022	LOKHANDE TRUPTI RAJENDRA	<u>T.R. Lokhande</u>
96	5023	MAINKAR DHANASHREE DATTATRAY	
97	5024	MALI ASHWINI SHIVAJI	<u>Mali</u>
98	5025	MANE NIKITA SHARAD	<u>mane</u>
99	5026	MANE SANGRAM BHIMRAO	<u>S.B. Mane</u>
100	5027	MANE SHUBHAM NETAJI	<u>Mane</u>
101	5028	MORE ARPITA VISHWAS	<u>more</u>
102	5029	PATIL NIKITA SANJAY	<u>Patil</u>

103	5030	PATIL PANKAJ ARUN	<u>Pankaj</u>
104	5031	PATIL PRACHI AVADHUT	
105	5032	PATIL PRADNYA ANANDRAO	<u>P.P. Anandrao</u>
106	5033	PATIL PRAJAKTA MAHADEV	<u>P.P.R.</u>
107	5034	PATIL PRANALI SANJAY	
108	5035	PATIL ROHAN BALASAHEB	<u>P.R.B.</u>
109	5038	RANKHAMBE HARSHVARDHAN SHRIRANG	<u>Rankhambha</u>
110	5040	SAYYAD TASNIM RIYAJ	
111	5041	SHINDE HARSHADA DHANAJI	<u>S.H.D.</u>
112	5042	SHINDE PRATIKSHA RAJENDRA	
113	5043	SHINDE RUTUJA DILIP	<u>RSD</u>
114	5044	SURYAWANSHI HAREKRUSHNA DNYANDEV	<u>Shankar</u>
115	5045	SURYAWANSHI SANDHYA BHARAT	
116	5046	TAKALE MAYURI SUNIL	<u>M.S. Takale</u>
117	5047	VIBHUTE AKANKSHA SANTOSH	
118	5048	WAGH AKANKSHA DHONDIRAM	<u>Wagh</u>
119	5191	CHAVAN VISHWAJEET KRUSHNARAO	
120	5192	DHISALE ANIKET SANJAY	<u>A. Dhisale</u>
121	5193	EDAKE RUTUJA JAGANNATH	<u>E. Dake</u>
122	5195	JADHAV ANJALI MACHINDRA	
123	5196	JADHAV APARNA RAMDAS	<u>A. Ramdas</u>
124	5197	JADHAV HARSHADA MAHADEV	<u>J. Harshada</u>
125	5199	JADHAV SOMNATH SUBHASH	<u>S. Subhash</u>
126	5200	JAMADADE VAISHNAVI HARISHCHANDRA	<u>J. Harishchandra</u>
127	5201	KADAM ABHIJEET MANIK	<u>K. Manik</u>

  
**HEAD**  
 DEPARTMENT OF ZOOLOGY,  
 PADMABHUSHAN DR. VASANTRAO DADA PATIL  
 MAHAVIDYALAYA, TASEBON, DIST. SANGLI



## Zoology Certificate Course In Zoology 2020-21

### Presentee List For Certificate course in "Sericulture"

Sr.No	Roll No.	Name of The Students	Date										
			17/2/21	18/2/21	20/2/21	22/2/21	23/2/21	24/2/21	25/2/21	26/2/21	27/2/21	1/3/21	
1	6101	BODAKE SAKSHI SHANKAR	P	P	P	P	P	P	P	P	P	P	P
2	6103	ERANDOLE SHUBHANGI MAHADEV	P	P	P	P	P	P	P	P	P	P	P
3	6104	GHAGARE KOMAL BHAIRU	P	P	P	P	P	P	P	P	P	P	P
4	6105	JADHAV GOURI RAGHUNATH	P	P	P	P	P	P	P	P	P	P	P
5	6106	JADHAV SUHAS SHIVAJI	P	P	P	P	P	P	P	P	P	P	P
6	6107	JAMADADE MAYURI VISHNU	P	P	P	P	P	P	P	P	P	P	P
7	6108	KAMBLE PRACHI VIJAY	P	P	P	P	P	P	P	P	P	P	P
8	6109	KAMBLE SHWETA VIKAS	P	P	P	P	P	P	P	P	P	P	P
9	6110	MALI AISHWARYA ABASO	P	P	P	P	P	P	P	P	P	P	P
10	6111	MOHITE PRITI SHANKAR	P	P	P	A	P	P	P	P	P	P	P
11	6112	PATIL PRASAD KAILAS	P	P	P	P	P	P	P	P	P	P	P
12	6113	PATIL PRATIKSHA RAVSAHEB	P	P	P	P	P	P	P	P	P	P	P
13	6114	PATIL PREETI RAJENDRA	P	A	P	P	P	P	P	P	P	P	P
14	6115	PATIL RUPALI PARASHARAM	P	P	P	P	P	P	P	P	P	P	P
15	6116	PATIL SHIVANI AVINASH	P	P	P	P	P	P	P	P	P	P	P
16	6117	PAWAR SURBHI RAJENDRA	P	P	A	P	P	P	P	P	P	P	P
17	6118	TAUR SHRADDHA KAILAS	P	P	P	P	P	P	P	P	P	P	P
18	6119	THORAT DIPTI LAXMAN	P	P	P	P	P	P	P	P	P	P	P
19	5756	MALI NIVEDITA GAJANAN	P	P	P	P	P	P	P	P	P	P	P
20	5757	MALI SAKSHI MILIND	P	P	P	P	P	P	P	P	P	P	A
21	5758	MANE PALLAVI APPASO	P	P	P	P	P	P	P	P	P	P	P
22	5759	MANE SAYALI SHAHAJI	P	P	P	P	P	P	P	P	P	P	P
23	5760	MANE SONALI SUDHAKAR	P	P	P	P	P	P	P	P	P	P	P
24	5761	MANE SWAPNALI PRAKASH	P	P	P	P	P	P	P	P	P	P	P
25	5762	MOHITE AISHWARYA VINOD	P	P	P	P	P	P	P	P	P	A	P
26	5763	MOHITE PRANALI ADHIKRAO	P	P	P	P	P	P	P	P	P	P	P
27	5764	MORE ADARSH POPAT	P	P	P	P	P	P	P	P	P	P	P
28	5765	PARALE ASAWARI ADINATH	P	P	P	P	P	P	P	P	A	P	P











102	5029	PATIL NIKITA SANJAY	P	P	P	P	P	P	P	P	P	P	P
103	5030	PATIL PANKAJ ARUN	P	P	P	P	P	P	P	P	P	P	P
104	5031	PATIL PRACHI AVADHUT	P	P	P	P	P	P	P	P	P	P	P
105	5032	PATIL PRADNYA ANANDRAO	P	P	P	P	P	P	A	P	P	P	P
106	5033	PATIL PRAJAKTA MAHADEV	P	P	P	P	P	P	P	P	P	P	P
107	5034	PATIL PRANALI SANJAY	P	P	P	P	P	P	P	P	A	P	P
108	5035	PATIL ROHAN BALASAHEB	P	P	P	P	P	P	P	P	P	P	P
109	5038	RANKHAMBE HARSHVARDHAN SHRIRANG	P	P	P	P	P	P	P	P	P	P	P
110	5040	SAYYAD TASNIM RIYAJ	P	P	P	P	P	P	P	P	P	P	P
111	5041	SHINDE HARSHADA DHANAJI	P	P	P	P	P	P	P	P	P	P	P
112	5042	SHINDE PRATIKSHA RAJENDRA	P	P	P	P	P	P	P	P	P	P	P
113	5043	SHINDE RUTUJA DILIP	P	P	P	P	P	P	P	P	P	P	P
114	5044	SURYAWANSHI HAREKRUSHNA DNYANDEV	P	P	P	P	P	P	P	P	P	P	P
115	5045	SURYAWANSHI SANDHYA BHARAT	P	P	P	P	P	A	P	P	P	P	P
116	5046	TAKALE MAYURI SUNIL	P	P	P	P	A	P	P	P	P	P	P
117	5047	VIBHUTE AKANKSHA SANTOSH	P	P	P	P	P	P	P	P	P	P	P
118	5048	WAGH AKANKSHA DHONDIRAM	P	A	P	P	P	P	P	P	P	P	P
119	5191	CHAVAN VISHWAJEET KRUSHNARAO	P	P	P	P	P	P	P	P	P	P	P
120	5192	DHISALE ANIKET SANJAY	P	P	P	P	P	P	A	P	P	P	P
121	5193	EDAKE RUTUJA JAGANNATH	P	P	P	P	P	P	P	P	P	P	P
122	5195	JADHAV ANJALI MACHINDRA	P	P	P	P	P	A	P	P	A	P	P
123	5196	JADHAV APARNA RAMDAS	P	P	P	P	P	P	P	P	P	P	P
124	5197	JADHAV HARSHADA MAHADEV	P	P	P	P	P	P	P	P	P	P	P
125	5199	JADHAV SOMNATH SUBHASH	P	P	P	P	P	P	P	A	P	P	P
126	5200	JAMADADE VAISHNAVI HARISHCHANDRA	P	P	P	P	P	P	P	P	P	P	P
127	5201	KADAM ABHIJEET MANIK	P	P	P	P	P	P	P	P	P	P	P

(15) Phulke  
P. P. P.  
TeerB  
 (4) AB  
Phulke  
TeerB  
AK  
Phulke















102	5029	PATIL NIKITA SANJAY	P	P	A	P	P	P	P	P	P	P
103	5030	PATIL PANKAJ ARUN	P	A	P	P	P	P	P	P	P	P
104	5031	PATIL PRACHI AVADHUT	P	P	P	P	A	P	P	P	P	P
105	5032	PATIL PRADNYA ANANDRAO	P	P	A	P	P	P	P	P	P	P
106	5033	PATIL PRAJAKTA MAHADEV	P	P	P	P	P	A	P	P	P	P
107	5034	PATIL PRANALI SANJAY	P	P	P	A	P	P	P	P	P	P
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109	5038	RANKHAMBE HARSHVARDHAN SHRIRANG	P	P	P	A	P	P	P	P	P	P
110	5040	SAYYAD TASNIM RIYAJ	P	P	P	P	P	P	P	P	A	P
111	5041	SHINDE HARSHADA DHANAJI	P	P	A	P	P	P	P	P	P	P
112	5042	SHINDE PRATIKSHA RAJENDRA	P	P	P	P	P	P	P	P	P	A
113	5043	SHINDE RUTUJA DILIP	P	P	P	P	P	A	P	P	P	P
114	5044	SURYAWANSHI HAREKRUSHNA DNYANDEV	P	P	P	P	P	P	P	A	P	P
115	5045	SURYAWANSHI SANDHYA BHARAT	P	P	A	P	P	P	P	P	P	P
116	5046	TAKALE MAYURI SUNIL	P	P	P	P	P	A	P	P	P	P
117	5047	VIBHUTE AKANKSHA SANTOSH	P	P	P	P	A	P	P	P	P	P
118	5048	WAGH AKANKSHA DHONDIRAM	P	P	P	P	P	P	P	A	P	P
119	5191	CHAVAN VISHWAJEET KRUSHNARAO	P	P	P	A	P	P	P	P	P	P
120	5192	DHISALE ANIKET SANJAY	P	P	P	P	P	A	P	P	P	P
121	5193	EDAKE RUTUJA JAGANNATH	P	P	P	P	P	P	P	P	P	P
122	5195	JADHAV ANJALI MACHINDRA	P	P	A	P	P	P	P	P	P	P
123	5196	JADHAV APARNA RAMDAS	P	P	P	P	P	A	P	P	P	P
124	5197	JADHAV HARSHADA MAHADEV	P	A	P	P	P	P	P	P	P	P
125	5199	JADHAV SOMNATH SUBHASH	P	P	P	P	P	P	P	P	P	A
126	5200	JAMADADE VAISHNAVI HARISHCHANDRA	P	P	P	P	P	P	P	P	A	P
127	5201	KADAM ABHIJEET MANIK	P	P	P	P	P	P	P	P	P	P

(15) TeepB

(16) TeepB

TeepB

(17) TeepB

TeepB

TeepB



## Zoology Certificate Course In Zoology 2020-21

### Presentee List For Certificate course in "Sericulture"

Sr.No	Roll No.	Name of The Students	Date									
			15/3/21	15/3/21	16/3/21	17/3/21	18/3/21	19/3/21	20/3/21	21/3/21	22/3/21	22/3/21
1	6101	BODAKE SAKSHI SHANKAR	P	P	P	P	P	P	P	P	P	P
2	6103	ERANDOLE SHUBHANGI MAHADEV	P	P	P	P	P	P	P	P	P	P
3	6104	GHAGARE KOMAL BHAIRU	P	P	P	P	P	P	P	P	P	P
4	6105	JADHAV GOURI RAGHUNATH	P	P	P	P	P	P	P	P	P	P
5	6106	JADHAV SUHAS SHIVAJI	P	P	P	P	P	P	P	P	P	P
6	6107	JAMADADE MAYURI VISHNU	P	P	P	P	P	P	P	P	P	P
7	6108	KAMBLE PRACHI VIJAY	P	P	P	P	P	P	P	P	P	P
8	6109	KAMBLE SHWETA VIKAS	P	P	P	P	P	P	P	P	P	P
9	6110	MALI AISHWARYA ABASO	P	P	P	P	P	P	P	P	P	P
10	6111	MOHITE PRITI SHANKAR	P	P	P	P	P	P	P	P	P	P
11	6112	PATIL PRASAD KAILAS	P	P	P	P	P	P	P	P	P	P
12	6113	PATIL PRATIKSHA RAVSAHEB	P	P	P	P	P	P	P	P	P	P
13	6114	PATIL PREETI RAJENDRA	P	P	P	A	P	P	P	P	P	P
14	6115	PATIL RUPALI PARASHARAM	P	P	P	P	P	P	P	P	P	P
15	6116	PATIL SHIVANI AVINASH	P	P	P	P	P	P	P	P	P	P
16	6117	PAWAR SURBHI RAJENDRA	P	P	A	A	P	P	P	P	P	P
17	6118	TAUR SHRADDHA KAILAS	P	P	P	P	P	A	P	P	P	P
18	6119	THORAT DIPTI LAXMAN	A	P	P	P	P	P	P	P	P	P
19	5756	MALI NIVEDITA GAJANAN	P	P	P	P	P	P	P	P	P	P
20	5757	MALI SAKSHI MILIND	P	P	P	P	P	P	P	P	P	P
21	5758	MANE PALLAVI APPASO	P	P	P	P	P	P	P	P	P	P
22	5759	MANE SAYALI SHAHAJI	P	P	P	P	P	P	P	P	P	P
23	5760	MANE SONALI SUDHAKAR	P	P	P	P	P	P	P	P	P	P
24	5761	MANE SWAPNALI PRAKASH	P	P	P	P	P	P	P	P	P	P
25	5762	MOHITE AISHWARYA VINOD	P	P	P	P	P	P	P	P	P	P
26	5763	MOHITE PRANALI ADHIKRAO	P	A	P	P	P	P	P	P	P	P
27	5764	MORE ADARSH POPAT	P	P	P	A	A	P	P	P	P	P
28	5765	PARALE ASAWARI ADINATH	P	P	P	A	P	P	P	P	P	P











102	5029	PATIL NIKITA SANJAY	P	P	P	P	P	P	P	P	P	P
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118	5048	WAGH AKANKSHA DHONDIRAM	P	P	P	P	P	P	P	P	P	P
119	5191	CHAVAN VISHWAJEET KRUSHNARAO	P	P	P	P	P	P	P	P	P	P
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122	5195	JADHAV ANJALI MACHINDRA	P	P	P	P	P	P	P	P	P	P
123	5196	JADHAV APARNA RAMDAS	P	P	P	P	P	P	P	P	P	P
124	5197	JADHAV HARSHADA MAHADEV	P	P	P	P	P	P	P	P	P	P
125	5199	JADHAV SOMNATH SUBHASH	P	P	P	P	P	P	P	P	P	P
126	5200	JAMADADE VAISHNAVI HARISHCHANDRA	P	P	P	P	P	P	P	P	P	P
127	5201	KADAM ABHIJEET MANIK	P	P	P	P	P	P	P	P	P	P

(10) TeepB  
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"Dissemination of Education through Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe  
Shri Swami Vivekanand Shikshan Sanstha's, Kolhapur

Padmbhushan Dr. Vasant Rao Dada Patil Mahavidyala, Tasgaon,  
Certificate course on "SERICULTURE"

## Department of Zoology

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### Notice

22/03 /2021

All the B.Sc. III students of Zoology department are hereby informed that the exam on "Sericulture Certificate Course" will be held on 24/03/2021. The attendance should be compulsory.

Head of Department



Prof. (Dr.) S.A. Khabade)

**HEAD**  
DEPARTMENT OF ZOOLOGY,  
PADMABHUSHAN DR. VASANTRAO DADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI

"Dissemination of Education through Knowledge, Science and Culture"  
-Shikshanmaharshi Dr. BapujiSalunkhe  
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Padmbhushan Dr. Vasantodada Patil Mahavidyala, Tasgaon.

Certificate course on " SERICULTURE "

Department of Zoology

Date- 24/03/2021

Total mark-50

Note- Answer all the questions

Each question carries 2 marks

**Q.1) Multiple choice question**

**Marks 10.**

1. This species produces silk of the superior quality.  
a) Attacus atlas      b) Bombyx mori      c) Attacus ricini      d) Antheraea assamensis
2. Silk is produced by.....  
a) Cocoon      b) adult moth      c) larva      d) larva and adult moth
- 3) What is the life span of an adult ' Bombyx mori '  
a) 2days      b) 3-4 days      c) 6 days      d) 8days
- 4) Silk contains a protein known as.....  
a) casein      b) fibroin      c) sericin      d) both b and c
- 5) Which of the following varieties of silk is not produced in India.  
a) Muga silk      b) Tassar silk      c) Mulberry silk      d) American silk

**Q.2) Attempt any one of the following.**

**Marks-20**

1. Explain the silkworm life history with neat diagram?



2. Write various steps for processing fibres into wool?

**Q.3 ) Attempt any two of the following.**

**Marks-20**

1. Write the economics of egg production?
2. Write the systematic position of silkworm?
3. Write about hatching and brushing?
4. Types of silk wastes?

Mali Aishwarya Abaso  
B.Sc III  
Date - 24/3/2021

- Q. 1 This species produces silk of the superior quality  
→ Bombyx mori
2. Silk is produced by  
→ larva.
3. What is the life span of an adult "Bombyx mori" → 3 to 4 day
4. Silk contains a protein known as —  
→ Fibroin
5. Which of the following varieties of silk is not produced in India.  
→ American silk.

Q. 2 Explain the silkworm of life history with neat diagram ?  
→ The life cycle of silk moth starts when a female silk moth lays eggs, the caterpillar or larvae are hatched from the eggs of the silk moth. The silkworms feed on mulberry leaves & give rise to pupa. After that it swings its head



silk is a type of natural fibre or animal fibre. silkworm is responsible for spinning of silk & it is reared to obtain silks.

### History of silk :-

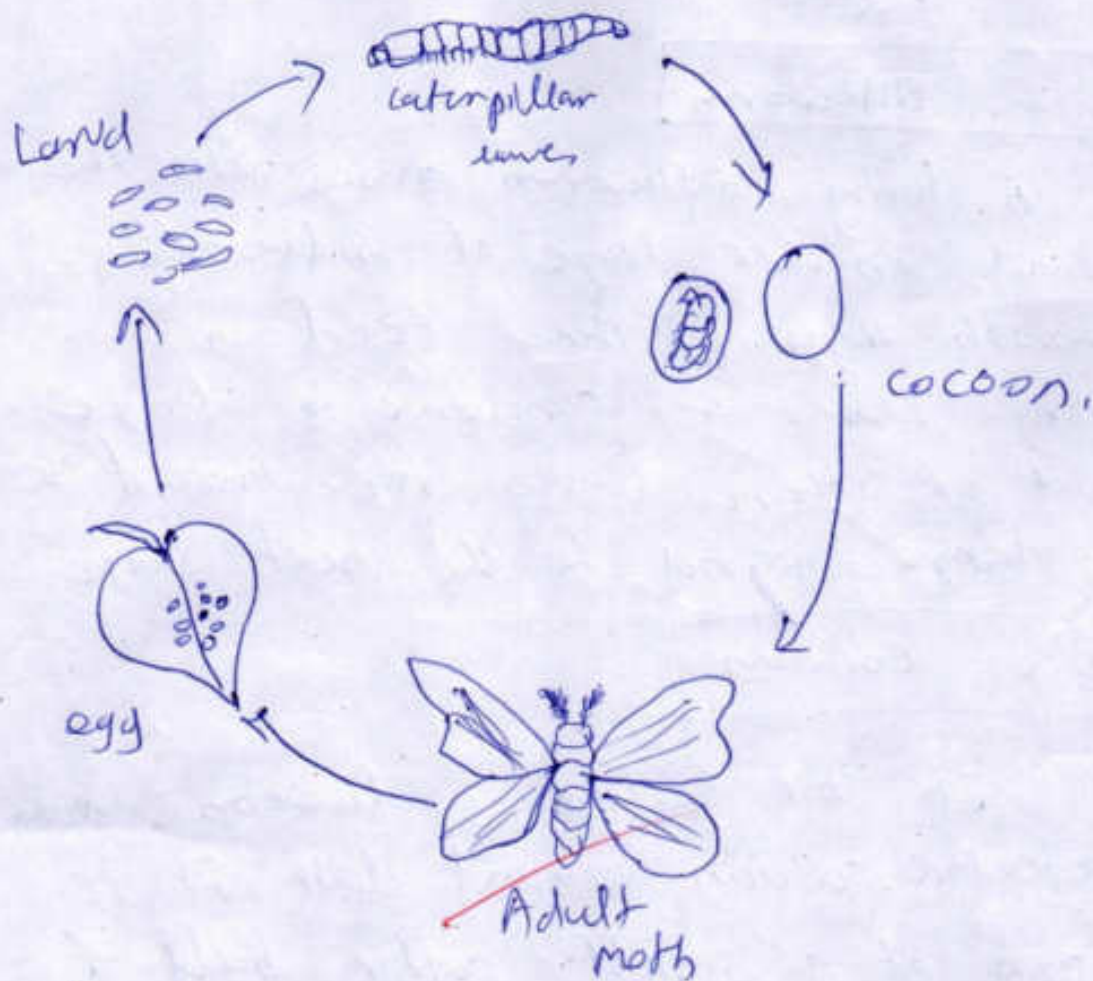
silk was discovered around 3500 Bc in china. for a long period of time, silk was shipped to other parts of the world through trade. Technological advancement & new developments have enabled manufacturers to produce different types of silk from diff<sup>n</sup> silkworms on the basis of luster & texture.

mulberry silk is the most common silk moth that is used for producing silk. Rearing of the silkworms is known as sericulture.

### The life cycle of silkworms

The life cycle of silk moth starts when a female silk moth lays eggs. The caterpillars or larvae are hatched from the eggs of the silk moth. The silkworms feed on mulberry leaves & give rise to pupa. In the pupa stage a weave is netted around by the silkworm to hold itself. After that the spinning its head spinning a fibre several caterpillars from a protective layer around pupa & this covering is known as the cocoon.





### Stage - 1 Egg

An egg is the first stage of the life cycle of the silkworm. The egg is laid by a female moth which is mostly the size of small dots. A female moth lays more than 300 eggs at a time. In the springtime the eggs hatch due to the warmth in the air. This



This procedure happens once in every year.

## Stage 2: Silkworms

A hairy silkworm arises after the eggs crack. In this stage of silkworms, the growth happens. They feed on mulberry leaves & consume a large amount of these leaves for around 30 days before going to the next stage.

## Stage 3 Cocoon

In this stage, silkworms spin a protective cocoon around itself. It is the size of a small cotton ball & is made of a single thread of silk.

## Stage 4: pupa

The pupa stage is a motionless stage in this stage people kill the pupa by plunging the cocoons into boiling water & unwind the silk thread.

### Stage 5 Moth

In this stage, the pupa changes into an adult moth. The female moth lays eggs after mating & thus the life cycle of silkworms begins again.

### Processing of silk

Extracting silk from the cocoon is known as the processing of silk. Silk is separated from the cocoon by exposing it to sunlight. After the reeling of silk is done, the process of unwinding silk from a cocoon takes place. Silk from a cocoon takes place. Silk thread is then bleached. The silk fibre is then spun into silk threads.

20/20



Q3. write the economic of egg production.

The incremental trend in the share of Bimoline silk production in India is a welcome change to reduce dependency on chinese silk yarn imports besides development of farm based rural enterprise based on ~~strengthened~~ dry land farming practices in the country.

Technology Involved

Silk worm eggs are produced at registered silk worm seed production centre & young caterpillars are supplied to 80-100 farmers covering 120-150 acres of mulberry.

Optimum temp. maintained in a CRC is 27-28°C with relative humidity of 85-90% using air cooler or air conditioning.

Particulars	Annual cost	Particulars	Annual cost
Mulberry trade price	33,300	Cost of distribution	1,700
Appropriated cost for mulberry growers	7900	Miscellaneous	10,000
		Total cost of silk worms	20,797



## 2) Types of silk waste-2

→ silk waste includes all kinds of ~~raw~~ silk which may be ~~unwindable~~, & therefore unsuited to ~~the~~ throwing process. before the introduction of machinery applicable to the spinning of silk waste, the refuse from cocoon reeling & also from ~~silk winding~~, which is now used in producing spun silk winding which is now used in production spun silk fabrics was nearly all destroyed as being useless with the exceptions of that which could be hand-combed & spun by means of the distaff & spinning wheel a method which is still practised by some of the ~~persons~~ in India.

### Sources

The supply of waste silk is drawn from the following sources



- The silkworm, when commencing to spin emits a dull, dustless & uneven thread with which it suspends itself from the twigs & leaves of the tree upon which it has been feeding or the stream provided for it by attendants. In the worm rearing establishment this first thread is unreliable this last thread is unreliable, & moreover, is often mixed with straw, leaves & twigs

- pierced cocoons that is, those from which the moth of the silkworm has emerged and damaged cocoons

- During the process of reeling the from the cocoon the silk often breaks & both in finishing & have & red the thread in joining the ends. Hence it is unavoidable waste

## Zoology Certificate Course In Zoology 2020-21

### Exam Attendance For Certificate course in "Sericulture"

Sr.No	Roll No.	Name of The Students	Signature
1	6101	BODAKE SAKSHI SHANKAR	Bodakes
2	6103	ERANDOLE SHUBHANGI MAHADEV	E.S.M.
3	6104	GHAGARE KOMAL BHAIRU	K.B. Ghagare
4	6105	JADHAV GOURI RAGHUNATH	Gauri J.
5	6106	JADHAV SUHAS SHIVAJI	S.S. Jadhav
6	6107	JAMADADE MAYURI VISHNU	Jamada
7	6108	KAMBLE PRACHI VIJAY	P.V. Kamble
8	6109	KAMBLE SHWETA VIKAS	Shw. Kamble
9	6110	MALI AISHWARYA ABASO	A. Mal
10	6111	MOHITE PRITI SHANKAR	P. Mohite
11	6112	PATIL PRASAD KAILAS	P. Patil
12	6113	PATIL PRATIKSHA RAVSAHEB	P.R. Patil
13	6114	PATIL PREETI RAJENDRA	P.P. Patil
14	6115	PATIL RUPALI PARASHARAM	R. Patil
15	6116	PATIL SHIVANI AVINASH	S. Patil
16	6117	PAWAR SURBHI RAJENDRA	S.R. Pawar
17	6118	TAUR SHRADDHA KAILAS	T. Taur
18	6119	THORAT DIPTI LAXMAN	D. Thorat
19	5756	MALI NIVEDITA GAJANAN	N. Mal
20	5757	MALI SAKSHI MILIND	M. Mal
21	5758	MANE PALLAVI APPASO	P.A. Mane
22	5759	MANE SAYALI SHAHAJI	
23	5760	MANE SONALI SUDHAKAR	S.D. Mane
24	5761	MANE SWAPNALI PRAKASH	S. Mane
25	5762	MOHITE AISHWARYA VINOD	M. A.S.
26	5763	MOHITE PRANALI ADHIKRAO	P.A. Mohite
27	5764	MORE ADARSH POPAT	M. More
28	5765	PARALE ASAWARI ADINATH	A. Parale



29	5766	PATHAN SWALIYA JAMIRKHAN	P. S. Jamir Khan.
30	5767	PATIL AJAY SAMBHAJI	A.S. patil .
31	5768	PATIL AKSHADA SUNIL	Akshada .
32	5769	PATIL KISHOR RAOSAHEB	Kishor patil -
33	5770	PATIL KSHITJA ASHOK	Kshitja .
34	5771	PATIL NIKITA LAXMAN	patil .
35	5772	PATIL PANKAJ PRAKASH	Pankaj .
36	5773	PATIL PRATIKSHA POPAT	Pratiksha .
37	5774	PATIL SACHIN BHAUSO	sachin .
38	5775	PATIL SADHANA NANASAHEB	patil .
39	5776	PATIL SHUBHAM VINAYAK	S.V. Patil
40	5777	PATIL SNEHA MADHUKAR	patil .
41	5778	PATIL SNEHAL SANJAY	S.S. Patil
42	5779	PATIL SUJAY SURESH	patil .
43	5780	PATIL SWAPNALI ADHIK	patil .
44	5781	PATIL TEJAS GIRISH	T. G. Patil .
45	5782	PATIL VAISHNAVI BHANUDAS	V. B. Patil
46	5783	PAWAR NIKHIL NANDKUMAR	pawar .
47	5784	PAWAR PRATHAMESH CHANDRAKANT	P. C. Pawar
48	5785	POTDAR ABHISHEK POPAT	Potdar
49	5786	SALUNKHE PRANITA VISHNU	salunkhe .
50	5787	SALUNKHE ROHIT RAMESH	R. S. Salunkhe .
51	5788	SAWANT SHIVANI RAMESH	S. R. Sawant
52	5789	SHELAKE ANJALI ADHIKRAO	A. D. Shelake .
53	5790	SHENDAGE AJIT RAJARAM	A. R. Shendage .
54	5791	SHENDAGE PRATIKSHA SANJAY	. Shendage .
55	5792	SHENDAGE SMITA SURESH	Q.
56	5793	SHINDE AKASH ANANDA	A. A. Shinde
57	5794	SHINDE DIPTI MANIK	D. M. Shinde .
58	5795	SHINDE KASTURI NARAYAN	Shinde .
59	5796	SHINDE ROHIT CHANDRAKANT	R. Shinde .
60	5797	SHINDE SAYALI SANJAY	. Shinde .
61	5798	SHINDE SHUBHADA VASANT	S. S. Shinde .
62	5799	SHINDE SHUBHAM DHANAJI	Shubham .
63	5800	THORAT APURVA BALASO	Thorat .
64	5801	THORWAT ANIKET SANJAY	Thorwat

65	5802	UMRANI POOJA PRADHAN	<del>Kharag</del>
66	5803	WAGH KULDEEP SHIDU	Wagh
67	5804	YADAV VARADRAJ ASHOK	Yadav
68	5805	YAMGAR SHWETA MAHADEV	<del>Yamgar</del>
69	5806	YEDAGE SAMBHAJI DASHRATH	Yedage
70	5807	ZAMBRE SHRADDHA SAYAJI	<del>Sambre</del>
71	5904	MOHITE PRATIK BHARAT	Mohite
72	5905	PATIL TEJASHRI SURESH	Patil
73	5906	JADHAV SUDIKSHA DINESH	Jadhav
74	5909	KAVATHEKAR ADITI SUDHAKAR	Kavathekar
75	5001	BABAR SARIKA GANPATI	B.S.G.
76	5002	BHOSALE DNYANESHWARI PARAMANAND	Bhosale
77	5003	BHOSALE PALLAVI DILIP	PDB
78	5004	CHAVAN PRATHMESH POPAT	
79	5005	CHAVAN YASHWANT SANJAY	Chavane
80	5006	CHOUGULE NIKITA NAMDEV	Nikita
81	5007	DAGADE TEJASHRI ADHIKARAO	Dagade
82	5008	DEVKULE NIKITA NISHIKANT	
83	5009	EDAKE POOJA TUKARAM	Edake
84	5010	GADVIR MANALI DIPAK	Gadvir
85	5011	GAIKWAD NIKHIL SHANKAR	Nikhil
86	5012	GHORAPADE SAKSHI BALASO	Ghorapade
87	5013	GOSAVI DEEPAK MANIK	D.M. Gosavi
88	5014	GURAV JYOTI UTTAM	Gurav
89	5015	JADHAV RATNADIP SANJAY	R.S. Jadhav
90	5016	JADHAV SNEHAL SADANAND	Sadhar
91	5017	JADHAV SUSHAMA SAHEBRAV	S.S. Jadhav
92	5018	KAMBLE HARSH DILIP	Kamble
93	5019	KHARMATE JYOTI DIPAK	Jyoti
94	5020	KOLI PRATHAMESH SANJAY	Koli
95	5021	LANDAGE ABHIJEET ANNASO	ALandage
95	5022	LOKHANDE TRUPTI RAJENDRA	T.R. Lokhande
96	5023	MAINKAR DHANASHREE DATTATRAY	mainkar
97	5024	MALI ASHWINI SHIVAJI	Mali
98	5025	MANE NIKITA SHARAD	Nikita
99	5026	MANE SANGRAM BHIMRAO	S.B. Mane
100	5027	MANE SHUBHAM NETAJI	Mane
101	5028	MORE ARPITA VISHWAS	more



102	5029	PATIL NIKITA SANJAY	<u>M. Patil</u>
103	5030	PATIL PANKAJ ARUN	<u>Patil</u>
104	5031	PATIL PRACHI AVADHUT	
105	5032	PATIL PRADNYA ANANDRAO	<u>P.P. Ananda</u>
106	5033	PATIL PRAJAKTA MAHADEV	<u>Patil</u>
107	5034	PATIL PRANALI SANJAY	
108	5035	PATIL ROHAN BALASAHEB	<u>Ranikant</u>
109	5038	RANKHAMBE HARSHVARDHAN SHRIRANG	<u>Rank</u>
110	5040	SAYYAD TASNIM RIYAJ	
111	5041	SHINDE HARSHADA DHANAJI	<u>S.H.D</u>
112	5042	SHINDE PRATIKSHA RAJENDRA	<u>S.P.R</u>
113	5043	SHINDE RUTUJA DILIP	<u>RSD</u>
114	5044	SURYAWANSHI HAREKRUSHNA DNYANDEV	<u>Desai</u>
115	5045	SURYAWANSHI SANDHYA BHARAT	<u>S.S.B</u>
116	5046	TAKALE MAYURI SUNIL	<u>Takale</u>
117	5047	VIBHUTE AKANKSHA SANTOSH	<u>Vibhute</u>
118	5048	WAGH AKANKSHA DHONDIRAM	
119	5191	CHAVAN VISHWAJEET KRUSHNARAO	<u>Chavante</u>
120	5192	DHISALE ANIKET SANJAY	
121	5193	EDAKE RUTUJA JAGANNATH	<u>Edake</u>
122	5195	JADHAV ANJALI MACHINDRA	<u>Jadhav</u>
123	5196	JADHAV APARNA RAMDAS	<u>Jadhav</u>
124	5197	JADHAV HARSHADA MAHADEV	
125	5199	JADHAV SOMNATH SUBHASH	<u>S.S. Jadhav</u>
126	5200	JAMADADE VAISHNAVI HARISHCHANDRA	<u>Jamdade</u>
127	5201	KADAM ABHIJEET MANIK	<u>Kadam</u>

  
**HEAD**  
 DEPARTMENT OF ZOOLOGY,  
 PADMAKUSHAN DR. VASANTRAO DADA PATI  
 MAHAVIDYALAYA, TASGAON, DIST. SANGLI

"Dissemination of Education through Knowledge, Science and Culture" Shikshanmaharshi Dr. Bapuji Salunkhe  
Shri Swami VivekanandShikshanSanstha's, Kolhapur

Padmbhushan Dr. Vasantraodada Patil Mahavidyala, Tasgaon, Dist- Sangli.

**DEPARTMENT OF ZOOLOGY**

**Zoology Certificate Course 2020-21**

**MARK LIST FOR CERTIFICATE COURSE IN "SERICULTURE"**

Sr.No	Roll No.	Name of The Students	Marks
1	6101	BODAKE SAKSHI SHANKAR	48
2	6103	ERANDOLE SHUBHANGI MAHADEV	48
3	6104	GHAGARE KOMAL BHAIRU	49
4	6105	JADHAV GOURI RAGHUNATH	48
5	6106	JADHAV SUHAS SHIVAJI	47
6	6107	JAMADADE MAYURI VISHNU	45
7	6108	KAMBLE PRACHI VIJAY	48
8	6109	KAMBLE SHWETA VIKAS	48
9	6110	MALI AISHWARYA ABASO	49
10	6111	MOHITE PRITI SHANKAR	45
11	6112	PATIL PRASAD KAILAS	48
12	6113	PATIL PRATIKSHA RAVSAHEB	47
13	6114	PATIL PREETI RAJENDRA	47
14	6115	PATIL RUPALI PARASHARAM	45
15	6116	PATIL SHIVANI AVINASH	46
16	6117	PAWAR SURBHI RAJENDRA	47
17	6118	TAUR SHRADDHA KAILAS	48
18	6119	THORAT DIPTI LAXMAN	48
19	5756	MALI NIVEDITA GAJANAN	48
20	5757	MALI SAKSHI MILIND	48
21	5758	MANE PALLAVI APPASO	47
22	5759	MANE SAYALI SHAHAJI	47
23	5760	MANE SONALI SUDHAKAR	47
24	5761	MANE SWAPNALI PRAKASH	45
25	5762	MOHITE AISHWARYA VINOD	45



26	5763	MOHITE PRANALI ADHIKRAO	48
27	5764	MORE ADARSH POPAT	47
28	5765	PARALE ASAWARI ADINATH	47
29	5766	PATHAN SWALIYA JAMIRKHAN	47
30	5767	PATIL AJAY SAMBHAJI	47
31	5768	PATIL AKSHADA SUNIL	48
32	5769	PATIL KISHOR RAOSAHEB	48
33	5770	PATIL KSHITJA ASHOK	49
34	5771	PATIL NIKITA LAXMAN	45
35	5772	PATIL PANKAJ PRAKASH	45
36	5773	PATIL PRATIKSHA POPAT	47
37	5774	PATIL SACHIN BHAUSO	48
38	5775	PATIL SADHANA NANASAHEB	48
39	5776	PATIL SHUBHAM VINAYAK	48
40	5777	PATIL SNEHA MADHUKAR	47
41	5778	PATIL SNEHAL SANJAY	48
42	5779	PATIL SUJAY SURESH	48
43	5780	PATIL SWAPNALI ADHIK	47
44	5781	PATIL TEJAS GIRISH	47
45	5782	PATIL VAISHNAVI BHANUDAS	48
46	5783	PAWAR NIKHIL NANDKUMAR	48
47	5784	PAWAR PRATHAMESH CHANDRAKANT	48
48	5785	POTDAR ABHISHEK POPAT	48
49	5786	SALUNKHE PRANITA VISHNU	48
50	5787	SALUNKHE ROHIT RAMESH	48
51	5788	SAWANT SHIVANI RAMESH	47
52	5789	SHELAKHE ANJALI ADHIKRAO	47
53	5790	SHENDAGE AJIT RAJARAM	48
54	5791	SHENDAGE PRATIKSHA SANJAY	48
55	5792	SHENDAGE SMITA SURESH	48
56	5793	SHINDE AKASH ANANDA	47
57	5794	SHINDE DIPTI MANIK	45
58	5795	SHINDE KASTURI NARAYAN	45
59	5796	SHINDE ROHIT CHANDRAKANT	48
60	5797	SHINDE SAYALI SANJAY	47
61	5798	SHINDE SHUBHADA VASANT	45

62	5799	SHINDE SHUBHAM DHANAJI	45
63	5800	THORAT APURVA BALASO	45
64	5801	THORWAT ANIKET SANJAY	44
65	5802	UMRANI POOJA PRADHAN	43
66	5803	WAGH KULDEEP SHIDU	45
67	5804	YADAV VARADRAJ ASHOK	45
68	5805	YAMGAR SHWETA MAHADEV	45
69	5806	YEDAGE SAMBHAJI DASHRATH	47
70	5807	ZAMBRE SHRADDHA SAYAJI	48
71	5904	MOHITE PRATIK BHARAT	48
72	5905	PATIL TEJASHRI SURESH	48
73	5906	JADHAV SUDIKSHA DINESH	45
74	5909	KAVATHEKAR ADITI SUDHAKAR	45
75	5001	BABAR SARIKA GANPATI	45
76	5002	BHOSALE DNYANESHWARI PARAMANAND	45
77	5003	BHOSALE PALLAVI DILIP	47
78	5004	CHAVAN PRATHMESH POPAT	47
79	5005	CHAVAN YASHWANT SANJAY	47
80	5006	CHOUGULE NIKITA NAMDEV	47
81	5007	DAGADE TEJASHRI ADHIKARAO	48
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83	5009	EDAKE POOJA TUKARAM	48
84	5010	GADVIR MANALI DIPAK	45
85	5011	GAIKWAD NIKHIL SHANKAR	47
86	5012	GHORAPADE SAKSHI BALASO	46
87	5013	GOSAVI DEEPAK MANIK	46
88	5014	GURAV JYOTI UTTAM	45
89	5015	JADHAV RATNADIP SANJAY	46
90	5016	JADHAV SNEHAL SADANAND	48
91	5017	JADHAV SUSHAMA SAHEBRAV	44
92	5018	KAMBLE HARSH DILIP	45
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94	5020	KOLI PRATHAMESH SANJAY	43
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127	5201	KADAM ABHIJEET MANIK	

# **A REPORT ON MULBERRY PLANTATION A” GREEN PRACTICE”**

## **AT COLLEGE CAMPUS**

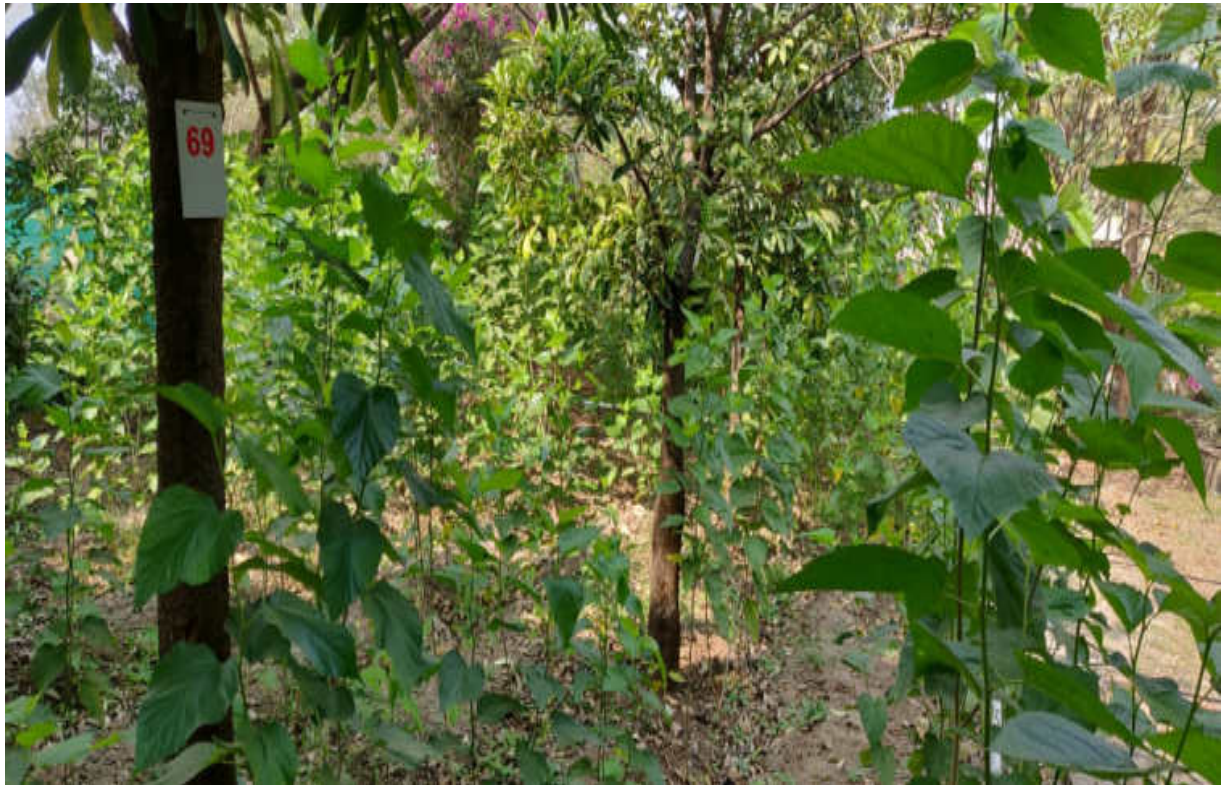
Mulberry (*Morus* spp.) is being exploited by sericulture, pharmaceutical, cosmetic, food and beverage industries.

- It is regarded as a unique plant on earth due to its positive impact in environmental safety approach.
- It relieves Mother Nature from all ecological disturbances and hence appropriate to call it as most suitable plant in providing a sustainable environment for future generations.

Mulberry (*Morus* spp.) of Moraceae family is regarded as a unique plant on this earth due to its broader geological distribution across the continents; ability to be cultivated in different forms; multiple uses of leaf foliage and its positive impact in environmental safety approaches such as ecorestoration of degraded lands, bioremediation of polluted sites, conservation of water, prevention of soil erosion and improvement of air quality by carbon sequestering.

Mulberry is also used as a medicinal plant in improving and enhancing the life of human beings by utilizing the biologically active pharmacokinetic compounds found in leaf, stem and root parts. Further industrial exploitation of mulberry through preparation of various products in pharmaceutical, food, cosmetic and health care industries has gained the attention of industrialists. As mulberry is being exploited by sericulture, pharmaceutical, cosmetic, food and beverage industries along with its utilization in environmental safety approach; it is appropriate to call it as a most suitable plant for sustainable development.

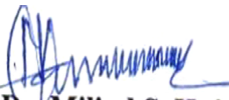








Mulberry Garden

  
**Prin. Dr. Milind S. Hujare**  
**Principal**

Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, Tasgaon (Sangli).



**“Dissemination of Education for Knowledge, Science, and Culture”**  
- Shikshanmaharshi Dr. Bapuji Salunkhe

SHRI SWAMI VIVEKANAND SHIKSHAN SANSTHA, KOLHAPUR

**PADMABHUSHAN DR.VASANTRAODADA  
PATIL MAHAVIDYALAYA, TASGAON**

**DEPARTMENT OF BOTANY**

REPORT OF

**“CULTIVATION OF MEDICINAL  
AND AROMATIC PLANTS”**

**2020-2021**

## **CULTIVATION OF SUITABLE MEDICINAL AND AROMATIC PLANTS.**

Medicinal and aromatic plants form a numerically large group of economically important plants which provide basic raw materials for medicines, perfumes, flavors and cosmetics. These plants and their products not only serve as valuable source of income for small land holder's farmers and entrepreneurs but also earn valuable foreign exchange by way of export. India possesses a rich and diverse variety of plant resources to meet the growing demand for plant-based drugs, perfumery and flavor items. Availability of wide variation in soil and climate in our country offers great potential for cultivation of these plants in the country in general and Maharashtra in particular. During the last decades there has been a renewed interest in recognizing plants as a source of drugs, perfumes and cosmetics which may be due to little or no side effects associated with their application and user friendly and environment friendly products. It is therefore necessary to collect, conserve and evaluate germplasm and to develop agro technologies for medicinal and aromatic plants with potential for farming. Plants have been a major source of therapeutic agents for alleviation or cure of human diseases since time immemorial. At present there are about 130 clinically useful prescription drugs of known chemical structure which are used in Modern System of Medicine and solely derived from about 100 species of higher plants. The traditional system of medicine continue to cater in to the medicinal needs of the about 80% world population. India has a unique position in the world where a number of Traditional Systems of Medicine are practised such as Ayurveda, Siddha, Unani, Homeopathy, Yoga and Naturopathy for the total health care. These systems of medicine are heavily dependent upon the medicinal plants. A recent study indicates that the herbal



drug market continues to grow at the rate of 15% annually. In India, earlier, the medicines used in indigenous systems of medicines were generally prepared by the practicing physicians by themselves, but now this practice has been largely replaced by the establishment of organized indigenous drugs industry. Several hundred genera are used in herbal remedies and in traditional or folklore medicines throughout the world. As per one estimate 35-70,000 species have been used in some culture for medicinal purposes. They are used in the form of crude drugs which are dried parts of the medicinal plants (root, stem, wood, bark, leaves, flowers, fruits seeds and in some cases whole plants) or their extracts. There is much smaller number of plants from which individual active constituents are isolated and used as medicines, either alone or in combination. The species used for isolation of active ingredients may be indigenous species growing wild or cultivated, or hybrids or other cultivated varieties that have been bred for a particular characteristic. One of the major difficulties of medicinal plants cultivation in large scale is the lack of scientific and appropriate agro technology for different climatic zones of the country.

Keeping in mind the importance of medicinal plants the department of Botany has undertaken a cultivation program of medicinal plants in the college garden. The plants saplings are collected from various sources from Western Ghats and cultivated in the garden. Around 108 and more medicinal plants are cultivated in the college garden. The idea behind this program is to create an awareness among the students and surrounding farmers. These plants are well survived and show healthy growth.



*Plumbago zeylanica*



*Rauwolfia serpentina*



*Terminalia bellirica*



*Embelia ribes*

**Table: List of medicinal plants cultivated in the Institute.**

Sr.No.	Botanical Name	Marathi Name	Family	Medicinal uses
1.	Garcinia indica Choisy	कोकम	Clusiaceae	Anti - acidic Juice
2.	Pterospermum suberifolium (L.) Willd.	मुचकुंद	Malvaceae	Aromatic
3.	Piper cubeba <u>L.f.</u>	कंकोळ	Piperaceae	Spices
4.	Gardenia gummifera <u>L.f.</u>	डिकेमाली	Rubiaceae	Digestive disorder
5.	Coffea Arabica L.	काँफी	Rubiaceae	Beverage



6.	<i>Couroupita guianensis</i> Aubl.	कैलासपती	<u>Lecythidaceae</u>	Malaria
7.	<i>Borassus flabellifer</i> L.	थती	Arecaceae	Energy Drink
8.	<i>Lawsonia inermis</i> L.	मेहेंदी	Lythraceae	Natural Dye, Jaundice
9.	<i>Aquilaria malaccensis</i> Lam.	कृष्णगुरु	Thymelaeaceae	Asthma
10.	<i>Butea monosperma</i> (Lam.) Taub.	पळस	Fabaceae	Natural Dye
11.	<i>Chonemorpha fragrans</i> (Moon) Alston.	मोमी	Apocynaceae	Anti-Diabetic
12.	<i>Bixa orellana</i> L.	शेंदरी	Bixaceae	Natural Dye
13.	<i>Gmelina arborea</i> Roxb.	शिवण	Lamiaceae	Anti Diabetic
14.	<i>Manilkara hexandra</i>	खिरणी	Sapotaceae	Fever, Jaundice
15.	<i>Asparagus racemosus</i> <u>Willd.</u>	शतावरी	Asparagaceae	Cancer
16.	<i>Pterocarpus santalinus</i> L.f.	रक्तचंदन	Fabaceae	Tonic, Swelling
17.	<i>Prosopis cineraria</i> (L.) <u>Druce.</u>	शमी	Fabaceae	Asthma
18.	<i>Bacopa monnieri</i> (L.) Pennell	नीर ब्राम्ही	Plantaginaceae	Anti Diabetic
19.	<i>Helicteres isora</i> L.	मुरुड शेंग	Malvaceae	Anti Diabetic
20.	<i>Solanum nigrum</i> L.	डोरली	Solanaceae	Skin Diseases

21.	<i>Strobilanthes callosa</i> Nees.	कारवी	Acanthaceae	Jaundice
22.	<i>Basella alba</i> L.	मायाळू	Basellaceae	Leaf Vegetable
23.	<i>Coleus amboinicus</i> Lour.	पानओवा	Lamiaceae	Gastric Disorders
24.	<i>Sapindus saponaria</i> L.	रिठा	Sapindaceae	Astringent, Soap Nut
25.	<i>Elaeocarpus ganitrus</i> Roxb. ex G.Don	रुद्राक्ष	Elaeocarpaceae	Blood Purifier
26.	<i>Convolvulus</i> <i>prostrates</i> Forsk.	शंखपुष्पी	Convolvulaceae	Brain Tonic
27.	<i>Dalbergia sissoo</i> <u>Roxb.</u>	शिसम	Fabaceae	Molluscicidal, Tooth Brush
28.	<i>Piper longum</i> <u>L.</u>	लेंडी पिंपळी	Piperaceae	Chronic Malaria, Stomachache
29.	<i>Plumbago zeylanica</i> <u>L.</u>	श्वेतचित्रक	Plumbaginaceae	Skin diseases
30.	<i>Premna serratifolia</i> <u>L.</u>	नरवेल	Lamiaceae	Anti-pyretic
31.	<i>Mussaenda frondosa</i> <u>L.</u>	जंगली मुसांडा	Rubiaceae	Tuberculosis, Jaundice
32.	<i>Madhuca longifolia</i> ( <u>J.Konig</u> )	मोहा	Sapotaceae	Tonic, Cough
33.	<i>Carissa carandas</i> <u>L.</u>	करवंद	Apocynaceae	Skin disease
34.	<i>Eclipta prostrata</i> ( <u>L.</u> ) <u>L.</u>	माका	Asteraceae	Cough and Asthma
35.	<i>Wrightia</i> <i>antidysenterica</i>	कुडा	Apocynaceae	Skin disorders



	( <u>L.</u> ) <u>R.Br.</u>			
36.	<i>Alstonia scholaris</i> ( <u>L.</u> ) <u>R.Br.</u>	सातवीण	Apocynaceae	Fevers, Dysentery, Cancer, Malaria
37.	<i>Gymnema sylvestre</i> <u>R.</u> <u>Br.</u>	माडूनाशी	Apocynaceae	Diabetes, Weight loss, Cough
38.	<i>Mammea suriga</i> ( <u>Buch.-</u> <u>Ham. ex Roxb.</u> ) <u>Koster</u> <u>m.</u>	सुरंगी	Calophyllaceae	Dyspepsia and Haemorrhoid
39.	<i>Mentha spicata</i> <u>L.</u>	मिंट	Lamiaceae	Cough, Cold, Asthma, Fever
40.	<i>Crateva nurvala</i> <u>Buch.</u> <u>Ham.</u>	वरुण	Capparaceae	Rheumatic Fever, Gastric irritation
41.	<i>Ziziphus oenoplia</i> ( <u>L.</u> ) <u>Mill.</u>	तोरण	Rhamnaceae	Dysentery
42.	<i>Aristolochia indica</i> <u>L.</u>	सापसन	Aristolochiaceae	Boost the Immune system, Snakebite
43.	<i>Putranjiva roxburghii</i> <u>L.</u>	पुत्रंजिवा	Putranjivaceae	Skin Ailment
44.	<i>Rauvolfia serpentine</i> ( <u>L.</u> ) <u>Benth. ex Kurz</u>	सर्पगंधा	Apocynaceae	High blood pressure, Asthma
45.	<i>Pandanus</i> <i>amaryllifolius</i> <u>Roxb.</u>	केवडा	Pandanaceae	Chest pains, Reduce fevers
46.	<i>Baliospermum</i> <i>montanum</i> <u>L.</u>	दंती	Euphorbiaceae	Purgative, Anthelmentic

47.	<i>Limonia acidissima</i> L.	कवठ	Rutaceae	Tonic for heart and lungs
48.	<i>Withania somnifera</i> (L.) <u>Dunal</u>	अश्वगंधा	Solanaceae	Lower blood pressure
49.	<i>Lagerstroemia speciosa</i> (L.) <u>Pers.</u>	ताम्हण	Lythraceae	Anti - oxidant
50.	<i>Grewia asiatica</i> <u>L.</u>	फालसा	Malvaceae	Treating throat, tuberculosis
51.	<i>Carica papaya</i> L.	पपई	Caricaceae	Increase the count of white blood cells and platelets
52.	<i>Barringtonia acutangula</i> (L.) Gaertn.	समुद्रफळ	Lecythidaceae	Cough, Diarrhea, Fever.
53.	<i>Mesua ferrea</i> L.	नागचाफा	Calophyllaceae	Antiseptic, Anti-inflammatory, Blood purifier
54.	<i>Polypodium qercifolium</i>	बाशिंगी	Polypodiaceae	Skin Ailment
55.	<i>Artemisia vulgaris</i> <u>L.</u> C.B. Clarke <u>Mattf.</u>	सुरबंधी	Asteraceae	<u>Antiparasitic</u>
56.	<i>Abrus precatorius</i> <u>L.</u>	गुंज	Fabaceae	Anti Diabetic
57.	<i>Phyllanthus amarus</i> <u>Schumach.</u>	भुईआवळा	Phyllanthaceae	Gallstones and Kidney stones
58.	<i>Terminalia arjuna</i> Roxb.	अर्जुन	Combretaceae	Antioxidant, Anti-Carcinogenic
59.	<i>Syzygium aromaticum</i>	लवंग	Myrtaceae	Asthma, Bronchitis, Anti -




	( <u>L.</u> ) <u>Merr.</u>			Acidic
60.	<i>Celastrus paniculatus</i> <u>Willd.</u>	मालकांगुणी	Celastraceae	Anti-arthritic, Wound healing
61.	<i>Pterocarpus marsupium</i> <u>Roxburgh</u>	बिबळा	Fabaceae	Antibiotic, Hypoglycaemic
62.	<i>Senegalia catechu</i> (L.f.) P.J.H.Hurter & Mabb.	खैर	Fabaceae	Osteoarthritis
63.	<i>Cordia dichotoma</i> <u>G.Forst.</u>	भोकर	Boraginaceae	Anthelmintic
64.	<i>Erythrina corallodendron</i> L.	पांगारा	Fabaceae	Anti carcinogenic
65.	<i>Bauhinia racemosa</i> L.	आपटा	Fabaceae	Anti-carcinogenic, Anti-inflammatory
66.	<i>Calophyllum inophyllum</i> L.	उंडी	Calophyllaceae	Fish poison
67.	<i>Moringa oleifera</i> <u>Lam.</u>	शेवगा	Moringaceae	Antioxidant
68.	<i>Curcuma amada</i> <u>Roxburgh</u>	आंबेहळद	Zingiberaceae	Antioxidant, Antibacterial
69.	<i>Premna serratofolia</i> L.	अग्निमंथ	Lamiaceae	Anti - Inflammatory
70.	<i>Semecarpus anacardium</i> <u>L.f.</u>	बिब्बा	Anacardiaceae	Digestive disorders
71.	<i>Terminalia bellirica</i> ( <u>Gaertn.</u> ) <u>Roxb.</u>	बेहडा	Combretaceae	Antioxidant (Triphala)
72.	<i>Kaempferia rotunda</i> L.	भुईचाफा	Zingiberaceae	Anti - Inflammatory,

				Analgesic
73.	<i>Myristica fragrans</i> <u>Houtt.</u>	जायफल	Myristicaceae	Antiseptic, Analgesic
74.	<i>Embelia roubusta</i> <u>Burm.f.</u>	आमटी	Primulaceae	Antimicrobial, Antioxidant
75.	<i>Oroxylum indicum</i> (L.) <u>Benth.</u> ex <u>Kurz</u>	ढेटू	Bignoniaceae	Astringent, Tonic, Anti-diarrhoeal
76.	<i>Memecylon</i> <i>umbellatum</i> <u>Burm.f.</u>	अंजन	Melastomataceae	Herpes, Diabetes, Cough
77.	<i>Cinnamomum</i> <i>zeylanicum</i> <u>J.Presl</u>	दालचीनी	Lauraceae	Spice
78.	<i>Cinnamomum tamala</i> <u>Buch.Ham.</u>	तमालपत्र	Lauraceae	Spice
79.	<i>Areca catechu</i> L.	सुपारी	Arecaceae	Mouth Freshener
80.	<i>Hemidesmus indicus</i> (L.) R.Br.	अनंतमूळ	Apocynaceae	Astringent, Blood purifier
81.	<i>Saraca indica</i> L.	सीतेचा अशोक	Fabaceae	Antioxidants, Hematoprotective
82.	<i>Aegle marmelos</i> L.	बेल	Rutaceae	Dysentery, Diabetes
83.	<i>Cissus quadrangularis</i> L.	अस्थी शृंखला	Vitaceae	bone health, Diabetes
84.	<i>Santalum album</i> L.	चंदन	Santalaceae	Anti - Inflammatory,



				Skin diseases
85.	<i>Clerodendrum infortunatum</i> L.	भारंगी	Lamiaceae	Rheumatism, Swelling
86.	<i>Tylophora indica</i> (Burm. f.) Merr.	दमवेल	Apocynaceae	Asthma, Expectorant
87.	<i>Cheilocostus speciosus</i> J.Konig	कोष्ठ	Costaceae	Kidney problems
88.	<i>Desmodium gangeticum</i> (L.) DC.	सालवान	Fabaceae	Febrifuge, Diuretic
89	<i>Embelia ribes</i> Burm.f.	वावडींग	Primulaceae	Anthelmintic
90	<i>Acorus calamus</i> L.	वेखंड	Acoraceae	Antioxidant, Anti-inflammatory
91.	<i>Abelmoschus ficulneus</i> (L.) Wight	रानभेंडी	Malvaceae	Antibacterial
92.	<i>Barleria prionitis</i> L.	पिवळीकरो ति	Acanthaceae	Dental problems and gout
93.	<i>Cassia alata</i> L.	कॅशिआ	Fabaceae	Skin recovery , Stomach infection
94.	<i>Terminalia catappa</i> L.	बदाम	Combretaceae	Antioxidant
95.	<i>Ixora coccinea</i> L.	देव्हारी	Rubiaceae	Skin disease, Fever
96.	<i>Helicteres canescens</i> L.	मुरुडशेंग	Sterculiaceae	Snake bite, Abdominal swelling
97.	<i>Asclepias curassavica</i> L.	हळदीकुंकू	Apocynaceae	Antioxidant

98.	<u>Crotalaria retusa</u> L.	खुळखुळा	Fabaceae	Fever, Lung diseases
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101.	Caryota urens L.	सुरमाड	Areceae	Cool and Nutritious
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103.	Grewia tiliifolia Burrett	धामण	Tiliaceae	Cough, Anti- carcinogenic
104.	Celastrus paniculatus	मालकांगुणी	Celastraceae	Amnesia, Leprosy
105.	Bombax ceiba L.	काटेसावर	Bombacaceae	Dysentery, Haemoptysis
106.	Maranta arundinacea L.	आरारूट	Marantaceae	Skin disorders and Stomachache
107.	Elettaria cardamomum	वेलदोडा	Zingiberaceae	Spice
108.	Actinodaphne quinqueflora	सांधरूख	Lauraceae	Gastrointestinal, Ailments

  
 (Dr. N. A. Kulkarni)  
 HEAD  
 DEPARTMENT OF BOTANY  
 PADMABHUSHAN DR. VASANTRAO DADA PATIL  
 MAHARAJLAYA, TARGAON, DAST BANGULI



“Dissemination of Education for Knowledge, Science, and Culture”  
-Shikshanmaharshi Dr.Bapuji Salunkhe  
Shri Swami Vivekanand Shikshan Sanstha, Kolhapur

Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon

# DEPARTMENT OF BOTANY

REPORT OF

*E-FLORA*

(The Botanical Information of the Standing Trees  
In P.D.V.P. College, Tasgaon Campus)

2019 - 2020

# INTRODUCTION

Diversity in the plants plays an important role in social places. The diversity in the social places like college gives multiple advantages like aesthetic view, recreation, study value, pollution free environment etc. Developing a well grown garden in a college takes many years' pains and labor. The Garden of P.D.V.P. College has composed of well diversified plants which are consisting some of the common and uncommon plants. Some of the plants are full grown and reached up to several feet height. These plants are now giving the shade and recreational places to the students. The present attempt is the enumeration and scientific study of the standing dominant trees of the P.D.V.P. College campus. These plants are also serving as a source of Carbon sequestration for the campus. Till date Twenty Nine different species of trees are recorded during the study. The plant specimens are collected and brought in the laboratory and referred with available literature. Present report gives an idea of present tree flora of P.D.V.P. College campus.

**Courtesy:** 1. "WIKIPEDIA" a free encyclopedia and 2. Flora of Bombay Presidency by T. Cooke (1901). The data is only for academic purpose and not for any commercial purpose.



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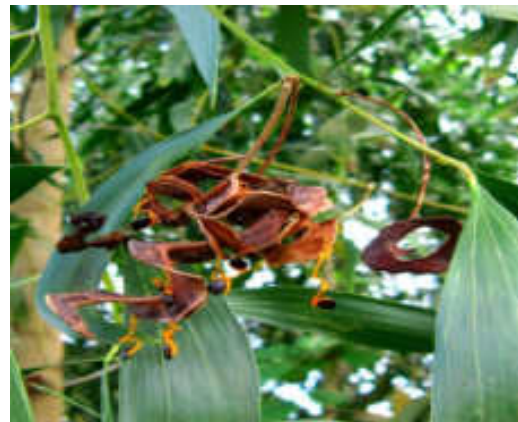
# *Acacia auriculiformis*

Name of the Plant	<i>Acacia auriculiformis</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Fabales
Family:	Fabaceae
Clade:	Mimosoideae
Genus:	<i>Acacia</i>
Species:	<i>A. auriculiformis</i>
<b>Binomial name</b>	<i>Acacia auriculiformis</i> A.Cunn. ex Benth.

*Acacia auriculiformis* (Australia wattle) is another species which is planted in the garden for its attractive shape, foliage and shade. It is a dwarf tree and produce typically spiral legume shaped fruits. *A. cyanophylla* commonly called as Golden acacia, is another handsome species which bears golden flowers. It is also dwarf but possess brittle branches.



*Acacia auriculiformis* Flowers



*Acacia auriculiformis* Fruits

# *Albizia lebeck*

Name of the Plant	<i>Albizia lebeck</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Fabales
Family:	Fabaceae
Clade:	Mimosoideae
Genus:	<i>Albizia</i>
Species:	<i>A. lebeck</i>
<b>Binomial name</b>	<i>Albizia lebeck</i> (L.) Benth.

This is native of Indo-Malaya region and is large quick growing tree. Trunk is tall and colour is greenish yellow white. Leaves are bi-pinnate of light green colour. Tree produces profuse flowers in July-August. Flowers are small heads of yellowish white in colour. It is good tree for roadside plantation and for big parks. It can also be easily propagated by seeds.



*Flowers and Fruits of Albizia lebeck*



# *Bauhinia variegata*

Name of the Plant	<i>Bauhinia variegata</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Fabales
Family:	Fabaceae
Clade:	Mimosoideae
Genus:	<i>Bauhinia</i>
Species:	<i>B. variegata</i>
<b>Binomial name</b>	<i>Bauhinia variegata</i> (L.) Benth.

This is a tall tree producing flowers of rose colored variegated with red and yellow which appear in mid of March. Most ideally suited for planting as specimen or in groups in gardens and big parks and as avenue tree alongside the road.



*Bauhinia  
variegata*  
**Flowers**



*Bauhinia  
variegata*  
**Leaves**



*Bauhinia  
variegata*  
**Fruits**



*Bauhinia  
variegata*  
**Pollens**

# *Casuarina equisetifolia*

Name of the Plant	<i>Casuarina equisetifolia</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Fagales
Family:	Casuarinaceae
Genus:	<i>Bauhinia</i>
Species:	<i>C. equisetifolia</i>
<b>Binomial name</b>	<i>Casuarina equisetifolia</i> L.

It is native of Australia, Burma, Malaya and Pacific Islands and is commonly called as beefwood, Janglisaru, Farash or Jor-Tor on account of cord like leaves which are easily separated at the node and can be temporarily fixed without knowing breaking point. It is a tall, upright, evergreen and fast growing tree.

It has rough bark and spreading branches. Trees are dioecious producing male and female cones separately. Easily propagated through seed. It is tolerant to saline soils. It is planted for screening purpose and can be planted closely and trimmed as tall hedge.



*Casuarina equisetifolia* Trees

*Casuarina equisetifolia* Fruits



# *Cedrela toona*

Name of the Plant	<i>Cedrela toona</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Sapindales
Family:	Meliaceae
Genus:	<i>Cedrela</i>
Species:	<i>C. toona</i>
<b>Binomial name</b>	<i>Toona ciliate</i> M. Roem

It is commonly called the toona or Indian Mahagoni tree and is native of Indo-Malaya region and Australia. It is a large, quick growing tree having shining compound leaves. Flowers are small, white and appear in middle of April. Easily propagated by seeds. It is planted in the garden in groups for shade and also suitable for roadside plantation.



*Cedrela toona* Trees



*Cedrela toona* Flowers

# *Chorisia speciosa*

Name of the Plant	<i>Chorisia speciosa</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Malvales
Family:	Malvaceae
Genus:	<i>Ceiba</i>
Species:	<i>C. speciosa</i>
<b>Binomial name</b>	<i>Ceiba speciosa</i> (A.St.-Hil.) Ravenna

It is native of Mexico and Brazil and commonly called as Mexican Semal. It is an erect tree with well-placed branches. Stem is waxy green with spines. Leaves are palmate in shape, of light green colour. Flowers are pink with creamish white centre which appear in October-November when tree is in leafless condition. It flowers when other trees are not in bloom. It is planted in the garden as specimen.



*Chorisia speciosa* Trees



*Chorisia speciosa* Flowers



# *Delonix regia*

Name of the Plant	<i>Delonix regia</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Fabales
Family:	Fabaceae
Genus:	<i>Delonix</i>
Species:	<i>D. regia</i>
<b>Binomial name</b>	<i>Delonix regia</i> (Boj. ex Hook.) Raf.

It is native of Madagascar and is commonly known as Gulmohar, Peacock or Flamboyant flower. It is a fast growing large tree. Limbs are spreading and form an umbrella. Leaves are compound and leaflets are small with round apices. Showy flowers or orange, red, scarlet to salmon colour are produced in May-June.

Easily propagated through seeds. It is an ideal tree for big parks for beautiful flowers as well as for shade. Under North Indian conditions it starts declining after 10-12 years. It has shallow root system and hence grass does not grow under this tree.



*Delonix regia* Trees



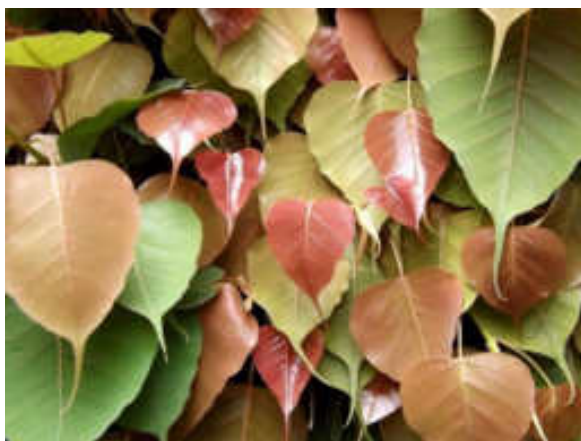
*Delonix regia* Flowers

# *Ficus religiosa*

Name of the Plant	<i>Ficus religiosa</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Rosales
Family:	Moraceae
Genus:	<i>Ficus</i>
Species:	<i>F. religiosa</i>
<b>Binomial name</b>	<i>Ficus religiosa</i> L.

It is commonly called as Pipal or Bodhi tree and native of India. It is associated with three deities of Hindu religion i.e. Brahma, Vishnu and Shiva and also with Lord Buddha; hence, it is considered to be a sacred tree and is worshipped. It is a huge tree with spreading branches.

Leaves are cordate in shape and shining. Flowers are very small hidden in synconium which appear in April-May. Easily propagated through seeds and cuttings. It is commonly planted in villages near ponds for shade and also in big parks. Birds take shelter on this tree, eat fruit and disperse the seeds.



*Ficus religiosa* Leaves



*Ficus religiosa* Fruits



# *Pithecellobium dulce*

Name of the Plant	<i>Pithecellobium dulce</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Fabales
Family:	Fabaceae
Genus:	<i>Pithecellobium</i>
Species:	<i>P. dulce</i>
<b>Binomial name</b>	<i>Pithecellobium dulce</i> (Roxb.) Benth.

It is popularly known as Jangal jalebi due to its curvaceous fruits. It is quick growing evergreen tree having thorns. Leaves are compound and of dark green colour. Flowers are not very showy which appear in the month of March-April and easily propagated through seeds. It is highly suitable for boundary plantation and tall protective hedge.



*Pithecellobium dulce* Trees



*Pithecellobium dulce* fruits

# *Santalum album*

Name of the Plant	<i>Santalum album</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Santalales
Family:	Santalaceae
Genus:	<i>Santalum</i>
Species:	<i>S.album</i>
<b>Binomial name</b>	<i>Santalum album</i> L.

*Santalum album*, or **Indian sandalwood**, is a small tropical tree, and is the most commonly known source of sandalwood. It is native to southern India and Southeast Asia. Certain cultures place great significance on its fragrant and medicinal qualities. It is also considered sacred in some religions and is used in different religious traditions. The plant is widely cultivated and long lived, although harvest is only viable after many years. Etymologically it is derived from Sanskrit *chandanam*.

The height of the evergreen tree is between 4 and 9 metres. The tree is variable in habit, usually upright to sprawling, and may intertwine with other species. The reddish or brown bark can be almost black and is smooth in young trees, becoming cracked with a red reveal. The heartwood is pale green to white as the common name indicates. The leaves are thin, opposite and ovate to lanceolate in shape.



*Flowers of Santalum*



*Fruits of Santalum*



# *Mangifera indica*

Name of the Plant	<i>Mangifera indica</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Sapindales
Family:	Anacardiaceae
Genus:	<i>Mangifera</i>
Species:	<i>M.indica</i>
<b>Binomial name</b>	<i>Mangifera indica</i> L.

*Mangifera indica*, commonly known as mango, is a species of flowering plant in the sumac and poison ivy family Anacardiaceae. It is native to the Indian sub-continent where it is indigenous. Hundreds of cultivated varieties have been introduced to other warm regions of the world. It is a large fruit-tree, capable of growing to a height and crown width of about 30 metres (100 ft) and trunk circumference of more than 3.7 metres (12 ft). Mangiferin(a pharmacologically active hydroxylated xanthone C-glycoside) is extracted from mango. Allergenicurushiols are present in the fruit peel. In Ayurveda, it is used in a Rasayana formula sometimes with other mild sours and shatavari (*Asparagus racemosus*) and guduchi (*Tinospora cordifolia*). In traditional medicine, varied properties are attributed to different parts of the mango tree. The wood is susceptible to damage from fungi and insects. The wood is used for musical instruments such asukuleles, plywood and low-cost furniture.



*Mangifera indica* Flowering



*Mangifera indica* Fruits

# *Ficus racemosa*

Name of the Plant	<i>Ficus racemosa</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Rosales
Family:	Moraceae
Genus:	<i>Ficus</i>
Species:	<i>F. racemosa</i>
<b>Binomial name</b>	<i>Ficus racemosa</i> L.

*Ficus racemosa* (syn. *Ficus glomerata* Roxb.) is a species of plant in the family Moraceae. Popularly known as the **cluster fig tree**, **Indian fig tree** or **goolar (gular) fig**, this is native to Australia, Malesia, Indo-China and the Indian subcontinent. It is unusual in that its figs grow on or close to the tree trunk, termed cauliflory. In India, the tree and its fruit are called *gular* in the north and *atti* in the south. The fruits are a favorite staple of the common Indian monkeys. It serves as a food plant for the caterpillars.

## **Health uses**

The bark of *audumbar (oudumbar)* tree is said to have healing power. In countries like India, the bark is rubbed on a stone with water to make a paste, which can be applied over afflicted by boils or mosquito bites. Allow the paste to dry on the skin and reapply after a few hours.



*Ficus racemosa* Fruits



# *Cocos nucifera*

Name of the Plant	<i>Cocos nucifera</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Monocots
Clade:	<u>Commelinids</u>
Order:	Arecales
Family:	Areaceae
Genus:	<i>Cocos</i> L.
Species:	<i>C. nucifera</i>
<b>Binomial name</b>	<i>Cocos nucifera</i> L.

The **coconut tree** (*Cocos nucifera*) is a member of the palm tree family (Areaceae) and the only known living species of the genus *Cocos*.

Coconuts are known for their versatility of uses, ranging from food to cosmetics. The inner flesh of the mature seed, as well as the coconut milk extracted from it, forms a regular part of the diets of many people in the tropics and sub tropics. Coconuts are distinct from other fruits because their endosperm contains a large quantity of clear liquid, called coconut water or coconut juice.

Mature, ripe coconuts can be used as edible seeds, or processed for oil and plant milk from the flesh, charcoal from the hard shell, and coir from the fibrous husk. Dried coconut flesh is called copra, and the oil and milk derived from it are commonly used in cooking –frying in particular – as well as in soaps and cosmetics. The hard shells, fibrous husks and long pinnate leaves can be used as material to make a variety of products for furnishing and decorating. The coconut also has cultural and religious significance in certain societies, particularly in India, where it is used in Hindu rituals.



***Entire Coconut Tree***



***Coconut Fruits***



# *Eucalyptus globulus*

Name of the Plant	<i>Eucalyptus globulus</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Myrtales
Family:	Myrtaceae
Genus:	<i>Eucalyptus</i>
Species:	<i>E. globulus</i>
<b>Binomial name</b>	<i>Eucalyptus globulus</i> L.

The bark is smooth, fibrous, hard or stringy, leaves with oil glands, and sepals and petals that are fused to form a "cap" or operculum over the stamens. The fruit is a woody capsule commonly referred to as a "gumnut".

The wood of the trees can be used as ornament, timber, firewood and pulpwood. Eucalyptus wood is also used in a number of industries, from fence posts and charcoal to cellulose extraction for biofuels. Fast growth also makes eucalypts suitable as wind breaks and to reduce erosion. It is the most common source for pulp wood to make pulp. Eucalyptus oil is readily steam distilled from the leaves and can be used for cleaning and as an industrial solvent, as an antiseptic, for deodorizing, and in very small quantities in food supplements, especially sweets, cough drops, tooth paste and decongestants. It has insect repellent properties, and is an active ingredient in some commercial mosquito repellents. Eucalyptus globulus is the principal source of eucalyptus oil worldwide.



*Flowers of Eucalyptus*



*Fruits of Eucalyptus*

# *Grevillea robusta*

Name of the Plant	<i>Grevillea robusta</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Myrtales
Family:	Myrtaceae
Genus:	<i>Grevillea</i>
Species:	<i>G. robusta</i>
<b>Binomial name</b>	<i>Grevillea robusta</i> A.Cunn. ex R.Br.

*Grevillea robusta*, commonly known as silver oak or Australian silver oak, is a flowering plant in the family Proteaceae. It is a fast-growing evergreen tree with a single main trunk, growing to 5–40 m tall. The bark is dark grey and furrowed. Its leaves are fern-like, 10–34 cm long, 9–15 cm wide and divided with between 11 and 31 main lobes. The flowers are arranged in one-sided, "toothbrush"-like groups, sometimes branched, 12–15 cm long. The carpel (the female part) of each flower has a stalk 21–28 mm long. The flowers are glabrous and mostly yellowish orange, or sometimes reddish. Flowering occurs from September to November and the fruit that follows is a glabrous follicle. The timber of the plant was widely used for external window joinery, as it is resistant to wood rot. It has been used in the manufacture of furniture, cabinetry, and fences.



*Grevillea leaves*



*Grevillea fruits*



# *Hyophorbe lagenicaulis*

Name of the Plant	<i>Hyophorbe lagenicaulis</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Monocots
Clade:	<u>Commelinids</u>
Order:	Arecales
Family:	Areaceae
Genus:	<i>Hyophorbe</i>
Species:	<i>H. lagenicaulis</i>
<b>Binomial name</b>	<i>Hyophorbe lagenicaulis</i> (L.H.Bailey) H.E.Moore

Bottle palm has a large swollen (sometimes bizarrely so) trunk. Bottle palms have only four to six leaves open at any time. The leaves of young palms have a red or orange tint, but a deep green at maturity. The flowers of the palm arise from under the crown shaft. Its inflorescence branches in 4 orders, and its 2.5 cm fruits can be orange or black. The trunk of species becomes more and more slender at older ages. Bottle palms are very cold sensitive and are killed at 0 °C (32 °F) or colder for any appreciable length of time. They may survive a brief, light frost, but will have foliage damage.



***Bottle palm trees***

# *Azadirachta indica*

Name of the Plant	<i>Azadirachta indica</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Sapindales
Family:	Meliaceae
Genus:	<i>Azadirachta</i>
Species:	<i>A. indica</i>
<b>Binomial name</b>	<i>Azadirachta indica</i> A.Juss. (Neem)

*Azadirachta indica*, commonly known as neem, nim tree or Indian lilac. Neem is a fast-growing tree that can reach a height of 15–20 metres. It is evergreen, but in severe drought it may shed most or nearly all of its leaves. The branches are wide and spreading. The fairly dense crown is roundish and may reach a diameter of 20–25 metres. The opposite, pinnate leaves are 20–40 centimetres long, with 20 to 30 medium to dark green leaflets. The terminal leaflet often is missing. The petioles are short. The (white and fragrant) flowers are arranged in more-or-less drooping axillary panicles. The fruit is a smooth (glabrous), olive-like drupe which varies in shape from elongate oval to nearly roundish. The fruit skin (exocarp) is thin and the bitter-sweet pulp (mesocarp) is yellowish-white and very fibrous. Neem leaves are dried in India and placed in cupboards to prevent insects eating the clothes, and also in tins where rice is stored. Neem products are believed by Siddha and Ayurvedic practitioners to be anthelmintic, antifungal, antidiabetic, antibacterial, antiviral, contraceptive, and sedative. It is particularly prescribed for skin diseases. Neem oil is also used for healthy hair, to improve liver function, detoxify the blood, and balance blood sugar levels. Neem leaves have also been used to treat skin diseases like eczema, psoriasis, etc.



Insufficient research has been done to assess the purported benefits of neem, however. In adults, short-term use of neem is safe, while long-term use may harm the kidneys or liver; in small children, neem oil is toxic and can lead to death. Neem may also cause miscarriages, infertility, and low blood sugar.



***Flowers of Azadirachta indica***



***Fruits of Azadirachta indica***

# *Mimusops elengi*

Name of the Plant	<i>Mimusops elengi</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Asterids
Order:	Ericales
Family:	Sapotaceae
Genus:	<i>Mimusops</i>
Species:	<i>M. elengi</i>
<b>Binomial name</b>	<i>Mimusops elengi</i> L.

*Mimusops elengi* is a medium-sized evergreen tree found in tropical forests. Its timber is valuable, the fruit is edible, and it is used in traditional medicine. As the trees give thick shade and flowers emit fragrance, it is a prized collection of gardens. Bullet wood is an evergreen tree reaching a height of about 16 m . It flowers in April, and fruiting occurs in June. Leaves are glossy, dark green, oval-shaped. Flowers are cream, hairy, and scented. Bark is thick and appears dark brownish black or grayish black in colour. The tree may reach up to a height of 9–18 m with about 1 m circumference. The bark, flowers, fruits, and seeds of *Bakula* are used in Ayurvedic medicine in which it is used as astringent, cooling, anthelmintic, tonic, and febrifuge. It is mainly used for dental ailments such as bleeding gums, pyorrhea, dental caries, and loose teeth.



*Flowers and Fruits of Mimusops elengi*



# *Plumeria alba*

Name of the Plant	<i>Plumeria alba</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Asterids
Order:	Gentianales
Family:	Apocynaceae
Genus:	<i>Plumeria</i>
Species:	<i>P. alba</i>
<b>Binomial name</b>	<i>Plumeria alba</i> L.

*Plumeria* flowers are most fragrant at night in order to lure sphinx moths to pollinate them. *Plumeria* species may be propagated easily by cutting leafless stem tips in spring. Cuttings are allowed to dry at the base before planting in well-drained soil. *Plumeria* cuttings could also be propagated by grafting a cutting to an already rooted system. *Plumeria* species have a milky latex that, like many other Apocynaceae contains poisonous compounds that irritate the eyes and skin. The various species differ in their leaf shape and arrangement. The leaves of *Plumeria alba* are narrow and corrugated, whereas leaves of *Plumeria pudica* have an elongated shape and glossy, dark-green color. *Plumeria pudica* is one of the ever blooming types with non-deciduous, evergreen leaves.



***Plumeria alba* Tree**



***Plumeria alba* Flowers**

# *Terminalia catappa*

Name of the Plant	<i>Terminalia catappa</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Myrtales
Family:	Combretaceae
Genus:	<i>Terminalia</i>
Species:	<i>T. catappa</i>
<b>Binomial name</b>	<i>Terminalia catappa</i> L.

The tree grows to 35 m tall, with an upright, symmetrical crown and horizontal branches. *Terminalia catappa* has corky, light fruit that are dispersed by water. The seed within the fruit is edible when fully ripe, tasting almost like almond. As the tree gets older, its crown becomes more flattened to form a spreading, vase shape. Its branches are distinctively arranged in tiers. The leaves are large, 15–25 cm long and 10–14 cm broad, ovoid, glossy dark green, and leathery. The trees are monoecious, with distinct male and female flowers on the same tree. Both are 1 cm in diameter, white to greenish. The fruit is a drupe 5–7 cm long and 3–5.5 cm broad. It is widely grown as an ornamental tree. The fruit is edible, tasting slightly acidic. The wood is red and solid, and has high water resistance. The leaves contain several flavonoids such as kaempferol or quercetin, several tannins such as punicalin, punicalagin or tercatin, saponines and phytosterols. Due to this chemical richness, the leaves (and the bark) are used in different herbal medicines for various purposes.





*Flowers of Terminalia catappa*



*Fruits of Terminalia catappa*

# *Alstonia scholaris*

Name of the Plant	<i>Alstonia scholaris</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Asterids
Order:	Gentianales
Family:	Apocynaceae
Genus:	<i>Alstonia</i>
Species:	<i>A. scholaris</i>
<b>Binomial name</b>	<i>Alstonia scholaris</i> (L.) R.Br.

*Alstonia scholaris* is a glabrous tree and grows up to 40 m tall. Its mature bark is grayish and its young branches are copiously marked with lenticels. The upper side of the leaves are glossy, while the underside is greyish. Leaves occur in whorls of three to ten; petioles are 1–3 cm. The leathery leaves are narrowly obovate to very narrowly spatulate, base cuneate, apex usually rounded. Cymes are dense and pubescent. Pedicels are usually as long as or shorter than calyx. The corolla is white and tube-like, 6–10 mm, lobes are broadly ovate or broadly obovate, 2–4.5 mm, overlapping to the left. The ovaries are distinct and pubescent. The follicles are distinct and linear.

Flowers bloom in the month October. The flowers are very fragrant. Seeds of *A. scholaris* are oblong, with ciliated margins, and ends with tufts of hairs 1.5–2 cm. The bark is almost odorless and very bitter, with abundant bitter and milky sap. The wood of *Alstonia scholaris* has been recommended for the manufacture of pencils, as it is suitable in nature and the tree grows rapidly and is easy to cultivate. At one time, decoctions of the leaves were used for beriberi. The bark contains the alkaloids ditamine, echitenine, echitamine and strictamine.





*Alstonia scholaris* Flowers



*Alstonia scholaris* Fruits

# *Neolamarckia cadamba*

## *(Anthocephalus cadamba)*

Name of the Plant	<i>Neolamarckia cadamba</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Asterids
Order:	Gentianales
Family:	Rubiaceae
Genus:	<i>Neolamarckia</i>
Species:	<i>N. cadamba</i>
<b>Binomial name</b>	<i>Neolamarckia cadamba</i> (Roxb.) Bosser

A fully mature kadam tree can reach up to 45 m in height. It is a large tree with a broad crown and straight cylindrical bole. It is quick growing, with broad spreading branches and grows rapidly in the first 6–8 years. The trunk has a diameter of 100–160 cm, but typically less than that. Leaves are 13–32 cm long. Flowering usually begins when the tree is 4–5 years old. Kadam flowers are sweetly fragrant, red to orange in colour, occurring in dense, globular heads of approximately 5.5 cm diameter. The fruit of *N. cadamba* occur in small, fleshy capsules packed closely together to form a fleshy yellow-orange infructescence containing approximately 8000 seeds. On maturing, the fruit splits apart, releasing the seeds, which are then dispersed by wind or rain. Stamens 5, inserted on the corolla tube, filaments short, anthers basifixed. Ovary inferior, bi-locular, sometimes 4-locular in the upper part, style exserted and a spindle-shaped stigma. Fruitlets numerous with their upper parts containing 4 hollow or solid structures. Seed trigonal or irregularly shaped. The sapwood is white with a light yellow tinge becoming creamy yellow on exposure and is not clearly differentiated from the heartwood. The fruit and inflorescences are reportedly edible by humans. The fresh leaves are fed to cattle. *N. lamarckia* is grown as an ornamental, and for low-grade timber and paper. The timber is used for plywood, light construction, pulp and paper, boxes and crates, dug-out canoes, and furniture components. Kadamba yields a pulp of satisfactory brightness and



performance as a hand sheet. The wood can be easily impregnated with synthetic resins to increase its density and compressive strength. The wood has a density of 290–560 kg/cu m at 15% moisture content, a fine to medium texture; straight grain; low luster and has no characteristic odor or taste. It is easy to work, with hand and machine tools, cuts cleanly, gives a very good surface and is easy to nail. The timber air dries rapidly with little or no degrade. Kadamba wood is very easy to preserve using either open tank or pressure-vacuum systems. Kadamba is one of the most frequently planted trees in the tropics. The tree is grown along avenues, roadsides and villages for shade. Kadamba are suitable for reforestation programs. It sheds large amounts of leaf and non-leaf litter which on decomposition improves some physical and chemical properties of soil under its canopy. This reflects an increase in the level of soil organic carbon, cation-exchange capacity, available plant nutrients and exchangeable bases. A yellow dye is obtained from the root bark. Kadamba flowers are an important raw material in the production of 'attar', which is Indian perfume with sandalwood (*Santalum* spp.) base in which one of the essences is absorbed through hydro-distillation. An extract of the leaves serves as a mouth gargle. The leaf extract has recently been used to produce silver nanoparticles for surface-enhanced Raman spectroscopy.



***Neolamarckia cadamba* Tree**



***Neolamarckia cadamba* Fruits**

## *Cycas revoluta*

Name of the Plant	<i>Cycus revoluta</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
<i>Clade</i> :	Tracheophytes
Division	Gymnosperms
<i>Class</i>	Cycadopsida
Order:	Cycadales
Family:	Cycadaceae
Genus:	<i>Cycus</i>
Species:	<i>C. revoluta</i>
<b>Binomial name</b>	<i>Cycus revoluta</i> Thunb.

This very symmetrical plant supports a crown of shiny, dark green leaves on a thick shaggy trunk that is typically about 20 cm in diameter, sometimes wider. The trunk is very low to subterranean in young plants, but lengthens above ground with age. It can grow into very old specimens with 6–7 m of trunk; however, the plant is very slow-growing and requires about 50–100 years to achieve this height. Trunks can branch several times, thus producing multiple heads of leaves. The leaves are a deep semi glossy green and about 50–150 cm long when the plants are of a reproductive age. They grow out into a feather-like rosette to 1 m in diameter. The crowded, stiff, narrow leaflets are 8–18 cm long and have strongly recurved or revolute edges. The basal leaflets become more like spines. The petiole or stems of the sago cycad are 6–10 cm (2.4–3.9 in) long and have small protective barbs. Roots are called *coralloid* with an *Anabaena* symbiosis allowing nitrogen fixation. Tannins-rich cells are found on either side of the algal layer to resist the algal invasion. As with other cycads, it is dioecious, with the males bearing pollen cones (strobilus) and the females bearing groups of megasporophylls. Pollination can be done naturally by insects or artificially. Propagation of *Cycas revoluta* is either by seed or clonally by removal of basal offsets. The pith contains edible starch, and is used for making sago. Before use, the starch must be carefully washed to leach out toxins contained in the pith. Extracting edible starch from the sago cycad requires special care due to the poisonous nature of cycads. Cycad sago is used for many of the same purposes as palm sago. Sago is extracted from the



sago cycad by cutting the pith from the stem, root and seeds of the cycads, grinding the pith to a coarse flour and then washing it carefully and repeatedly to leach out the natural toxins. The starchy residue is then dried and cooked, producing a starch similar to palm sago/sabudana. The cycad seed contains cycasin toxin and should not be eaten as it is possible for cycasin toxin to survive the most vigorous of repeated washings. Cycasin toxin can cause ALS, Parkinson's, prostate cancer and fibrolamellar hepatocellular carcinoma.

The hydro-alcoholic extract of leaves of *C. revoluta* shows the presence of alkaloids, steroids and tannins while the chloroform extract shows the presence of saponins, tannins and sugars.<sup>[10]</sup> Leaflets also contain biflavonoids. Estragole is the primary volatile compound emitted from the male and female cones of *C. revolute*



***Cycas revolute Plant***



***Cycas revolute Male Cones***

# *Syzygium cumini*

Name of the Plant	<i>Syzygium cumini</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Myrtales
Family:	Myrtaceae
Genus:	<i>Syzygium</i>
Species:	<i>S. cumini</i>
<b>Binomial name</b>	<i>Syzygium cumini</i> L.

A slow growing species, it can reach heights of up to 30 m and can live more than 100 years. Its dense foliage provides shade and is grown just for its ornamental value. At the base of the tree, the bark is rough and dark grey, becoming lighter grey and smoother higher up. The wood is water resistant. Because of this it is used in railway sleepers and to install motors in wells. It is sometimes used to make cheap furniture and village dwellings though it is relatively hard to work on. The leaves which have an aroma similar to turpentine, are pinkish when young, changing to a leathery, glossy dark green with a yellow midrib as they mature. The leaves are used as food for livestock, as they have good nutritional value. Dried leaves are also used to make (native) cigarettes by wrapping them around a small piece of tobacco leaf. *Syzygium cumini* trees start flowering from March to April. The flowers are fragrant and small, about 5 mm in diameter. The fruits develop by May or June and resemble large berries; the fruit of *Syzygium* species is described as "drupaceous". The fruit is oblong, ovoid. Unripe fruit looks green. As it matures, its color changes to pink, then to shining crimson red and finally to black color. A variant of the tree produces white coloured fruit. The fruit has a combination of sweet, mildly sour and astringent flavour and tends to colour the tongue purple.



The seed of the fruit is used in various alternative healing systems like Ayurveda, Unani and Chinese medicine. The extract of the fruit and seeds are found be effective against hyperglycemia in diabetic rats. Wine and vinegar are also made from the fruit. It has a high source in vitamin A and vitamin C.



*Syzygium cumini* Flowers



*Syzygium cumini* Fruits

# *Millingtonia hortensis*

Name of the Plant	<i>Millingtonia hortensis</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Asterids
Order:	Lamiales
Family:	Bignoniaceae
Genus:	<i>Millingtonia</i>
Species:	<i>M. hortensis</i>
<b>Binomial name</b>	<i>Millingtonia hortensis</i> L.F.

The tree grows to height of between 18 and 25 meters and has a spread of 7 to 11 metres. It reaches maturity between 6 and 8 years of age and lives for up to 40 years. It is a versatile tree which can grow in various soil types and climates with a preference for moist climates.

The tree is evergreen and has an elongated pyramidal stem. The soft, yellowish-white wood is brittle and can break under strong gusts of wind.

The leaf is imparipinnate. The white flowers come as large panicles which emit a pleasant fragrance. They are bisexual and zygomorphic. The bell-shaped sepals of the flower have five small lobes. The flower has four stamens with parallel anthers unlike in most other plants of this family where the anthers are divergent. The corolla is a long tube with five lobes

The fruit is a smooth flat capsule and is partitioned into two. It contains broad-winged seeds. The fruits are fed on by birds which aid in seed dispersal. In cultivation, the viability of seeds is low unless they are sown immediately after the fruit ripens, so the plant is generally propagated through cuttings.

The tree is considered ornamental and the pleasant fragrance of the flowers renders it ideal as a garden tree. The wood is also used as timber and the bark is used as an inferior substitute for cork. The leaves are also used as a cheap substitute for tobacco in cigarettes.





***Millingtonia hortensis* Flowers**



***Millingtonia hortensis* Fruits**

# *Muntingia calabura*

Name of the Plant	<i>Muntingia calabura</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Malvales
Family:	Muntingiaceae
Genus:	<i>Muntingia</i>
Species:	<i>M. calabura</i>
<b>Binomial name</b>	<i>Muntingia calabura</i> L.

*Muntingia* is a genus of plants in the family Muntingiaceae, comprising only one species, *Muntingia calabura*. In Kerala it is seen in the areas adjacent to the Western Ghat. Usually it serves as a shade plant. The edible fruit ripens during November to January and is said to help diabetic patients. A small reduction was recorded in patients' blood sugar levels after consumption. A popular belief is that this tree leads to prosperity. 'Kattilanthen' is the colloquial name which means 'wild cherry'. It is also known as "Company Pazham". The tree is quite common in the dry land and planted for its shade along highways.

*Muntingia calabura* is a shrub or tree up to 12 m tall with spreading branches. The leaves are alternate, distichous, oblong or lanceolate, 4–15 cm long and 1–6 cm wide, with toothed margin and covered in short hairs. The flowers are small (up to 3 cm wide), solitary or in inflorescences of two or three flowers, with five lanceolate sepals, hairy, five obovate white petals, many stamens with yellow anthers, and a smooth ovoid ovary. Fruit, an edible berry, is red at maturity, about 1.5 cm wide.





***Muntingia calabura* Flowers**



***Muntingia calabura* Fruits**

# *Polyalthia longifolia*

Name of the Plant	<i>Polyalthia longifolia</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Magnolids
Order:	Magnoliales
Family:	Annonaceae
Genus:	<i>Polyalthia</i>
Species:	<i>P. longifolia</i>
<b>Binomial name</b>	<i>Polyalthia longifolia</i> Sonn.

Large straight growing trees Found natively in India. It is introduced in gardens in many tropical countries around the world. Fresh leaves are a coppery brown color and are soft and delicate to touch, as the leaves grow older the color becomes a light green and finally a dark green. The leaves are shaped like a lance and have wavy edges. The leaves are larval food plant of the tailed jay and the kite swallowtail butterflies.

In spring the tree is covered with delicate star-like pale green flowers. The flowers last for a short period, usually two to three weeks, are not conspicuous due to their color.

Fruit is borne in clusters of 10-20, initially green but turning purple or black when ripe. The leaves are used for ornamental decoration during festivals. The tree is a main attraction in gardens throughout India. The tree can be cut into various shapes and maintained in required sizes. In past, the flexible, straight and light-weight trunks were used in the making of masts for sailing ships. That is why the tree is also known as the Mast Tree. Today, the tree is mostly used for manufacturing small articles such as pencils, boxes, matchsticks, etc. The oil of the seed has been confirmed to possess anti-oxidant, anti-lipoxygenase and antimicrobial.

Methanolic extracts of *Polyalthia longifolia* have yielded 20 known and two new organic compounds, some of which show cytotoxic properties. The fatty acid composition of the seed has also been reported.





***Polyalthia longifolia* Trees**



***Polyalthia longifolia* Flowers**



***Polyalthia longifolia* fruits**

# *Millettia pinnata*

## *(Pongamia pinnata)*

Name of the Plant	<i>Millettia pinnata</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Fabales
Family:	Fabaceae
Genus:	<i>Millettia</i>
Species:	<i>M. pinnata</i>
<b>Binomial name</b>	<i>Millettia pinnata</i> L.(Panigrahi)

*Millettia pinnata* is a legume tree that grows to about 15–25 metres in height with a large canopy which spreads equally wide. It may be deciduous for short periods. It has a straight or crooked trunk, 50–80 centimetres in diameter, with grey-brown bark which is smooth or vertically fissured. Branches are glabrous with pale stipulate scars. The imparipinnate leaves of the tree alternate and are short-stalked, rounded or cuneate at the base, ovate or oblong along the length, obtuse-acuminate at the apex, and not toothed on the edges. They are a soft, shiny burgundy when young and mature to a glossy, deep green as the season progresses with prominent veins underneath.

Flowering generally starts after 3–4 years with small clusters of white, purple, and pink flowers blossoming throughout the year. The raceme-like inflorescence bear two to four flowers which are strongly fragrant and grow to be 15–18 millimetres long. The calyx of the flowers is bell-shaped and truncate, while the corolla is a rounded ovate shape with basal auricles and often with a central blotch of green color. Croppings of indehiscent pods can occur by 4–6 years. The brown seed pods appear immediately after flowering and mature in 10 to 11 months. The pods are thick-walled, smooth, somewhat flattened and elliptical, but slightly curved with a short, curved point. The pods contain within them one or two bean-like brownish-red seeds, but



because they do not split open naturally the pods need to decompose before the seeds can germinate. The seeds are about 1.5–2.5 centimeters long with a brittle, oily coat and are unpalatable to herbivores.

The tree is well suited to intense heat and sunlight and its dense network of lateral roots and its thick, long taproot make it drought-tolerant. The dense shade it provides slows the evaporation of surface water and its root nodules promote nitrogen fixation. *Millettia pinnata* is well-adapted to arid zones and has many traditional uses. It is often used for landscaping purposes as a windbreak or for shade due to the large canopy and showy fragrant flowers. The flowers are used by gardeners as compost for plants requiring rich nutrients. The bark can be used to make twine or rope and it also yields a black gum that has historically been used to treat wounds caused by poisonous fish. The wood is said to be beautifully grained but splits easily when sawn thus relegating it to firewood, posts, and tool handles.

While the oil and residue of the plant are toxic and will induce nausea and vomiting if ingested, the fruits and sprouts, along with the seeds, are used in many traditional remedies. Juices from the plant, as well as the oil, are antiseptic and resistant to pests. In addition *M. pinnata* has the rare property of producing seeds of 25–40% lipid content of which nearly half is oleic acid. Oil made from the seeds, known as pongamia oil, is an important asset of this tree and has been used as lamp oil, in soap making, and as a lubricant for thousands of years. The oil has a high content of triglycerides, and its disagreeable taste and odor are due to bitter flavonoid constituents including karanjin, pongamol, tannin and karanjachromene. It can be grown in rainwater harvesting ponds up to 6 m in water depth without losing its greenery and remaining useful for biodiesel production.

The residue of oil extraction, called press cake, is used as a fertilizer and as animal feed for ruminants and poultry.

Long used as shade tree, *M. pinnata* is heavily self-seeding and can spread lateral roots up to 30 ft. over its lifetime. If not managed carefully it can quickly become a weed. However this dense network of lateral roots makes this tree ideal for controlling soil erosion and binding sand dunes.



*Millettia pinnata* Flowers



*Millettia pinnata* Fruits



# *Thespesia populnea*

Name of the Plant	<i>Thespesia populnea</i>
<b>Scientific classification</b>	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Malvales
Family:	Malvaceae
Genus:	<i>Thespesia</i>
Species:	<i>T. populnea</i>
<b>Binomial name</b>	<i>Thespesia populnea</i> L.(Sol)

The *Thespesia* tree reaches a height of 6–10 m tall and its trunk can measure up to 20–30 cm in diameter. It grows at elevations from sea level to 275 m in areas that receive 500–1,600 mm of annual rainfall. The *Portia* tree is able to grow in the wide range of soil types that may be present in coastal environments, including soils derived from quartz (sand), limestone, and basalt; it favours neutral soils (pH of 6–7.4). Pollens are approximately 70 microns in size. The heartwood of the *Portia* tree is dark reddish brown to chocolate brown.



*Thespesia populnea* Flowers



*Thespesia populnea* Fruits



*Dissemination of Education through Knowledge, Science and Culture”*

*- Shikshanmaharshi Dr. Bapuji Salunkhe*



**Shri Swami Vivekanand Shikshan Sanstha Kolhapur's**

**PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON,  
DIST- SANGLI**

**Pin Code - 416 312 (Maharashtra)**

**Phone No: (02346) 250665**

**(Affiliated to Shivaji University, Kolhapur)**

**Report On**

**“NO VEHICLE DAY”**

**Organized by**

**INTERNAL QUALITY ASSURANCE CELL**



<b>Event:</b>	<b>NO VEHICLE DAY</b>
Organizing Department	IQAC
Date	Last Saturday of Every Month- 2018
Venue	College Campus
Total Participants	All Stakeholders

ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार'- शिक्षण महर्षी डॉ. बापुजी साळुंखे  
श्री स्वामी विवेकानंद शिक्षण संस्था ,कोल्हापूर ,संचालित  
पद्मभूषण डॉ. वसंतदादा पाटील महाविद्यालय,तासगाव जि. सांगली

## NO VEHICLE DAY

दि. 20/06/2018

### सूचना

महाविद्यालयातील सर्व विद्यार्थी ,शिक्षक व शिक्षकेतर सेवकांना सूचित करण्यात येते की ,जून 2018 पासून महाविद्यालयात "नो व्हेईकल डे" प्रत्येक महिन्याच्या शेवटच्या शनिवारी आयोजित करण्यात येणार आहे. तरी सर्वांनी महाविद्यालयात येताना सदर दिवशी सार्वजनिक वाहनांचा वापर करावा व "नो व्हेईकल डे" साठी सहकार्य करावे.

सदरचे आयोजन पर्यावरण संवर्धनासाठी महाविद्यालयाने उघडलेले पाऊल आहे.



प्राचार्य,

पद्मभूषण डॉ. वसंतदादा पाटील  
महाविद्यालय, तासगाव, जि. सांगली.(O.S)

## No -Vehicle Day Digital Board Display Inauguration Programme



**Prin.Dr. Milind Hujare With IQAC Chairman Prof. (Dr.) S. S. Patil**

### **Introduction:**

Shri Swami Vivekanand Shikshan Sanstha Kolhapur's President Shikshanmaharshi Dr. Bapuji Salunkhe started Padmabhusan Dr. Vasantrodada Patil Mahavidyalaya, Tasgaon on June 1962 at Tasgaon Tahsil in Sangli District. According to the quote of Shikshanmaharshi Dr. Bapuji ***“Dissemination of Education through Knowledge, Science and Culture”*** he started schools and colleges in villages of Maharashtra state. Today Shri Swami Vivekanand Shikshan Sanstha spreads about 7 districts of Maharashtra State and 403 branches. In Sanstha about 4 to 5 lakhs students are studying and about 8000 to 9000



teaching and non-teaching staff are working today. Our college always involved in Social activities in large scale and providing the knowledge of socio-economic values.

Our college located in Rural area of Tasgaon Tahsil. In our college about 4000 student are studying in UG to PG section and about 170 teaching and non-teaching staff are present. Most of the students and staff coming from villages by common buses, two wheelers as well car. We are start our college campus pollution free and campus goes to green under the guidance of Prin. Dr. R. R. Kumbhar. Our Principal call the meeting on the month of June 2018 on discussion on No Vehicle Day. During this meeting all students and teaching staff are accepted the rules and regulation of **“No - Vehicle Day”**.

During this meeting Principal talks on benefits of **“No - Vehicle Day”** on the environment, Social life, and Health and Socio economic importance of Nation. All these suggestions and benefits are accepted by students and staff of our college.

Principal released notice to all students, faculties and non teaching staff of college on 20/06/2018. During meeting finalized last Saturday of every month is **“No Vehicle Day”** of campus. All the students, faculties and non teaching staff of college are accepted for Future Safe, clean Environment and Sound Free Zone.

In our College 64 staff coming by Motor Cycle, 17 staff by Own car, 2 by Bicycle, 47 staff by Public Transport and remaining are by walk. Most of the students are coming by Public transport.

**“No Vehicle Day”** was declared on last Saturday of every Month. Last Saturday of every month considered as a **“No Vehicle Day”**.

**Before No – Vehicle Day**



**Motor Cycle - Main Campus Road Parking Place For Students**



**Car & Motor Cycle Parking Place of Staff**



SHOT ON OPPO



SHOT ON OPPO

**After No-Vehicle Day**



SHOT ON OPPO



SHOT ON OPPO

**No Vehicle Day Place – Main Campus Road**

**No Vehicle Day – Main Car Parking Place**

**On the Day of “No-Vehicle Day”**





**Staff and Students coming with By cycle**



**Staff and Students coming with By cycle**



**Student are entering in College by Walk**



**Students entering in College Campus by walk & By cycle**



**Free Car Campus**



**Free Campus – Motor Cycle Parking Place**

## Output of "No -Vehicle Day"

1. No Vehicle Day helps to avoid air pollution and sound pollution.
2. It also helps to save the excess burning of fossil fuels.
3. It also protects nature from high temperature and minimum release of polluting gases.
4. It also responsible for increase the income of public transport.
5. It saves the consumption petrol and diesel of Nation.
6. It protects environment from air pollution.
7. It maintains free sound pollution and clean College campus.
8. Each staff and student involved in protection of Earth from air pollution.

Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
1	Dr. M. L. Patil	Principal				✓		01	[Signature]
2	Prof. (Dr.) Suresh S. Patil	Professor			✓			02	[Signature]
3	Dr. Prasadkumar B. Tati	Asst. Prof.					✓	75 km	[Signature]
4	Mr. Anand Shrivastava	Charke		✓				04 km	[Signature]
5	Dr. Kulkarni Renuka Jayanti	Asst. Prof.		✓				2 km	[Signature]
6	Dr. Laxman B. Patil	Asst. Prof.			✓			3 km	[Signature]
7	Shri. Vinod A. Kumbhar	Jr. Clerk			✓			20 km	[Signature]
8	Shri. Sanjay R. Kule	Lab Att.			✓			3 km	[Signature]
9	Shri. Kishor B. Shaikh	Jr. Clerk			✓			1 km	[Signature]
10	Shri. Salunke Surekh R.	Jr. Clerk			✓			25 km	[Signature]
11	Shri. Shrivastava Pradip S.	Asst.			✓			25 km	[Signature]
12	Shri. P. S. Shivaji D.	Jr. Clerk			✓			12 km	[Signature]
13	Shri. K. S. Mahesh K.	Lab Att.			✓			4 km	[Signature]
14	Dr. Kulkarni S. A.	Professor					✓	75 km	[Signature]
15	Miss. G. S. C. S.	Asst. Prof.					✓	5 km	[Signature]
16	Miss. Kusarkar S. P.	Asst. Prof.			✓			6 km	[Signature]
17	Dr. S. K. Khade S. K.	Asst. Professor				✓		24 km	[Signature]
18	Dr. N. A. Kulkarni	Professor					✓	24 km	[Signature]



Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
19	Dr. A. N. Ambhore	Asst. Prof.				✓		24 km	
20	Prof. D. V. Patil	Jr. Lecturer					✓	60 km	
21	Patil A. V.	Asst. Teacher			✓			15 km	
22	Shri. Kadam C. B.	Lab. Asst.					✓	90 km	
23	Jagtap S. M.	Pr. Asst.			✓			92 km	
24	Ganeshwade A. R.	Jr. Lecturer	✓					1.5 km	
25	Shri. Lohar Vijay R.	Lab. Attnd	✓					25 km	
26	Shri. Smart Jagdish G.	Lab. Attnd			✓			0.5 km	
27	Shri. Kogarkar. B. S. Khurde	Lib. Attnd			✓			50 km	
28	Dr. Pawan Hanuman Shing	Lab. Attnd					✓	20 km	
29	Dr. Sathya Ashok Patil	Jr. Lecturer					✓	25 km	
30	Mali Sanjay Vitthal	Jr. Lecturer			✓			27 km	
31	Prof. Subhash Jitendra	Jr. Lecturer			✓			10 km	
32	Shri. Pail Nishali Ashok	Sr. Lec.	✓					1 km	
33	Shri. Pail Sumera B.	Jr. Lec.			✓			1 km	
34	Shri. Hibare V. A.	Jr. Lec.	✓					1 km	
35	Shri. Patil A. N.	Asst. Teacher			✓			05 km	
36	Yadav P. S. D. H.				✓			27 km	
37	Dr. A. S. Kumbhar	Asst. Prof.					✓	39 km	

Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
38	Miss Rajmane A. S.	Asst. Prof.					✓	15 km	
39	Miss V. V. Patil (T)	Asst. Prof.					✓	2 km	
40	Mahadev A. Sapkal	Lab. Att.			✓			2 km	
41	Ambhore S. S.	Lab. Asst.			✓			16 km	
42	Suryawanshi M. M.	Asst. Prof.			✓			3 km	
43	Patil S. S.	Asst. Prof.			✓			10 km	
44	Bargal A. S.	Asst. Prof.			✓			0.5 km	
45	Dr. Raji D. Nadej	Asst. Prof.						2.0 km	
46	Rajesh S. Kumbhar	Lab. Asst.	✓					0.5 km	
47	Yadav A. S.	Asst. Prof.					✓	95 km	
48	Jagtap A. A.	Asst. Prof.			✓			2 km	
49	Patil S. S.	Asst. Prof.					✓	05 km	
50	Shinde S. S.	Asst. Prof.			✓			32 km	
51	Kumbhar S. S.	Asst. Prof.			✓			25 km	
52	Kumbhar N. V.	Asst. Prof.			✓			45 km	
53	Tiroge P. D.	Asst. Prof.					✓	90 km	
54	Dr. Anil P. Jadhav	Asst. Prof.					✓	2.5 km	
55	Kumbhar S. S.	Asst. Prof.	✓					0.5 km	
56	Laxman J. H.	Asst. Prof.	✓					12 km	

Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
57	Shri Mohite J.R.	Lib. Att	✓					0.5 km	[Signature]
58	Patil M.A.	Room	✓		✓			30 km	[Signature]
59	Desai G.S.	Lib. Att.			✓			3.00 km	[Signature]
60	Patil A.A.						✓	35 km	[Signature]
61	More D.B.				✓			9 km	[Signature]
62	Sutar V.S.V.	Lib. Clerk			✓			4 km	[Signature]
63	Murthy J.H.	Lib. Att.			✓			10 km	[Signature]
64	M. S. Patil	Lib. Att.					✓	100 km	[Signature]
65	Lohar V.R.	Lib. Att.	✓					0.5 km	[Signature]
66	Sarkar S.A.	Room			✓			2.5 km	[Signature]
67	Prof. D. Y. Sankar	Asst. Prof.			✓			1.10 km	[Signature]
68	Prof. R. D. Manekar	Asst. Prof.			✓			2 km	[Signature]
69	Prof. R. S. Mhas	Asst. Prof.			✓			2 km	[Signature]
70	Mr. Chitambar C.R.	Asst. Prof.					✓	10 km	[Signature]
71	Dr. Chaudkar J.S.	Asst. Prof.			✓			5 km	[Signature]
72	Patil Pankaj V. Vinayak	Asst. Prof.	-	-	-	✓	-	5 km	[Signature]
73	Dr. Pawar V. T.	Asst. Prof.				✓		25 km	[Signature]
74	S. S. Kanade	Asst. Prof.			✓			40 km	[Signature]
75	V. R. Patil	Jr. Teacher			✓			54 km	[Signature]

Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
76	Dr. S. D. Jadhav	Asst. Prof.	-	-	-	✓	✓	25 km	[Signature]
77	Dr. M. V. Patil	Asst. Prof.	✓	-	✓	-	-	Local	[Signature]
78	Miss. Kumbhar K. B.	-	-	-	-	-	✓	27 km	[Signature]
79	Thakkar S. D.	Lab. Asst.	✓	-	-	-	-	3 km	[Signature]
80	Miss. Bhambure P. S.	Asst. Prof.	✓	-	-	-	✓	20 km	[Signature]
81	Miss. Jadhav S. V.	Asst. Prof.	-	-	-	-	✓	12 km	[Signature]
82	Shri Patil Sanjay R.	Jun. Lect.	-	-	✓	-	-	2.5 km	[Signature]
83	Shri Kanale A. B.	-	-	-	✓	-	-	2.5 km	[Signature]
84	Shri Wagh. A. A.	Asst. Prof.					✓	50	[Signature]
85	Shri Valandkar F. B.	Jr. teacher	-	-	-	✓	-	50 km	[Signature]
86	Shri Patil M. S.	Lib. Att.					✓	24 km	[Signature]
87	Miss. Ghatge R. Malvi	Asst. Prof.	-	-	✓	-	-	2 km	[Signature]
88	Dr. Damade G. A.	Asst. Prof.	-	-	✓	-	-	4 km	[Signature]
89	Mr. Kelkar G. D.	Lab. Asst.			✓	-	-	10 km	[Signature]
90	Miss. Sadakhe M. C.	Asst. Prof.			✓			3 km	[Signature]
91	Miss. Salunkhe A. G.	Asst. Prof.	-	-	-	-	✓	70 km	[Signature]
92	Shri. Bhatkale P. B.	Room	✓	-	-	-	-	1 km	[Signature]
93	Keshi P. V.	Room	-	-	-	-	✓	40 km	[Signature]
94	Miss. Patil Bhagyashree B.	Asst. Prof.					✓	25 km	[Signature]



Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
95	Miss. Patti Suman S	Asst. Prof.	-	-	-	-	✓	09	[Signature]
96	Miss. Patti Sharyata S	Asst. Prof.	-	-	-	-	✓	24	[Signature]
97	Miss. Sutar Supriya V.	Asst. Prof.	-	-	✓	-	✓	5 km	[Signature]
98	Dr. Andaji Yogesh S.	Asst. Prof.	-	-	✓	-	-	25 km	Y. Andaji
99	Miss. Vaidhi B. Patti	-	-	-	-	-	✓	8 km	[Signature]
100	Miss. Patti Rutuja L.	Asst. Prof.	-	-	-	-	✓	8 km	[Signature]
101	Miss. Ghubhargi S. Bhosale	-	-	-	-	-	✓	27 km	[Signature]
102	Mr. Dattaraj J. Kelavde	-	-	-	✓	-	-	25 km	[Signature]
103	Miss. Shital S. Patti	-	-	-	-	-	✓	33 km	[Signature]
104	Miss. Pappal S. Jadhav	-	-	-	-	-	✓	7 km	[Signature]
105	Dr. Suresh S. Jadhav	-	-	-	✓	-	-	38 km	[Signature]
106	Mr. D. D. Patil	-	-	-	-	-	✓	30 km	[Signature]
107	Miss. Patti Anam Parthap	Asst. Prof.	-	-	-	-	✓	36 km	[Signature]
108	Suresh Dilip Ashar	Lab. Asst.	-	-	✓	-	✓	12 km	[Signature]
109	Suresh S. S.	Peon	-	-	✓	-	-	12 km	[Signature]
110	Patti A. K.	Physician	-	-	-	✓	✓	16 km	[Signature]
111	Jadhav V. J.	Asst. Prof.	✓	-	✓	-	-	3 K.M.	[Signature]
112	Dr. K. R. Patil	Asst. Prof.	-	-	✓	-	-	18 K.M.	[Signature]
113	Shinde V. P.	Asst. Prof.	-	-	-	-	✓	15 K.M.	[Signature]

Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
114	K. H. Nambale	Asst. Prof.	-	-	-	-	✓	15. km.	[Signature]
115	Mr. K. S. Keshav	C.H. R.	-	-	-	-	✓	30 km.	[Signature]
116	Mr. L. S. Jadhav	C.H. R.	-	-	✓	-	✓	-	[Signature]
117	Dr. T. K. Badame	Asst. Prof.	-	-	✓	-	-	1-5 km	[Signature]
118	K. S. Ganawde	Asst. Prof.	-	-	✓	-	-	3-10 km	[Signature]
119	S. D. Patil	Asst. Prof.	-	-	✓	-	-	12-10 km	[Signature]
120	A. S. Parkare	Asst. Prof.	-	-	-	✓	-	23. km	[Signature]
121	Dr. D. B. Thakole	Asst. Prof.	-	-	-	✓	-	11. km	[Signature]
122	Dr. A. S. Rajg	Asst. Prof.	-	-	-	✓	-	25 km	[Signature]
123	Dr. B. T. Kamale	Asst. P.	-	-	-	✓	-	25 km	[Signature]
124	Dr. S. T. Patil	Asst. P.	-	-	-	✓	-	10 km	[Signature]
125	Mr. Subhakar K. Shinde	Post. Prof.	-	-	✓	-	-	25 km	[Signature]
126	Mr. Mall Amit M.	Asst. Prof.	-	-	✓	-	-	25 km	[Signature]
127	Dr. Kumbhar Vinodhar D.	Asst. Prof.	-	-	-	✓	-	6 km	[Signature]
128	Prof. Yadav J. A.	Asst. Prof.	-	-	-	✓	-	25 km	[Signature]
129	Prof. Khade P. R.	Asst. Prof.	-	-	-	✓	-	25 km	[Signature]
130	Prof. Patti A. R.	Asst. Prof.	-	-	-	✓	-	10 km	[Signature]
131	Dr. A. G. Sawade	Asst. Prof.	-	-	✓	✓	-	04 km	[Signature]
132	Chorge V. D.	Asst. Prof.	-	-	-	-	✓	37 km	[Signature]

Sr. No.	Name of the Faculty	Designation	By Walk	Bycycle	Motor Cycle	Own Car	Public Transport	One Way Distance (km)	Signature
133	Mr. N. S. Patel.	Asst. Prof.	-	-	-	-	✓	30 km.	<i>N. S. Patel</i>
134	Mr. M. K. Patel	Head Clerk	-	-	-	-	✓	25 km.	<i>M. K. Patel</i>
135	Mr. D. S. Shinde	C.H.B.	✓	-	-	-	-	1 km	<i>D. S. Shinde</i>
136	Mrs. S. D. Ghule	C.H.B.	-	-	-	-	✓	18 km	<i>S. D. Ghule</i>
137	Mrs. N. V. Kumbhar	C.H.B.	-	-	✓	-	-	35 km.	<i>N. V. Kumbhar</i>
138	Mrs. Mall S. S.	C.H.B.	-	-	-	-	✓	25 km	<i>M. S. Mall</i>
139	Miss. A. P. Patil	C.H.B.	-	-	-	-	✓	15 km	<i>A. P. Patil</i>
140									
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*Teli*

**Dr. P. B. Teli**





“Dissemination of Education through Knowledge, Science and Culture”

-Shikshanmaharshi Dr. BabujiSalunkhe



Shri Swami Vivekanand Shikshan Sanstha Kolhapur

**PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHA VIDYALAYA TASGAON DIST- SANGLI**

**416 312 (Maharashtra) Phone No: (02346)250665**

(Affiliated to Shivaji University, Kolhapur)

**Report on**

**Teachers Training Workshop on  
“Climate Change & Sustainable Development Goals & the  
Role of Green Campuses & Sustainable Future”**

**Organised by**

**INTERNAL QUALITY ASSURANCE CELL**

**Date :14th Feb 2020**



<b>Event:</b>	<b>Teachers Training Workshop</b>
Organizing Department	IQAC
Date	14 <sup>th</sup> Feb 2020
Venue	Room No.28
Total Participants	110
Male	68
Female	42

### Program Schedule

<p><b>“Climate Change &amp; Sustainable Development Goals &amp; the role of Green Campuses &amp; Sustainable Future”</b>  <b>In Association with Climate Reality Project India</b>  <b>Date : 14<sup>th</sup> February 2020</b></p>	
9 to 10.30 am	Registration
10.30 to 11.15	Inaugural Session
Welcome By	Prof. (Dr.) N. A. Kulkarni
Key Note address by Chief Guest	Prin. Dr. Vijaya Chavan
Presidential Talk	Prin. Dr. Milind S. Hujare
Vote of Thanks By	Dr. S. K. Khade
11.15 to 12.15pm	Mr. Aditya Pundir(Country Manager) Topic: Climate Change: The New Reality
12.15 to 1.00 pm	Dr. Nandini Deshmukh(District Manager) Topic: Sustainable Development Goals
1.00 to 1.30 pm	Sheetal Antil(Sr. Project Officer) Topic: Introduction to the Green Campus
1.30 to 2.15 pm	Valedictory Program
Closing Remarks By	Dr. (Mrs.) Alka P. Inamdar
Vote of Thanks By	Dr. P. B. Teli
2.00 pm onwards	Lunch



In 2006, Nobel Laureate and former U.S. Vice President Al Gore sparked an international conversation on climate change with his Academy Award-winning documentary, *An Inconvenient Truth* and a year later he founded The Climate Reality Project. The Climate Reality Leadership Corps has been training and empowering everyday people to become world changers – and then mobilizing them for action.

In India, *The Climate Reality Project* established in March 2008 under the aegis of Al Gore and Dr. R. K. Pachauri, India has grown from its original ambit of spreading climate change awareness through presentations to developing new content on India specific climate change impacts & solutions. In order to leverage action on climate change, we are working with teachers & students of the various schools in India to take the message of climate change deeper into the classrooms to garner awareness & action

The Climate Project Foundation is host to the Indian chapter of Nobel Laureate and former Vice President Al Gore's climate change leadership program, The Climate Reality Project. Its mission is to educate the public about the harmful effects of climate change and to work toward solutions at a grassroots level worldwide.

Climate Reality supports more than 10,000 diverse and dedicated volunteers worldwide who have been personally trained by Al Gore to deliver clear and concise presentations on impacts of and solutions to climate crisis. These Presenters have delivered 70,000 presentations and have reached a combined global audience of more than 7.3 million people, sharing our message that the climate crisis is real and the time to act is now. Presentations can be requested free of charge by any size group or organization.

The Climate Reality Project has branches in 10 countries and presence in more than 130 countries.

## Al Gore & Indian Sustainability Experts Lead Climate Reality Leadership Corps Training in New Delhi.

Former U.S. Vice President Al Gore and other experts train more than 450 new Climate Reality Leaders in New Delhi.

New Delhi, India (February 23, 2015) – The Climate Reality Project announced today that high-profile leaders in renewable energy are joining former U.S. Vice President Al Gore in New Delhi to train more than 450 new Climate Reality Leaders.

Participants in the training learn about the science of climate change and solutions for the climate crisis while developing skills to effectively communicate about both the challenges and opportunities.

Now a days, Deforestation, Use of more Vehicles, irregularity of rainfall cause the water and soil pollution, air pollution and flood etc. so many problems are facing the society, Industrialization releases green house gases, these gases are responsible for increase of Earth temperature and due to high temperature the affect on biodiversity of the earth. During Teachers Training Workshop on Climate Change, All the Resources persons provide good message about climate change, their effects on health, environment, Biodiversity through their presentation to all participants. Due this Training program we are all participants are appreciated their thoughts and ideas.

The Teachers Training Workshop was held on 14<sup>th</sup>February, 2020. The registration was sharply started at 9.00 am and closed at 10.30 am.





## Registration

The inaugural function was started at 10.30 am and ends at 11.15 am. The Welcome Programme was started with Addition of Water to Plants By Chief Guest Mr. Aditya Pundir, Prin. Dr. Vijaya Chavan, Prin. Dr. Milind S. Hujare, Prof. Dr. Nandini Deshmukh, Prof. Dr. N. A. Kulkarni and Dr. P. B. Teli.



## Inaugural Function



**All the Dignitaries on dais Welcomed by Prof. (Dr.) N.A. Kulkarni.**



**All the Dignitaries Felicitated By Prin. Dr. Milind S. Hujare**



## Welcome and Felicitation of Chief Guest and Resource Person



Welcome address by Prin. Dr. Milind Hujare



Precedential Address by Prin. Dr. Vijaya Chavan

Presidential talk was given by principal of our college Dr. Milind. S. Hujare. Principal said the climate changes indirectly affect the human social life and causes flood that we faced on last year at Krishna river bank in western Maharashtra. He also emphasized the importance of goals of sustainable development. Prin. Dr. Milind Hujare shared the initiatives taken by P.D.V.P. College under Green Campus program.

The key note address lecture was delivered by chief guest Principal Dr. Vijaya Chavan. She gave talk on current environmental issue and their side effect on biodiversity. The responsibility of human being and his behavior for the sustainable development has been explained in detail.

**Technical Session-I** was started 11.15 am by the Resource Person Mr. Aditya Pundir on Climate change: The Climate Reality India. He said root of climate change is human beings and we have to prevent or the control the changes in climate by taking initiative and to solve the mother earth and lives of human being on the earth.



**Key note address by Chief Guest**



**Expert Talk in technical session I**

**Session –II** started at 12.15pm by Dr. Nandini Deshmukh. She delivered a lecture on Sustainable goals of the organization. She talks on the 17 goals. She said climate change affects the social human life and explain the goals number '13' that is increases the **valley** between poor and rich peoples.



**Expert Talk in technical session II**



**Expert Talk in technical session III**

**Session –III** was started at 1.00pm by Sheetal Antil. She gives a talk on Green Campus. She divided a green campus program into work, awareness, action, awards and benefits of green campus program. She gives information about the organization, contacts, quizzes and Competition.



**Session - IV** was Group Discussion. During Group Discussion session Dr. Nandini Deshmukh selected Two Participants as a Judges of this Session. All participants are grouped into 9 groups. After Completion of group discussion, one of the each group leader speaks on stage about Climate change. Out of Nine group, One group was Win, declared by Judges and felicitated by Aditya Pundir and Judges.



**Discussion of Resource person with participants**



**Participants opinion**



**Participants opinion**



### **Participants opinion**



### **Group Discussion Award Winner Dr. Padmashri Waghmare Felicitated By Aakash Bhosale**

At 1.30pm Valedictory program was started. The whole program was summarized by Dr. Mrs. Alka P. Inamdar. She has reviewed the whole day with respect to each and every topic discussed by the expert talks in their lectures. As well as she noticed some of the issues which we people should do in academic environment with the help of students to encourage them with trees, plantation, and some steps to save nature, save plants etc....Because "Plantation is the only solution for dilution of pollution."





**Introductory speech by  
Dr. Mrs. Alka P. Inamdar**



**Felicitation of organizing secretary  
Dr. P. B. Teli**



**Opinion of participant by  
Dr. Sunil Kamble**



**Vote of Thanks by Dr. P. B. Teli**



**PARTICIPANTS IN TEACHERS TRAINING WORKSHOP**

**Outcome:** The Teachers Training Workshop was fruitfully to the Teachers and awareness is created among the participants about climate change and importance of Green campuses.



Dr. P. B. Teli

Organizing Secretary



Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon, Dist- Sangli, Maharashtra

Teachers Training Workshop on

"Climate Change & Sustainable Development Goals & the role of Green Campuses for Safer Planet and a Sustainable Future"

Date: 14/02/2028

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13 February 2020



### माणदेश एक्सप्रेस

# वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका

## प्राचार्य डॉ. मिलिंद हुजरे

**माणदेश एक्सप्रेस मुंबई**  
**तासगाव :** महापुरुषांचे पौराणिक आगम अद्वयपत्ते असून दुष्काळाशी आपण अनेक वर्षे सामना करीत जगत आहो. काही अचानकाची पाऊस तर काही दुष्काळ अशी स्थिती साम्या असलेली दिसून येते. प्रदूषण आणि वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका आहे असे उद्गार प्राचार्य डॉ.मिलिंद हुजरे यांनी पदभूषण डॉ.वसंतरावदादा पाटील महाविद्यालय तहसगाव येथे प्राचीनशास्त्र विभागाच्या यतीने आयोजित केलेल्या 'वातावरणातील बदल आणि साक्षर विकास' या विषयावर आयोजित केलेल्या एक दिवसीय कार्यशाळेत बोलताना काढले. या कार्यशाळेचे उद्घाटन श्री विभवसिंह पाटील आर्ट्स अँड सायन्स कॉलेज पेटवडगावच्या प्राचार्य डॉ.विजया चव्हाण यांनी केले. चाचेडी बोलताना त्या म्हणाल्या, माणूस



'वातावरणातील बदल आणि साक्षर विकास' या विषयावर कार्यशाळेत बोलताना प्राचार्य डॉ. मिलिंद हुजरे

निवृत्त पोहोचला तिथे प्रदूषण झाले, निर्माणाच्या आणि निर्माणातील साधनसंगतीचा वास्तू मानवामुळे होत आहे हे विविध उदाहरणांनी त्यांनी पटवून दिले. क्लायमेट रिजॉनिटी प्रोग्रेस इंडिया,

दिल्ली येथून आलेले कॅट्री मीजर आदिवासी पुरातन यांनी नैसर्गिक आपत्तीवर मार्गदर्शन केले पर्याय वर्षापूर्वीची परिस्थिती आणि सध्याच्या परिस्थितीचा तुलनात्मक अभ्यास सांगला. डॉ.नींदी देशमुख यांनी साक्षर

विभागाची सहाय्येने व त्यामध्ये उत्सवगरी सुसंगती विषय प्रकल्प या मुद्द्यांची जोपासना करण्यासाठी मानवने पुढाकार घेण्याचे आवाहन केले. कु.मिहल अटील यांनी ग्रीन कॅम्पसबद्दलचे मार्गदर्शन केले. या कार्यशाळेतील प्रत्येक शिक्षकांनी वातावरणातील बदल याविषयी आपापली पत्ते मांडली. या कार्यशाळेच्या आद्यया डॉ. अलका इनामदार यांनी बोलला. कार्यशाळेचे प्रस्ताविक डॉ.रंजित कुलकर्णी यांनी केले तर आचार्य कार्यशाळा संपन्नवक डॉ.पी.बी.तेली यांनी मानले. कार्यशाळेचे सूत्रसंचालन डॉ.अंकर खाडे यांनी केले. कार्यशाळेला नैक सान्धवक डॉ.एन.एम. पाटील, प्रा.पे.ए. वाटव, डॉ. शहाजी पाटील, प्रा.अजित पाचोरे, डॉ.अशोक सोनवले, प्रा.डी.काय. साखरे, डॉ.अनंत बाब, डॉ.अजय उभोते, डॉ.जीवन घोडके, डॉ.टी.के.बदामे वसन्नामड प्राध्यापक, विद्यार्थी-विद्यार्थिनी, शिक्षकेतर कार्यवाही मोठ्या संख्येने उपस्थित होते.

# वातावरणातील बदलांमुळेच नैसर्गिक आपत्ती : प्राचार्य डॉ. हुजरे तासगावच्या वसंतदादा महाविद्यालयात कार्यशाळा

तासगाव : पुढारी वृत्तसेवा

प्रदूषण आणि वातावरणातील बदलांमुळेच नैसर्गिक आपत्तीचा भोका निर्माण झाला आहे, असे प्रतिपादन प्राचार्य डॉ. मिलिंद हुजरे यांनी केले.

एद्यभूषण डॉ. वसंतरावदादा पाटील महाविद्यालयात प्राणीशास्त्र विभागाच्यावतीने आयोजित 'वातावरणातील बदल आणि शाश्वत विकास' या विषयावर कार्यशाळेत ते बोलत होते.

कार्यशाळेचे उद्घाटन पेंढवडगाव येथील विजयसिंह यादव आर्टस् अँड सायन्स महाविद्यालयाच्या प्राचार्या डॉ. विजया चव्हाण यांच्याहस्ते करण्यात आले. प्राचार्य डॉ. हुजरे म्हणाले, महापुराचे येमान आपण अनुभवले आहे. दुष्काळाशी आपण अनेक वर्षे सामना करीत आहोत. कधी अवकाळी पाऊस तर कधी दुष्काळ स्थिती दिसून येते. याला निसर्गात झालेले बदल कारणीभूत आहेत.

प्राचार्या डॉ. चव्हाण म्हणाल्या,



तासगाव : वसंतरावदादा महाविद्यालयात 'वातावरणातील बदल आणि शाश्वत विकास' या विषयावर एकदिवसीय कार्यशाळेत मार्गदर्शन करताना प्राचार्य डॉ. मिलिंद हुजरे.

माणूस जिथे पोहोचला तिथे प्रदूषण झाले. निसर्गाच्या आणि निसर्गातील साधनसंपत्तीचा न्हास मानवामुळे होत आहे. दिल्ली येथील क्लायमेट रिऑलिटी प्रोजेक्ट रॉटियाचे आदित्य

पुनदीर यांचेही भाषण झाले.

प्रस्ताविक डॉ. नरेंद्र कुलकर्णी यांनी केले. आभार डॉ. पी. बी. तेली यांनी मानले. सूत्रसंचालन डॉ. शंकर खाटे यांनी केले



# वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका - प्राचार्य डॉ. मिलिंद हुजरे

**वातावरण / प्रतिनिधी**  
 महाराष्ट्राचे वसुंधरा आश्रम संस्थासमवेत महाराष्ट्रातील वातावरण आणि आपत्ती व्यवस्थापन विभाग यांच्या संयुक्त आयोजनात आयोजित झालेल्या 'वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका' या कार्यशाळेचे प्राचार्य डॉ. मिलिंद हुजरे यांनी उद्घाटन करताना. कार्यशाळेचे उद्घाटन करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका या कार्यशाळेचे उद्घाटन करताना. कार्यशाळेचे उद्घाटन करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका या कार्यशाळेचे उद्घाटन करताना.



कार्यशाळेचे उद्घाटन करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका या कार्यशाळेचे उद्घाटन करताना. कार्यशाळेचे उद्घाटन करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका या कार्यशाळेचे उद्घाटन करताना.

महाराष्ट्राच्या वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका होत आहे हे प्रतिबोध करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी कार्यशाळेचे उद्घाटन केले. कार्यशाळेचे उद्घाटन करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका या कार्यशाळेचे उद्घाटन करताना.

कार्यशाळेचे उद्घाटन करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका या कार्यशाळेचे उद्घाटन करताना. कार्यशाळेचे उद्घाटन करताना प्राचार्य डॉ. मिलिंद हुजरे यांनी वातावरणातील बदलामुळे नैसर्गिक आपत्तीचा धोका या कार्यशाळेचे उद्घाटन करताना.

"ज्ञान विज्ञान आणि युसंस्कार यांसाठी शिक्षणासाठी प्रसार" - शिक्षणमहवी डॉ.बापुजी साजुंबे

पद्मभूषण डॉ. वसंतरावदादा पाटील महाविद्यालय, तासगाव.

दिनांक - १३/०२/२०१९

## नोटीस

महाविद्यालयातील सर्व सिनिअर व ज्युनिअर मधील प्राध्यापकांना कळविण्यात येते की आपल्या महाविद्यालयामध्ये शुक्रवार दिनांक १४/०२/२०२० रोजी सकाळी ९.०० वा. **Climate Change & Sustainable Development Goals & the Role of Green Campuses for Safer Planet & a Sustainable Future** या विषयावर एक दिवसीय शिक्षकासाठी कार्यशाळा अयोजित केली आहे. सदर कार्यशाळेसाठी ज्या प्राध्यापकांनी नोंद केलेली आहे त्यांनी रूम नंबर २८ मध्ये उर्पास्थित रहावे.

  
( डॉ. मिलिंद एस. हुने )

**प्राचार्य**

पद्मभूषण डॉ. वसंतरावदादा पाटील  
महाविद्यालय, तासगाव (जि. सांगली.)



## CERTIFICATE OF PARTICIPATION

This is to certify that

*Dr. P. B. Teli P. D. V. P. Mahavidyalaya, Sangli*

has participated in the teachers training Program on

**'Understanding Climate Change, Sustainable Development Goals and  
the role of Green Campuses for a Sustainable Future.'**

jointly organised by Department of Zoology, Padmabhushan Dr. Vasanturadada Patil Mahavidyalaya, Sangli,  
Maharashtra and Climate Reality India on 14<sup>th</sup> February 2020.



Aditya Parde  
Country Manager  
The Climate Reality Project - India



Dr. P. B. Teli  
Principal  
Padmabhushan Dr. Vasanturadada  
Patil Mahavidyalaya, Sangli





‘Dissemination of Education through Knowledge, Science and Culture’-Shikshanmaharshi Dr. Bapuji Salunkhe

**Shri Swami Vivekanand Shikshan Sanstha, Kolhapur’s**

**PADMABHUSHAN Dr. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON  
Tal. Tasgaon, Dist.: Sangli.**

**DEPARTMET OF COMMERCE**

***Report on***

***TRAINING PROGRAM ON AURVEDIK***

***SUGANDHI UTHANE***





<b>Title of Programme</b>	<b>Training Program on Aurvedik Sugandhi Uthane</b>
<b>Organizing Department</b>	<b>DEPARTMENT OF COMMERCE</b>
<b>Collaboration with</b>	-
<b>Date</b>	14 <sup>th</sup> October, 2019.
<b>Venue</b>	ROOM NO. 28
<b>No. of Participants</b>	21, Male: 07, Female: 09 Teachers : Male: 02, Female: 03

The use of ubtan powder for cleansing and bathing is being mentioned in the treasures of ayurveda since ages. During this festive season of Diwali having the bath with ubtan is considered to be auspicious and termed as “Abhyang Snan”. ABHYANG Ayurvedic ubtan powder is used to remove dirt, greasiness and dead cells and protect the skin from skin ailments.

In order to create interest in entrepreneurship among the students and considering the importance of Aurvedik Sugandhi Uthane in Diwali Festival, the Commerce Department conducted a training program on Aurvedik Sugandhi Uthane. It showed the students the actual process of making Sugandhi Uthane. The students actually sold the created Aurvedik Sugandhi Uthane in the society.

आयुर्वेदिक सुगंधी उठणे साहित्य	
मसूर डाळ पीठ	नागरमोथा
आवळा पावडर	वाळा
आंबेहळद	जटामासी
वेखंड	सुगंधी कचोरा
बावची	मरवा
अनंतमूळ	घुलाब कळी पावडर



*Inauguration Ceremony of Aurvedik Sugandhi Uthane by The Prin. Dr. Milind Hujare.*




*All Participants With Principal Dr. Milind Hujare.*


**Dr. A. G. Sonawale**  
Head, Department of Commerce




**Participants Students List  
2019-20**

<b>Class: B.Com. II</b>		
<b>Sr. No</b>	<b>GENDER</b>	<b>NAME OF THE STUDENT</b>
1	SHRI	BANASAVADE DATTATRAY ASHOK
2	SHRI	RENDALKAR VIJAY YUVRAJ
3	SHRI	INGAWALE PRATIK DIPAK
4	SHRI	SUTAR SUSHANT SHIVAJI
5	SHRI	PAWAR NILESH NAMDEV
6	SHRI	SAWANT VAIBHAV SHASHIKANT
7	SHRI	WAGH INDRAJIT SUDHAKAR
8	MISS	KOKANE PALLAVI RAVINDRA
9	MISS	BODARE PRAJAKTA UTTAM
10	MISS	CHAVAN POOJA BAPURAO
11	MISS	GAIKWAD RUTUJA JAYANT
12	MISS	GURAV ASHWINI PANDIT
13	MISS	PATIL SNEHAL GOVIND
14	MISS	HINGMIRE SHRADDHA SUNIL
15	MISS	KAMBLE NISHA ANANDA
16	MISS	KARMARKAR DIVYA DAMODAR
<b>Teachers Name</b>		
17		DR. SONAWALE A.G.
18		MR. PATIL G.R.
19		MISS. CHAVAN P.C.
20		MISS. SALUNKHE P.B.
21		MISS. PATIL S.S.

  
**Dr. Alka Inamdar**  
 IQAC & NAAC Coordinator  
**IQAC Co-Ordinator,**  
 P.D.V.P. Mahavidyalaya,  
 Tasgaon.

  
**Dr. Amol Sonawale**  
 HOD, Commerce Department  
**HEAD**  
 Department of Commerce  
 P.D.V.P.College, Tasgaon.

  
**Dr. Milind Hujare**  
**Principal**  
 Padmabhushan Dr. Vasantrodada Patil  
 Mahavidyalaya, Tasgaon. (Sangli)

1