

“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**

### **CERTIFICATE COURSE IN GARDENING**

#### **DURATION**

*(From 02/12/2019 to 18/12/2019)*

**2019-2020**

Dr. N. A. Kulkarni  
Professor and Head  
Department of Botany  
P. D. V. P. College, Tasgaon  
Date : 25/11/2019

To,  
The Principal  
P. D. V. P. College, Tasgaon

**Subject: Permission to start second add-on course.**

Respected Sir,

We are going to start second add-on course on "GARDENING." The duration of the course is from 02/12/2019 to 18/12/2019. Kindly permit us to conduct the course.

Thanking You,

*Principals  
Shri. V. S. Patil  
25/11/2019*

Yours faithfully

*N. A. Kulkarni*  
(Dr. N. A. Kulkarni)

**HEAD**

**DEPARTMENT OF BOTANY**  
PADMABHUSHAN DR. VASANTRAO DADA PATIL  
MAHARAJA, TASGAON, DIST. SANGLI

**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya,  
Tasgaon  
Department of Botany**

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**NOTICE**

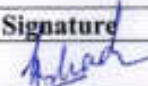
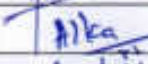


**CERTIFICATE COURSE IN GAEDENING**

Date: 27/11/2019

All the following faculties of the department are hereby informed you that you are all are appointed as the member of 'Board of studies' for 'CERTIFICATE COURSE IN GAEDENING.' This is to inform you all that a meeting of all the members has been arranged on 01/12/2019 at 11.00 am. Kindly attend the same without fail.

The agenda of the meeting will as bellow.

1. Making the time-table.
2. Finalizing the syllabus.
3. Syllabus distribution.
4. Organizing a workshop.
5. Inviting the external faculties.

Sr. No.	Name of the Teacher	Signature
1.	Dr. S. K. Khade	
2.	Dr. A. P. Inamdr	
3.	Dr. Y. S. Andoji	
4.	Ms. Vaishali Patil	



(Dr.N.A.kulkarni)

**Padmabhushan Dr. Vasantaoada Patil Mahavidyalaya,  
Tasgaon  
Department of Botany**



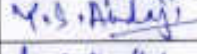

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**NOTICE**

**CERTIFICATE COURSE IN GAEDENING**

**'BOARD OF STUDIES'**

Date: 27/11/2019

Sr. No.	Name of the Teacher	Signature
1.	Dr. S. K. Khade	
2.	Dr. A. P. Inamdr	
3.	Dr. Y. S. Andoji	
4.	Ms. Vaishali Patil	



(Dr.N.A.kulkarni)

**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya,  
Tasgaon  
Department of Botany**

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**NOTICE**


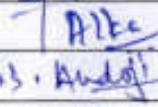
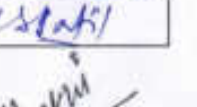
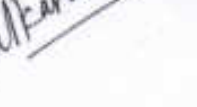
**CERTIFICATE COURSE IN GAEDENING**

**MINUTES OF THE MEETING**

Date: 01/12/2019

A meeting of members of 'Board of studies' for 'CERTIFICATE COURSE IN GAEDENING.' has been arranged on 01/12/2019 at 11.00 am. Following are the minutes of the meeting.

1. Making the time-table.
2. Finalizing the syllabus.
3. Syllabus distribution.
4. Organizing a workshop.
5. Inviting the external faculties.

Sr. No.	Name of the Teacher	Signature
1.	Dr. S. K. Khade	
2.	Dr. A. P. Inamdr	
3.	Dr. Y. S. Andoji	
4.	Ms. Vaishali Patil	

  
(Dr.N.A.kulkarni)

## **CERTIFICATE COURSE IN GARDENING PHOTOS**



**Demonstration of Terrarium Preparation**



**Demonstration of Bouquets and Bonsai Preparation**



**Students learning Bouquets and Terrarium Preparation**



**Bonsai**



**Bouquets**

Following Syllabus and assessment procedure has been decided in the meeting

## CERTIFICATE COURSE IN GARDENING

### SYLLABUS

#### 1. APPROACHES TO GARDENING

- o Ways to Garden
- o Garden Planning

#### 2. TOOLS AND EQUIPMENT

- o Selecting and Using Tools and Machines
- o Types of Gardening Tools and Equipment
- o Equipment

#### 3. PLANTS AND PLANTING

- o Plant Names
- o Plant Groups
- o Planting in Garden Beds
- o Taking Care of Young Plants
- o Greenhouses and Shade houses

#### 4. GROWING MEDIA AND POTS

- o Soil Composition
- o Problems with Organic Materials
- o Potting Media
- o Plant Containers

#### 5. WATERING AND FEEDING

- o Applying Water to Plants
- o Trickle Irrigation in Easy Care Gardens
- o Water Saving Measure
- o Feeding Plants

#### 6. PESTS, DISEASES AND WEEDS

- o Biological Competitors
- o Environmental Problems
- o The Importance of Healthy Soil to Plant Health
- o Garden Hygiene - Keeping the Garden Healthy
- o How Water Affects Plant Health
- o Air, Soil Temperature, Light: Importance to Plant Growth
- o Plant Protection
- o Protecting from Cold and Heat
- o Using Organic Sprays and Dusts
- o What Makes a Weed?
- o Using Weed killers
- o Weed Identification
- o Weed Control Methods



## **7. PRUNING AND MOWING**

- Pruning Plants
- Grass Surfaces
- Maintaining Lawns

## **8. GARDENING TECHNIQUES**

- Organic Gardening
- Vermiculture
- No-dig Gardening
- No-Till Planting in Turf
- Making Compost
- Crop Rotation
- Seed Saving
- Environmental Horticulture
- Hydroponics

## **9. Bonsai Preparation**

## **10. Flower Arrangement**

## **11. Terrarium Preparation**

## **12. Biodiversity: The Path to Garden and Plant Health**

## **13. Integrated Pest Management**

## **14. Review what you have been learning**

## **15. Final Assessment**

### **Assessment**

Following assessment process has been finalized during the meeting.

1. Written test of 50 marks will be conducted at the end of the course.
2. Project work of 50 marks will be allotted to the students and will be evaluated at the time of final assessment.

## CERTIFICATE COURSE IN GARDENING

### TIME - TABLE

Sr. No.	Date	Time	Lesson /Practical Number	Details	Name of the Resource Person
1	02/12/2019	9.30 am to 10.30 am	1 (T)	APPROACHES TO GARDENING Ways to Garden Garden Planning Review what you have been learning	Dr. N.A.Kulkarni
		10.30 to 11.30 am	2(P)	-"	-"
2	03/12/2019	9.30 am to 10.30 am	3 (T)	TOOLS AND EQUIPMENT Selecting and Using Tools and Machines Types of Gardening Tools and Equipment Equipment Review what you have been learning	Dr.S.K.Khade
		10.30 to 11.30 am	4 (P)	-"	-"
3	04/12/2019	9.30 am to 10.30 am	5 (T)	PLANTS AND PLANTING Plant Names Plant Groups Planting in Garden Beds Taking Care of Young Plants Greenhouses and Shade houses Review what you have been learning	Dr.A.A.Inamdr
		10.30 to 11.30 am	6 (P)	-"	-"
4	05/12/2019	9.30 am to 10.30 am	7 (T)	GROWING MEDIA AND POTS Soil Composition Problems with Organic Materials Potting Media Plant Containers Review what you have been learning	Dr.Y.S.Andoji
		10.30 to 11.30 am	8 (P)	-"	-"
5	06/12/	9.30 am	9 (T)	WATERING AND FEEDING	Miss. Vaishali

	2019	to 10.30 am		Applying Water to Plants Trickle Irrigation in Easy Care Gardens Water Saving Measure Feeding Plants Review what you have been learning	Patil
		10.30 to 11.30 am	10 (P)	-.-	-.-
6	08/12/2019	9.30 am to 10.30 am	11 (T)	PESTS, DISEASES AND WEEDS Biological Competitors Environmental Problems The Importance of Healthy Soil to Plant Health Garden Hygiene - Keeping the Garden Healthy How Water Affects Plant Health Plant Protection Protecting from Cold and Heat Using Organic Sprays and Dusts What Makes a Weed? Using Weedkillers Weed Identification Weed Control Methods Review what you have been learning	Dr. N.A.Kulkarni
		10.30 to 11.30 am	12 (P)	-.-	-.-
7	09/12/2019	9.30 am to 10.30 am	13 (T)	PRUNING AND MOWING Pruning Plants Grass Surfaces Maintaining Lawns Review what you have been learning	Dr.S.K.Khade
		10.30 to 11.30 am	14 (P)	-.-	-.-
8	10/12/2019	9.30 am to 10.30 am	15 (T)	GARDENING TECHNIQUES Organic Gardening Permaculture No-dig Gardening No-Till Planting in Turf Making Compost Crop Rotation Seed Saving Environmental Horticulture	Mr. Sanjeev Walawalkar, Sangli

				Hydroponics	
		10.30 to 11.30 am	16 (P)	-.-	-.-
9	11/12/2019	9.30 am to 10.30 am	17 (T)	Bonsai Preparation	Mrs. Neha Kulkarni
		10.30 to 11.30 am	18 (P)	-.-	-.-
10	12/12/2019	9.30 am to 10.30 am	19 (T)	Flower Arrangement	Mrs. Mrunal Natekar, Sangli
		10.30 to 11.30 am	20 (P)	-.-	-.-
11	13/12/2019	9.30 am to 10.30 am	21 (T)	Terarium Preparation	Dr. Manjushree Phadake, Sangli
		10.30 to 11.30 am	22 (P)	-.-	-.-
12	14/12/2019	9.30 am to 10.30 am	23 (T)	Integrated Pest Management	Miss. Vaishali Patil
		10.30 to 11.30 am	24 (P)	-.-	-.-
13	16/12/2019	9.30 am to 10.30 am	25 (T)	Air, Soil Temperature, Light: Importance to Plant Growth Biodiversity: The Path to Garden and Plant Health	Dr. Y.S. Andoji
		10.30 to 11.30 am	26 (P)	-.-	-.-
15	17/12/2019	9.30 am to 10.30 am	27 (T)	Review what you have been learning Final Assessment	Dr. N.A. Kulkarni Dr. S.K. Khade Dr. A.A. Inamdr Dr. Y.S. Andoji Miss. Vaishali Patil
		10.30 to 11.30 am	28 (P)	-.-	-.-
16	18/12/2019	9.30 am to 10.30 am	29 (T)	Review what you have been learning Final Assessment	Dr. N.A. Kulkarni Dr. S.K. Khade Dr. A.A. Inamdr Dr. Y.S. Andoji Miss. Vaishali Patil

					Mr. Sanjeev Walawalkar, Sangli Mrs. Neha Kulkarni Mrs. Mrunal Natekar, Sangli Dr. Manjushree Phadake, Sangli
		10.30 to 11.30 am	30 (P)	--	--

*(Handwritten Signature)*

**HEAD**

**DEPARTMENT OF BOTANY  
PADMABHUSHAN DR. VASANTRAO DADA PATIL  
MAHARAJDILAYA, TASGAON, DIST. SANGLI**

## ATTENDANCE OF THE COURSE IN GARDENING

Sr.No.	Roll No.	Name	Attendance															
			02/12/2019	03/12/2019	04/12/2019	05/12/2019	06/12/2019	07/12/2019	08/12/2019	09/12/2019	10/12/2019	11/12/2019	12/12/2019	13/12/2019	14/12/2019	16/12/2019	17/12/2019	18/12/2019
1.	6121	Ashokkar Rutejia Rajendra	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
2.	6122	Devlamith Amritha Babarao	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
3.	6123	Jadhav Neha Kisan	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
4.	6124	Karnade Survarna Satyawari	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
5.	6125	Khandagale Tamija Shivaji	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
6.	6126	Khodkar Ashwini Arvind	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
7.	6127	Mali Prajakti Ashok	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
8.	6128	More Tejashree Rangrao	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
9.	6129	Patil Shrushti Ganesh	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
10.	6130	Patil Nehal Vilas	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
11.	6131	Patil Pooanam Appasaheb	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
12.	6132	Patil Rohini Sanyasrao	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
13.	6133	Patil Samrudhi Shamoo	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
14.	6134	Pawar Soebal Madhukar	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
15.	6135	Salmkhe Anika Suresh	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
16.	6136	Salmkhe Soebal Brahmaram	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
17.	6137	Shikalgar Tammana Jansir	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
18.	6138	Sote Prajeta Pankaraj	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

**HEAD**  
 DEPARTMENT OF BOTANY  
 PADMAKUSHAN DR. VASANTRAO DADA PATIL  
 MAHARAJA, TASGAON, DAST, SANGLI

**Padmabhushan Dr. Vasantodada Patil Mahavidyalaya,  
Tasgaon  
Department of Botany**

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**NOTICE**

TO ALL THE STUDENTS PARTICIPATED IN CERTIFICATE COURSE IN  
GAEDENING

Date: 15/12/2019

This is to inform you all that a written test of 50 marks and assessment of the project work has been arranged on 18/12/2019 at 11.00 am. Kindly attend the same without fail.



(Dr.N.A.kulkarni)

**Certificate Course in Gardening**

**Mark list of the students participated in Test and project**

**Total Marks: 100**

**Date: 18/12/2019**

Sr.No.	Roll No.	Name	Test (50)	Project (50)	Total
1.	6121	Ashtekar Rutuja Rajendra	42	44	86
2.	6122	Deshmukh Amruta Baburao	44	45	89
3.	6123	Jadhav Neha Kisan	45	47	92
4.	6124	Karade Suvarna Satyawar	44	46	90
5.	6125	Khandagale Tanuja Shivaji	45	46	91
6.	6126	Khedakar Ashwini Arvind	42	47	89
7.	6127	Mali Prajakta Ashok	44	42	86
8.	6128	More Tejashree Rangrao	48	42	90
9.	6129	Patil Gauri Sharad	42	46	88
10.	6130	Patil Nehal Vilas	45	42	87
11.	6131	Patil Poonam Appasaheb	45	42	87
12.	6132	Patil Rohini Sampatrao	46	42	88
13.	6133	Patil Samrudhi Shamrao	42	45	87
14.	6134	Pawar Snehal Madhukar	45	43	88
15.	6135	Salunkhe Ankita Satish	45	44	89
16.	6136	Salukhe Snehal Bramhanand	43	42	85
17.	6137	Shikalgar Tammana Jamir	41	41	82
18.	6138	Sutar Prajkta Pandurang	42	46	88

  
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**DEPARTMENT OF BOTANY**  
CERTIFICATE COURSE IN GAEDENING

**TEST QUESTION PAPER**

**Marks 50 (Each question carry 2 marks)**

**Date: 18/12/2019**

- 1) ----- is a most familiar and important chemical mutagen.  
a) Temperature      b) X- rays      c) Ultra-violet rays      d) Colchicine
- 2) The structural and functional system of communities and their environment is called -----.  
a) ecology      b) life forms      c) ecosystem      d) niche.
- 3) Pyramid of energy is always -----.  
a) inverted      b) upright      c) horizontal      d) circular.
- 4) The establishment of pathogen in the host tissue is called -----.  
a) infection      b) inoculation      c) penetration      d) dissemination
- 5) The progressive browning and death of the twigs or branches from the tip towards the base is known as -----.  
a) canker      b) strikes      c) blight      d) die-back
- 6) *Sclerospora graminicola* causes ----- disease.  
a) Grain smut of Jowar      b) Anthracnose of Bean  
c) Downy mildew of Bajara.      d) Citrus canker
- 7) A cross made between an inbred line and an open pollinated variety is called as -----.  
a) top cross      b) synthetic cross      c) test cross      d) back cross
- 8) The concept of pure line selection was first introduced by -----.  
a) Darwin      b) Johansson      c) Harlan and Pope      d) Morgan
- 9) Mean is affected by -----.  
a) frequency      b) extreme values      c) experimental design      d) density

- 10) ----- is also called as positional average.  
a) Mean                      b) Mode                      c) Standard deviation      d) Median
- 11) The gene restoring male sterile line in plants is called -----.  
a) nif-genes      b) fertility restoring genes      c) jumping genes      d) alleles
- 12) The scientific study of the relationships between plants and peoples is termed as -----.  
a) Ethnobotany      b) Ecology                      c) Economic botany      d) Enzymology
- 13) A tract of virgin forest having rich biodiversity and well protected by local people is known as -----.  
a) Sacred grove      b) national park      c) Zoo                      d) Botanical garden
- 14) The plants which are grown to serve as a barrier or boundary for fencing and screening is called -----.
- 15) ----- first time isolated the plant cells in-vitro on artificial medium.  
a) P.R. White              b) G. Haberlandt      c) F.C.Steward              d) T. H. Morgan
- 16) The technique of hybrid production by protoplast fusion is called as -----.  
a) Plant hybridization                      b) Somatic hybridization  
c) Embryonic hybridization                      d) Nuclear hybridization
- 17) The plant part removed from the plant body for tissue culture is known as -----  
a) Organ              b) Callus                      c) Explant                      d) Cells
- 18) Colchicine interferes in -----.  
a) Chromosome condensation                      b) DNA- replication  
c) Organization and orientation of spindle fibers      d) Centriole formation
- 19) In microsporangium of angiosperms, the nutritive tissue is known as ----- .  
a) pollen mother cells      b) spore tetrad                      c) tapetum                      d) endothecium
- 20) ----- a Russian taxonomist proposed an evolutionary system of classification.  
a) John Hutchinson                      b) Armen Takhtajan  
c) Engler and Prantl                      d) Bentham and Hooker
- 21) The branch of taxonomy which deals with the study of secondary metabolites is known as -----.  
a) Cytotaxonomy      b) Chemotaxonomy      c) Palynology                      d) Pedology
- 22) Pedigree selection is used in -----.  
a) Self pollinated plants                      b) Cross pollinated plants

- c) Plants difficult to be hybridized    d) Vegetatively propagated plants
- 23) When the data is collected from published agency then it is called as -----  
a) primary data    b) secondary data    c) tertiary data    d) None of these
- 24) Development of organs or primordia from callus in tissue culture is called -----,  
a) Embryogenesis    b) Spermatogenesis    c) Organogenesis    d) Somatogenesis.
- 25) The term ethnobotany was coined by ----- .  
a) Richard Evans Schultes    b) John William Harshberger  
c) Gadgil and Vertak    d) Batson and Punettee  
c) Polymorphic chain reaction    d) Photosynthetic Carbon Reduction
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