

“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 01/08/2016 to 05/09/2016)*

**2016-2017**

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

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**NOTICE**

**CERTIFICATE COURSE IN GAEDENING**

Date: 01/08/2016

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 02/08/2016 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. A. P. Inamdr	Aika
2.	Dr. B.T. Dangat	Dangat
3.	Dr. Y. S. Andoji	Y.S. Andoji
4.	Ms. J. S. Mane	J.S. Mane

  
HEAD  
DEPARTMENT OF BOTANY  
PADMABHUSHAN DR. VASANTRODADA PATIL  
MAHAVIDYALAYA, TASGAON, DIST. SANGLI

# **CERTIFICATE COURSE IN GARDENING**

## **SYLLABUS**

### **1. APPROACHES TO GARDENING**

- Ways to Garden
- Garden Planning

### **2. TOOLS AND EQUIPMENT**

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

### **3. PLANTS AND PLANTING**

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

### **4. GROWING MEDIA AND POTS**

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

### **5. WATERING AND FEEDING**

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

### **6. 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

- Air, Soil Temperature, Light: Importance to Plant Growth
- Plant Protection
- Protecting from Cold and Heat
- Using Organic Sprays and Dusts
- What Makes a Weed?
- Using Weed killers
- Weed Identification
- 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**

## CERTIFICATE COURSE IN GARDENING

### TIME – TABLE

Sr. No.	Date	Time	Lesson /Practical Number	Details	Name of the Resource Person
1	01/08/2016	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
2	02/08/2016	10.30 to 11.30 am	2(P)	-”-	-”-
3	03/08/2016	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.B.T.Dangat
4	04/08/2016	10.30 to 11.30 am	4 (P)	-”-	-”-
5	05/08/2016	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
6	06/08/2016	10.30 to 11.30 am	6 (P)	-”-	-”-
7	08/08/2016	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
8	09/08/2016	10.30 to 11.30 am	8 (P)	-”-	-”-
9	10/08/2016	9.30 am to 10.30 am	9 (T)	WATERING AND FEEDING Applying Water to Plants	Miss. Vaishali Patil

				Trickle Irrigation in Easy Care Gardens Water Saving Measure Feeding Plants Review what you have been learning	
10	11/08/2016	10.30 to 11.30 am	10 (P)	-"-	-"-
11	12/08/2016	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
12	13/08/2016	10.30 to 11.30 am	12 (P)	-"-	-"-
13	15/08/2016	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.B.T.Dangat
14	16/08/2016	10.30 to 11.30 am	14 (P)	-"-	-"-
15	17/08/2016	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 Hydroponics	Mr. Sanjeev Walawalkar, Sangli
16	18/08/	10.30 to	16 (P)	-"-	-"-

	2016	11.30 am			
17	19/08/2016	9.30 am to 10.30 am	17 (T)	Bonsai Preparation	Mrs. Neha Kulkarni
18	20/08/2016	10.30 to 11.30 am	18 (P)	-"-	-"-
19	22/08/2016	9.30 am to 10.30 am	19 (T)	Flower Arrangement	Mrs. Mrunal Natekar, Sangli
20	23/08/2016	10.30 to 11.30 am	20 (P)	-"-	-"-
21	24/08/2016	9.30 am to 10.30 am	21 (T)	Terarium Preparation	Dr.Manjushree Phadake, Sangli
22	25/08/2016	10.30 to 11.30 am	22 (P)	-"-	-"-
23	26/08/2016	9.30 am to 10.30 am	23 (T)	Integrated Pest Management	Miss. Vaishali Patil
24	27/08/2016	10.30 to 11.30 am	24 (P)	-"-	-"-
25	29/08/2016	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
26	30/08/2016	10.30 to 11.30 am	26 (P)	-"-	-"-
27	31/08/2016	9.30 am to 10.30 am	27 (T)	Review what you have been learning Final Assessment	Dr. N.A.Kulkarni Dr.B.T.Dangat Dr.A.P.Inamdr Dr.Y.S.Andoji Miss. Vaishali Patil
28	01/09/2016	10.30 to 11.30 am	28 (P)	-"-	-"-
29	02/09/2016	9.30 am to 10.30 am	29 (T)	Review what you have been learning Final Assessment	Dr. N.A.Kulkarni Dr.B.T.Dangat Dr. A. P. Inamdr Dr.Y.S.Andoji Miss. Vaishali Patil Mr. Sanjeev Walawalkar, Sangli Mrs. Neha Kulkarni Mrs. Mrunal Natekar, Sangli Dr.Manjushree Phadake, Sangli
30	03/09/2016	10.30 to 11.30 am	30 (P)	Review what you have been learning Final Assessment	Dr. N.A.Kulkarni Dr.B.T.Dangat Dr. A. P. Inamdr Dr.Y.S.Andoji Miss. Vaishali Patil Mr. Sanjeev Walawalkar, Sangli

					<p>Mrs. Neha Kulkarni  Mrs. Mrunal Natekar,  Sangli  Dr.Manjushree  Phadake, Sangli</p>
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**Bonsai of Stone Plant**



**Bonsai of Ficus Plant**



**Bonsai of Rubber Plant**



**Bonsai of Ficus Plant**



























Sc. II

3072	Female	ANSARI FARHINJAHA KHAALIQUZZAMA	-	CBZ	Handwritten notes
3073	Male	BHOSALE VIKRAM TANAJI	8412991250	CBZ	Handwritten notes
3074	Female	BILE SUSHAMA SANBHAI	8600310923	CBZ	Handwritten notes
3075	Female	CHAVAN PUNAM SHRIKANT	9158876413	CBZ	Handwritten notes
3076	Female	CHAVAN RESHMA SUBHASH	9960913877	CBZ	Handwritten notes
3077	Female	DESHMUKH RESHMA RAJENDRA	8605371738	CBZ	Handwritten notes
3078	Female	DHAYGUDE TEJASVI TANAJI	8888957157	CBZ	Handwritten notes
3079	Female	GURAV SAMRUDDHI JAGANNATH	-	CBZ	Handwritten notes
3080	Male	JADHAV ONKAR RAVINDRA	9503839889	CBZ	Handwritten notes
3081	Female	JADHAV PRIYANKA GANESH	-	CBZ	Handwritten notes
3082	Female	JADHAV SUCHITA VILAS	9923107037	CBZ	Handwritten notes
3083	Female	KHADE PRANALI DAGADU	-	CBZ	Handwritten notes
3084	Female	KILLEDAR SHWETA ARVIND	9970878225	CBZ	Handwritten notes
3085	Female	KORE PIYA / RUPALI SHRIKANT	-	CBZ	Handwritten notes
3086	Female	LASHKARWALE SOMAIYYA JAHANGIR	-	CBZ	Handwritten notes
3087	Male	MANE ANSHAY GORAKH	-	CBZ	Handwritten notes
3088	Female	MANE PRERANA HIMMAT	-	CBZ	Handwritten notes
3089	Female	MANE SWAPNALI TANAJI	9503988455	CBZ	Handwritten notes
3090	Female	MOHITE SHITAL SUDAM	-	CBZ	Handwritten notes
3306	Female	NIKAM MANISHA MOHAN	9637823029	CBZ	Handwritten notes







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

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**NOTICE**

**TO ALL THE STUDENTS PARTICIPATED IN CERTIFICATE COURSE IN  
GAEDENING**

Date: 02/09/2016

This is to inform you all that a written test of 50 marks and assessment of the project work has been arranged on 03/09/2016 at 11.00 am. Kindly attend the same without fail.

  
**HEAD**  
DEPARTMENT OF BOTANY  
PADMABHUSHAN DR. VASANTROD DADA PATIL  
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**DEPARTMENT OF BOTANY**  
**CERTIFICATE COURSE IN GAEDENING**

**TEST QUESTION PAPER**

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

**Date: 03/09/2016**

- 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

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 -----.



## Certificate Course in Gardening

### Mark list of the students participated in Test and Project

**Total Marks: 100**

**Date: 05/09/2016**

S. N	Roll.No.	Gender	Name of Student	Mobile.No.	Test (50)	Project (50)	Total
1	3401	Female	PATIL PRATIBHA APPASO	9763361893	42	44	86
2	3402	Female	METHE PRIYANKA SHAHAJI	9673887301	44	45	89
3	3403	Male	JOSHI PADMAKSH SUNIL	7385659659	45	47	92
4	3404	Female	MANE NIKITA SANJAY	9766688150	44	46	90
5	3405	Female	PATIL YOGINI RAVINDRA	9975159423	45	46	91
6	3406	Female	NALAWADE ANURADHA MACHCHHINDRA	-	42	47	89
7	3407	Female	NADAF TABASSUM USMAN	8928006654	44	42	86
8	3409	Female	CHAVAN POOJA SHIVAJI	9503553554	48	42	90
9	3410	Male	MALI VAIBHAV SANJAY	-	42	46	88
10	3411	Female	MANE JYOSNA GANPATRAV	9623187464	45	42	87
11	3412	Female	PAWAR NIKITA KIRAN	-	45	42	87
12	3413	Female	SADAMATE AMRUTA PANDHARINATH	9970718683	46	42	88
13	3415	Female	PATIL PRAMODINI SHRIRANG	9765160862	42	45	87
14	3416	Female	PATIL POOJA MAHADEV	8108791616	45	43	88

### B. Sc. II

15	3072	Female	ANSARI FARHINJAHA KHAALIQUZZAMA	-	44	42	86
16	3073	Male	BHOSALE VIKRAM TANAJI	8412991250	48	42	90
17	3074	Female	BILE SUSHAMA SANBHAJI	8600310923	42	46	88
18	3075	Female	CHAVAN PUNAM SHRIKANT	9158876413	45	42	87
19	3076	Female	CHAVAN RESHMA SUBHASH	9960913877	45	42	87
20	3077	Female	DESHMUKH RESHMA RAJENDRA	8605371738	46	42	88
21	3078	Female	DHAYGUDE TEJASVI TANAJI	8888957157	42	45	87

22	3079	Female	GURAV SAMRUDDHI JAGANNATH	-	45	43	88
23	3080	Male	JADHAV ONKAR RAVINDRA	9503839889	42	44	86
24	3081	Female	JADHAV PRIYANKA GANESH	-	44	45	89
25	3082	Female	JADHAV SUCHITA VILAS	9921107037	45	47	92
262	3083	Female	KHADE PRANALI DAGADU	-	44	46	90
72	3084	Female	KILLEDAR SHWETA ARVIND	9970878225	45	46	91
8	3085	Female	KORE PRYA / RUPALI SHRIKANT	-	42	47	89
29	3086	Female	LASHKARWALE SUMAIYYA JAHANGIR	-	44	42	86
30	3087	Male	MANE AKSHAY GORAKH		48	42	90
31	3088	Female	MANE PRERANA HIMMAT	-	42	46	88
32	3089	Female	MANE SWAPNALI TANAJI	9503988455	45	42	87
33	3090	Female	MOHITE SHITAL SUDAM	-	45	42	87
34	3306	Female	NIKAM MANISHA MOHAN	9637823029	46	42	88
35	3307	Male	NIKAM VIJAY ANANDRAO	7757987751	42	44	86
36	3308	Female	OMBASE GAURI RATNAKUMAR	9730942645	44	45	89
37	3309	Female	PAILWAN SNEHAL APPASO	9860816919	45	47	92
38	3310	Female	PAKHARE SHITAL SURESH	9420678738	44	46	90
39	3311	Female	PARIT POOJA RAJARAM	7798706791	45	46	91
40	3312	Female	PATIL ASHARANI JALINDAR	9766839081	42	47	89
41	3313	Male	PATIL ATUL ASHOK	7798864416	44	42	86
42	3314	Female	PATIL BHAGYASHREE PRATAP	8805457878	48	42	90
43	3315	Male	PATIL OMKAR LAXMAN	-	42	46	88
44	3316	Female	PATIL PALLAVI TANAJI	9970671871	45	42	87
45	3317	Female	PATIL POONAM RAMCHANDRA	9665288505	45	42	87
46	3318	Female	PATIL PRITI PRAKASH	9657549264	46	42	88
47	3319	Female	PATIL RAJASHRI VINAYAK	-	42	45	87
48	3320	Male	PATIL ROHIT DADASO	-	45	43	88
49	3321	Female	PATIL RUPALI YASHWANT	9860572986	42	44	86

50	3322	Male	PATIL RUSHIKESH RAVINDRA	9021949092	44	45	89
51	3323	Female	PATIL RUTUJA RAMCHANDRA	7709988440	45	47	92
52	3324	Female	PATIL SARIKA SAMBHAJI	9096420615	44	46	90
53	3325	Female	PATIL SHITAL DHANANJAY	9561893883	45	46	91
54	3326	Female	PATIL SHIVANI CHANDRASHEKHAR	-	42	47	89
55	3327	Female	PATIL SHUBHADA SHASHIKANT	9665651159	44	42	86
56	3328	Male	PATIL SHUBHAM KIRAN	8975191955	48	42	90
57	3329	Male	PATIL SHUBHAM SUBHASH	9503379159	42	46	88
58	3330	Female	PATIL SMITA LAKSHMAN	7507291821	45	42	87
59	3331	Female	PATIL SUJAN SHAHAJI	-	45	42	87
60	3332	Female	PATIL SWEJAL TANAJI	9766923882	46	42	88
61	3333	Male	PATIL TUSHAR MAHADEV	8975464621	42	45	87
62	3334	Male	PATIL TUSHAR PRADIP	-	45	43	88
63	3335	Female	PATIL UNMESHA PRAKASH	9545194403	42	44	86
64	3336	Female	PATIL VIDYARANI MANOHAR	7219568657	44	45	89
65	3337	Male	PATL UMESH BALASO	9960152624	45	47	92
66	3338	Male	PAWAR DAYANAND KUNDLIK	9503003549	44	46	90
67	3339	Female	PAWAR PRAJAKTA MANIK	9766736065	45	46	91
68	3340	Female	PAWAR PRIYANKA SAKHARAM	-	42	47	89
69	3341	Male	PIMPARI DADASAHEB TRISHAD	9890862989	44	42	86
70	3342	Female	RANKHAMBE PRATIKSHA NARENDRA	-	48	42	90
71	3343	Female	SAGAR SNEHAL BHARAT	-	42	46	88
72	3344	Female	SALAMAT HALIMA BALAECHAND	9730281011	45	42	87
73	3345	Female	SALUNKHE ARCHANA ASHOK	9623409296	45	42	87
74	3346	Female	SALUNKHE ROHINI BALASO	-	46	42	88
75	3347	Male	SALUNKHE TUSHAR BALASO	7620788075	42	45	87
76	3348	Female	SANDE KAJAL DATTATRAY		45	43	88
77	3349	Male	SAWANT PRATIK RAJENDRA	-	42	44	86

78	3350	Male	SAWANT SUDARDHAN MANIKRAO	8956296529	44	45	89
79	3351	Female	SAWWASHE SUPRIYA ASHOK	9579432036	45	47	92
80	3352	Female	SHENDAGE MAYA JAGANNATH	9595181681	44	46	90
81	3353	Female	SHENDAGE NITA DATTATRAY	7741831389	45	46	91
82	3354	Female	SHENDAGE SNEHAL SUDHAKAR	9421182002	42	47	89
83	3355	Female	SHENDAGE VAISHALI PANDURANG	9657126364	44	42	86
84	3356	Female	SHINDE ANJALI VASANT	-	48	42	90
85	3357	Female	SHINDE BHAGYASHREE VISHNU	-	42	46	88
86	3358	Male	SHINDE PAVAN SURESH	8551895435	45	42	87
87	3359	Female	SHINDE PRANALI SHASHIKANT	9404354155	45	42	87
88	3360	Female	SHINDE SHITAL JANARDHAN	8605112629	46	42	88
89	3361	Male	SHINDE SHUBHAM VIJAY	-	42	45	87
90	3362	Female	SHINDE SNEHAL GANESH	9623718593	45	43	88
91	3363	Male	SHIVANKAR PRATIK POPAT	9595261384	42	44	86
92	3364	Female	SUTAR SWAPNALI VIJAY	-	44	45	89
93	3365	Male	TOKALE AKASH PANDURANG	-	45	47	92
94	3366	Male	TORE SURAJ BABASO	8180092484	44	46	90
95	3367	Female	WAGH SWAPNALI SAMBHAJI	9552233488	45	46	91
96	3368	Female	WAGHMARE VISHAKHA SAMBHAJI	-	42	47	89
97	3369	Male	YADAV ABHIJIT RAMRAV	-	44	42	86

  
 (Dr. N. A. Kulkarni)  
**HEAD**  
 DEPARTMENT OF BOTANY  
 PADMABHUSHAN DR. VASANTRAO DADA PATIL  
 MAHAVIDYALAYA, TASGAON, DIST. SANGLI