



Savitribai Phule Pune University

Satyaniketan's

**Adv. M. N. Deshmukh Arts, Science and Commerce College,
Rajur**

Syllabus for Skill Based Certificate Course

Plant Nursery Management

Program: B.Sc.

Organized by

Department of Botany

Coordinator

Prof. K.J. Kakade. (Head of Department)

(DEPARTMENT OF BOTANY SKILL BASED COURSE B.SC.)

“Plant Nursery Management”

Details of the Certificate Course:

SR.NO	Heading	Particulars
1	Title of Course	Nursery Management
2	Eligibility for Admission	HSC.
3	Level	U.G.
4	Status	Revised
5	Duration	Three Months (30 Hrs.)
6	Intake Capacity	30 Students
7	Theory & Practical	30 Hrs.
8	Fees Structure	-
9	To be implemented from Academic year	2023-24

Objectives of the Course:

- 1) To equip the students with practical knowledge of different Nursery Management of Practices.
- 2) To impart the basic skills of entrepreneurship in the students specifically in the field of Nursery.
- 3) Principles of nursery crop culture and improve Knowledge.
- 4) Principles of advertising & marketing nursery products and management.
- 5) This Certificate course will help students for employability.

About nursery:

A vegetable or fruit nursery is a place where plants are cared for during the early stage of growth, providing optimum conditions for germination and subsequent growth until they are strong to be planted out in their permanent place. A nursery can be as simple as a raised bed in an open field or a sophisticated green house with micro sprinklers and controlled atmospheric systems. Nursery management and plant propagation are considered same. They are different but inter-related.

In fact, mass multiplication of quality planting materials is the centre theme of nursery management is a trade oriented dynamic process, which refers to efficient utilization of resources for economic returns. Nursery management is team effort to reach the desired goal.

Nursery management

❖ The main phases of nursery management are-

- **Planning** - demand for planting material, provision of mother blocks, requirement of land area, water supply, working tools, growing structures and input availability.
- **Implementation** - land treatment, protection against biotic interference and soil erosion, proper layout, input supply, etc.
- **Monitoring and evaluation** - physical presence, rapid response, critical analysis, incentive to workers, etc.

**SYLLABUS FOR PLANT NURSERY MANAGEMENT (30L)
(YEAR 2023-2024)**

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|---------------------------------------|--|-----------|
| 1. Nursery Management: | | (4L) |
| | Introduction, Types of Nurseries and Cultural Practices
Seed (Propagule) Collection, Selection of Propagule Materials,
Storage and Treatment Manures, Fertilizers and Pesticides
Methods of Irrigation – Drip, Sprinkler and Flood | |
| 2. Horticultural Practices: | | (4L) |
| | Introduction, Branches and Importance methods of Propagation:
Vegetative –I) Natural - Rhizome, Bulb, Corm and Sucker
ii) Artificial –Cuttings, Layering, Grafting and Budding
Landscaping As a Means of Plant Resources Conservation | |
| 3. Greenhouse Technology: | | (4L) |
| | Introduction, Advantages and Limitations
Types of Greenhouses Greenhouse Structure, Principle –
I) Site Selection and Orientation, II) Structure Materials,
III) Covering Materials, IV) Temperature and Humidity Control | |
| 4. Plant Sales And Management: | | (3L) |
| | I) Economic Of Nursery Development
II) Online Nursery Information and Sales Systems | |
| Practical: | | (15L) |
| | 1. Preparation of pot for plant or seed formation technics. | 3P |
| | 2. Study of methods of propagation with the help of suitable materials
Tubers, bulbs, rhizomes, corms, suckers and runners. | 3P |
| | 3. Propagation of horticultural plants by stem cuttings and air layering. | 3P |
| | 4. Propagation of horticultural plants by grafting and ‘T’ budding. | 3P |
| | 5. Visit to nursery and playhouse/greenhouse. | 3P |

References –

- 1) P. Ratha Krishnan, Rajwant K. Kalia- Plant Nursery Management: Principles and Practices.
- 2) T.K. Bose, D. Mukharjee - (Revised by) Gardening in India II Edition.
- 3) Vijay. K. Sharma, Sunil. K. Sharma economically important ornamental plant.
- 4) V.L Chopra- Plant Breeding.
- 5) Vijay Mittal - Plant Diseases.
- 6) P.B. Sharma-Principal of Practices

TIME TABLE OF THE COURSE**TITLE OF THE COURSE: PLANT NURSERY MANEGMENT**

Sr. No.	Date	Day	Time	Teacher	No. of Lecture	P/L
1.	09/11/2017	Thursday	02:03 PM	Mr. V. B. Yelmame	01	L
2.	10/11/2017	Friday	02:03 PM	Mr. L. L. Wale	01	L
3.	11/11/2017	Saturday	02:05 PM	Mr. L. L. Wale	03	P
4.	17/11/2017	Thursday	02:03 PM	Mr. V. B. Yelmame	01	L
5.	18/11/2017	Friday	02:03 PM	Mr. V. B. Yelmame	01	L
6.	23/11/2017	Thursday	02:03 PM	Mr. V. B. Yelmame	01	L
7.	24/11/2017	Friday	02:03 PM	Mr. L. L. Wale	01	L
8.	25/11/2017	Saturday	02:05 PM	Mr. L. L. Wale	03	P
9.	02/12/2017	Thursday	02:03 PM	Mr. V. B. Yelmame	01	L
10.	07/12/2017	Friday	02:03 PM	Dr. D. B. Tambe	01	L
11.	08/12/2017	Saturday	02:05 PM	Dr. D. B. Tambe	03	P
12.	09/12/2017	Thursday	02:03 PM	Mr. V. B. Yelmame	01	L
13.	15/12/2017	Friday	02:03 PM	Dr. D. B. Tambe	01	L
14.	16/12/2017	Saturday	02:05 PM	Dr. D. B. Tambe	03	P
15.	21/12/2017	Thursday	02:03 PM	Mr. V. B. Yelmame	01	L
16.	22/12/2017	Friday	02:03 PM	Mr. V. B. Yelmame	01	L
17.	23/12/2017	Thursday	02:03 PM	Mr. K. J. Kakade	01	L
18.	28/12/2017	Friday	02:03 PM	Mr. K. J. Kakade	01	L
19.	30/12/2017	Saturday	02:05 PM	Mr. K. J. Kakade	03	P
20.	05/01/2018	Thursday	02:03 PM	Mr. K. J. Kakade	01	L