

Loknete Dr. Balasaheb Vikhe Patil (Padmabhushan Awardee)
Pravara Rural Education Society's
Arts, Commerce & Science College, Alkuti,
Department of Botany
Certificate course on
“Nursery Management and Horticultural Practices”

Theory Syllabus

a) Basics of Nursery Management (02)

1. Introduction to nursery
2. Plant propagation methods and classification
3. Study of soil- types of soil & Soil testing
4. Types of nurseries

b) Seed Propagation (03)

1. Seed as propagule
2. Germination of seeds
3. Seed dormancy and viability
4. Seed production- method of collection processing and seed treatment

c) Horticultural Practices (Natural) (02)

1. Asexual reproduction-importance and advantages
2. Propagation through stolons, runners, bulbs, tubers, suckers, rhizome etc.

d) Horticultural Practices (Artificial) (06)

1. Cutting
2. Root stock - Scion relationship
3. Layering
4. Grafting
5. Budding

e) Nutrient and Water Management (04)

I) Nutrient Management

- i. Plant Nutrients and Their Requirements.

- ii. Manures and Fertilizers Application in Nursery
- iii. Integrated Nutrient Management in Nursery.

II) Water Management

- i. Methods of irrigation
- ii. Water qualities and Water Management in Nursery
- iii. Special practices in nursery management – Sanitation, Drainage, Training and Pruning in Nursery

f) Commercial Nursery Management (04)

- 1. Prerequisites of nurseries
- 2. Cultural practices in nursery
- 3. Pots- Types, Potting, repotting and De-potting
- 4. Packing and Transport of Nursery Plants
- 5. Introduction to landscaping
- 6. Lawn making

g) Plant Protections in Nursery (02)

- 1. Pest Management in Nursery
- 2. Disease Management in Nursery
- 3. Weed Management in Nursery

h) Entrepreneurship Development (02)

- 1. Entrepreneurship – Concept, characteristics, approaches, need for Entrepreneurship
- 2. Traits of an entrepreneur-Risk taking, leadership, decision making, planning, organizing, coordinating and marketing.

Practical Syllabus	(40)
1. Study of soil testing - PH, WHC, EC, Nutrient content etc.	(02)
2. Study of garden equipment and various types of pots	(02)
3. Study of pot culture-Potting and Repotting	(04)
4. Study of different plant fertilizers.	(02)
5. Preparation of nursery beds, plastic bags, planting, sowing, and watering.	(06)
6. Study of natural vegetative plant propagation methods.	(03)
7. Study of artificial vegetative plant propagation methods	(08)
i) Cutting.	
ii) Layering.	
iii) Grafting	
iv) Budding.	
8. Study of irrigation system	(02)
9. Study of spaying	(01)
10. Visit to nursery	(04)
11. Visit to horticulture institute.	(04)
12. Study of nursery plant diseases.	(02)