## **Practical Plan**

## Name of the college: GOVERNMENT COLLEGE OF ARTS, SCIENCE AND COMMERCE, SANQUELIM- GOA

Name of Faculty: MS. SHUBHA SHIVDAS KAUTHANKAR

Subject: BOTANY

Paper code: BOT141: NURSERY AND GARDENING Program: F.Y.B.Sc. Division: -

Academic year: 2024- 2025 Semester: II Total Practicals/Labs: 15 × 4 = 60 Hours

**Credits: 2 (4 Hours)** 

Course Objectives: 1) To study the concepts and basics of operation and management of nursery and gardens.

2) To acquire hands- on training of various techniques used in nursery raising and gardening.

**Expected Course Outcome:** 1) Acquire knowledge about the basic nursery layout and management practices.

- 2) Develop skills in kitchen gardening for cultivation of different vegetables.
- 3) Understand gardening skills and routine operations of vertical garden, vegetable garden, etc.

Student Learning Outcome: 1) Understand the basics of nursery and gardening.

- 2) Familiarize students with nursery management practices like sowing, planting, potting, vegetative propagation, seed storage and plant protection. .
- 3) Acquire knowledge about various indoor gardening including vertical garden, bonsai, terrarium and its routing operations..
- 4) Develop skills in kitchen gardening among students.
- 5) Familiarize students to establish start-ups in gardening or work as landscape designers.

Month	Practicals/Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books
December 2024	13/12/2024	4 HOURS	Preparation of a layout sketch of a nursery.	
January 2025	03/01/2025	4 HOURS	Familiarization with various tools, implements and plant supports.	
January 2025	10/01/2025	4 HOURS	Raising of any 2 seedlings in seed trays, preparation of potting mix, Preparation of a coir stick/coir basket	1. Horticulture- V. L. Sheela
January 2025	17/01/2025	4 HOURS	Cultivation of any 3 vegetables in the College Botanical Garden (red amaranth, cluster beans, cucurbits, chillies, lady's finger, ginger and tomato)	
January 2025	24/01/2025	4 HOURS	ISA 01 Preparation of Compost, Preparation of layout sketches of any 2 types of gardens.	2. Introduction to Horticulture- N. Kumar
January 2025	31/01/2025	4 HOURS	Preparation/creation of a vertical garden and its after care	3. Sambamurty, A.V.S.S. and
February 2025	07/02/2025	4 HOURS	Preparation of a garden in window boxes, troughs and trays (any 2).  Preparation/creation of a vertical garden and its after care	Subramanyam, N.S. 1989. A Textbook of Economic Botany
February 2025	14/02/2025	4 HOURS	Transplanting of seedlings in pots and bags; care and maintenance of plants till flowering/maturity, Treatment of seeds of coriander or other suitable seeds to break dormancy and to find germination percentage of treated seeds.	- 4. Medicinal Plant Cultivation:
February 2025	21/02/2025	4 HOURS	ISA 02 + Preparation of potting medium and cultivation of different types of potted plants (foliage, succulent, anthurium and orchid).	S.S.Purohit and S.P.Vyas
February 2025	28/02/2025	4 HOURS	Demonstration of cultivation of house plants and after care of upright and climbing plants	5. Roa, PS (2016) Vegetable crops
March 2025	07/03/2025	4 HOURS	Propagation of plants by cutting, layering, budding, grafting, runners, suckers, corms, bulbs, bulbils and tubers	production, Sonali Publications, New Delhi
March 2025	21/03/2025	4 HOURS	ISA 03 + Preparation of a terrarium.	
March 2025	28/03/2025	4 HOURS	Field visit to a plant nursery or landscape garden	6. Textbook of Horticulture- V.L. Sheela
April 2025	04/04/2025	4 HOURS	Identification and description of any 2 plants used for avenues, hedges, flower beds and indoor garden.	
April 2025	11/04/2025	4 HOURS	Revision and Journal certification	

## \* Assessment Rubrics

Component	Max Marks		
ISA 1	5		
ISA 2	5		
ISA 3	5		
Practical	40		
Project	-		
Semester End	20		
Exam	20		