

## Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim-Goa				
Name of Faculty: Dr Jyosna Gawas		Subject: Botany		
Paper code: BOT-141		Program: B.Sc.		Batch: I
Academic year: 2025-2026		Semester: II		Total Practicals/Labs: 30
Credits: 02				
<b>Course Objectives:</b> <div><div>1. To provide hands-on training in nursery management, garden layout preparation, plant propagation, and cultivation practices.</div><div>2. To develop practical skills in compost preparation, seedling raising, potting, ornamental gardening, and maintenance of plants and gardens.</div></div>				
<b>Expected Course Outcome:</b> <div><div>1. Explain the scope and importance of nurseries and gardens.</div><div>2. Describe planning, layout, and management of nurseries.</div><div>3. Design and distinguish types of gardens and their features.</div><div>4. Apply knowledge of plant propagation and maintenance practices.</div></div>				
<b>Student Learning Outcome:</b> <div><div>1. Students will be able to prepare nursery and garden layouts, raise seedlings, propagate plants, and cultivate vegetables and ornamental plants using appropriate techniques.</div><div>2. Students will be able to identify garden plants, use horticultural tools effectively, create innovative gardens (vertical, terrarium, window boxes), and apply proper aftercare practices.</div></div>				
Month	Practicals/Labs Scheduled Date	No. of Practicals /Labs planned	List of Experiments	Reference books
December	5/12/2025	2	Preparation of a layout sketch of a nursery.	Textbook of horticulture by K. Manibhushan Rao
			Preparation of compost.	
	12/12/2025	1	Preparation of layout sketches of any 2 types of gardens	

January	2/1/2026	2	Familiarization with various tools, implements and plant support	Horticulture by V. L. Sheela
			Raising of any 2 seedlings in seed trays, preparation of potting mix, transplanting of seedlings in pots and bags; care and maintenance of plants till flowering/maturity.	
	9/1/2026	2	ISA I, Cultivation of any 3 vegetables in the College Botanical Garden (red amaranth, cluster beans, cucurbits, chillies, lady's finger, ginger and tomato).	Plant Propagation: Principles and Practices by H. T. Hartmann, D. L. Kester, F. T. Davies & R. L. Geneve
	16/1/2026	1	Raising of any 2 seedlings in seed trays, preparation of potting mix, transplanting of seedlings in pots and bags; care and maintenance of plants till flowering/maturity.	
	23/1/2026	2	Identification and description of any 2 plants used for avenues, hedges, flower beds, lawns, ornamental shrubs, rock garden, water garden and indoor garden.	
	30/1/2026	1	Treatment of seeds of coriander or other suitable seeds to break dormancy and to find germination percentage of treated seeds.	Horticulture in India by G. S. Randhawa & A. Mukhopadhyay
February	6/2/2026	1	ISA II, Propagation of plants by cutting, layering, budding, grafting, runners, suckers, corms, bulbs, bulbils and tubers.	
	13/2/2026	2	Preparation of a coir stick/coir basket. Preparation of a terrarium.	
	20/2/2026	1	Preparation of a garden in window boxes, troughs and trays (any 2).	
	27/2/2026	1	Preparation/creation of a vertical garden and its after care.	
March	6/3/2026	1	ISA III, Preparation of potting medium and cultivation of different types of potted plants (foliage, succulent, anthurium and orchid).	
	13/3/2026	1	Demonstration of cultivation of house plants and after care of upright and climbing plants.	
	20/3/2026	2	Field visit to a plant nursery or landscape garden.	
	27/3/2026		Practical Exam	

#### Assessment Rubrics

Component	Max Marks
ISA 1	05
ISA 2	05
ISA 3	05
Practical	40
Project	NA
Semester End Exam	NA