

Lecture Plan

Name of the college: Government college of arts science and commerce Sanquelim-Goa

Name of Faculty: Anuja Naik

Subject: Botany (Nursery and gardening)

Paper code: BOD-105

Program/Course: T.Y B.Sc.

Division: A

Academic year: 2024 - 2025

Semester: VI

Total Lectures: 30

Course Objectives: This course is designed to give detailed knowledge of operation and management of nursery, greenhouse and gardens. The practical component of the course involves hands-on training in designing landscape and garden layouts, vegetative propagation techniques, and routine nursery and garden operations including kitchen gardening

Course Learning Outcome: Understand the basic concepts of nursery layout and management practices like sowing, planting, potting, vegetative propagation, seed storage and plant protection.

Understand different features of indoor gardening such as vertical garden, bonsai, terrarium and its routine operations.

Develop skills in kitchen gardening for cultivation of different vegetables.

Be able to establish start-ups in gardening/kitchen gardening or work as landscape designers

Month	Lectures From: To:		No. of lectures allotted	Topic, Subtopic to be covered	Learning outcome	Exercise/ Assignmen t	ICT Tool s	Reference books
December	09-12-24	14-12-24	1	Different methods of vegetative propagation – Grafting, layering, cutting, budding, runners, suckers, corms, bulbs, bulbils, tubers.	Students learn different methods of vegetative propagation like grafting layering and cutting.		Power point presentation, hanging charts.	Bose, T.K. and Mukherjee, D. 1972. Gardening in India. Oxford & IBH Publishing Co., New Delhi. Sandhu, M.K.
January	2-1-25	4-1-25	1	Different methods of vegetative propagation – budding, runners, suckers, corms, bulbs, bulbils, tubers.	Students learn different methods of vegetative propagation like budding, runners,	Asked students to carry out grafting techniques		

					suckers, corms, bulbs, bulbils, tubers.	in their garden.	1989. Plant Propagation. Wiley Eastern Ltd., Bangalore. Agrawal, P.K. 1993. Hand Book of Seed Technology. Department of Agriculture and Cooperation, National Seed Corporation Ltd., New Delhi.
	6-1-25	11-2-25	1	Study of some nursery operations - raising seedlings in trays, preparation of potting mix, transplantation of seedlings in pots, care and maintenance of plants till flowering or fruiting.	Students perform the different nursery operation i.e. raising seedlings in trays, preparation of potting mix.		
	13-1-25	18-1-25	1	Study of some nursery operations - raising seedlings in trays, preparation of potting mix, transplantation of seedlings in pots, care and maintenance of plants till flowering or fruiting.	Students perform the different nursery operation i.e. transplantation of seedlings in pots, care and maintenance of plants till flowering or fruiting.		
	20-1-25	25-1-25	1	Treatment of seeds (any two types) to break seed dormancy and to find germination percentage of treated seeds.	Students carry out the experiments where in they learn to break the dormancy of the seeds of different seeds		
	27-1-25	31-1-25	1	Treatment of seeds (any two types) to break seed dormancy and to find germination percentage of treated seeds.	Students carry out the experiments where in they learn to break the dormancy of the seeds of different seeds		
February	3-2-25	8-2-25	1	Cultivation of any five local vegetables.	Students prepare land for	Asked students to	

					cultivation of different types of vegetables	grow more 2 different types of vegetables at their home backyard		
	10-2-25	15-2-25	1	Cultivation of any five local vegetables.	Students continue with preparation of land and sow the seeds in seed bed prepared.			
	17-2-25	22-2-25		To prepare a landscape design plan for a small home garden.	Students learn the basic components of home garden and learn to draw the layout of home garden.			
	24-2-25	28-2-25		To prepare a sketch of kitchen garden layout / nursery layout plan.	Students learn the basic components of kitchen garden and nursery layout and learn to draw the layout of nursery and kitchen garden.			
March	3-3-25	8-3-25		To prepare a garden in bowls, urns, tubs, troughs, hanging baskets, jars, bottles, terrarium gardening	Students learn to prepare garden in bowl, urns, tubs, troughs, hanging baskets, jars, bottles and also learn to do terrarium gardening			
	10-3-25	15-3-25		Identification and description of avenue	Students identify different types of			

				plants, hedge plants, flower beds (any 3), lawn (any 2), ornamental shrubs (any 3) and trees (any 3), rock garden plants (any 3), water garden plants (any 3), indoor plants (any 2 of each).	avenue plants, hedge plants, flower beds, lawn , ornamental shrubs		
	17-3-25	22-3-25		Identification and description of avenue plants, hedge plants, flower beds (any 3), lawn (any 2), ornamental shrubs (any 3) and trees (any 3), rock garden plants (any 3), water garden plants (any 3), indoor plants (any 2 of each).	Students identify different types of and trees , rock garden plants, water garden plants, indoor plants		
				Field visit to a plant nursery / landscaped public place / kitchen garden / local vegetable cultivation.	Students take the practical knowledge about theory classes through field visit		