

OOOEVEN SEMESTER THEORY PLAN						
Name of the college: Government College of Arts, Science and Commerce, Sanquelim Goa						
Name of Faculty: Dr. Nisha Kevat		Subject: Botany				
Paper code: BOT 141		Program/Course: F.Y B.Sc.		Division: - --		
Academic year: 2024 - 2025		Semester: II		Total Lectures: 15 Hours		
Course Objectives: 1. This course aims to increase the understanding about the different types of gardens, their features and routine operations in nursery management and gardening. 2. The Theory component of this course aims to impart skill in designing a plant nursery, different types gardens, cultivation practices to be followed in operating a plant nursery and garden.						
Course Learning Outcome: On completion of this course students will be able to: 1. Explain the objective and scope of a plant nursery and garden. 2. Describe the different types of gardens and their features. 3. Analyze the different routine operations in nursery management and gardening. 4. Develop skills in designing a plant nursery and different types of gardens, routine operations in gardening and nursery management, cultivation practices for entrepreneurial opportunities.						
Month	Lecture	No. of lectures allotted	Topic, Subtopic to be covered	Learning outcome	ICT Tools	Reference books
December (1 st Week)	09/12/2024	1 H	Theory 1: Module 1: Plant nursery, gardens and their management Definition, objectives and scope of a plant nursery and garden.	Explain the definition, objectives, and scope of a plant nursery and garden.	Power point presentation, You study lecture related videos	Acquaah, G (2019). Horticulture: Principles and Practices (4th edition). India: Pearson India Education Services Pvt. Ltd. Agrawal, PK (1993).
December (2 nd Week)	16/12/2024	1 H	Theory 2: Plant nursery layout, infrastructure, planning and	Describe the layout, infrastructure, planning, and	Power point presentation, You study lecture related	

			seasonal activities;	seasonal activities of a plant nursery.	videos	Hand Book of Seed Technology. Department of Agriculture and Cooperation, National Seed Corporation Ltd., New Delhi. Alphonso, N (2004). Home Gardening. Agriculture Officers' Association, Panaji – Goa. Bose, TK and Mukherjee, D (1972). Gardening in India. Oxford & IBH Publishing Co., New Delhi. Courtier, J and Clarke, G (1997). Indoor plants: The Essential Guide to Choosing and Caring for Houseplants. Reader's Digest, New York. Edmond, JB, Musser, AM and Andrews, FS (1957). Fundamentals of Horticulture. McGraw Hill Book Co., New Delhi. Janick, J (1979). Horticultural Science (3rd edition). W.H. Freeman & Co., San Francisco,
January (3 rd Week)	02/01/2025	1 H	Theory 3: Marketing challenges.	Identify the marketing challenges faced by plant nurseries and gardens.	Power point presentation, You study lecture related videos	
January (4 th Week)	06/01/2025	1 H	Theory 4: Different types of gardens and their design: indoor garden (gardening in window boxes, tubs, troughs, trays and hanging baskets)	Outline the design principles and features of indoor gardens, including window boxes, tubs, troughs, trays, and hanging baskets.	Power point presentation, You study lecture related videos Demonstration	
January (5 th Week)	13/01/2025	1 H	Theory 5: vertical garden; terrarium; bonsai)	Explain the concepts of vertical gardens, terrariums, and bonsai.	Offline Power point presentation, You study lecture related videos	
January (6 th Week)	20/01/2025	1 H	Theory 6 : and outdoor garden (landscape, avenue plantation,	Discuss the characteristics and design principles of outdoor gardens, including landscapes, avenue plantations, parks, rock gardens, water gardens, terrace gardens, and kitchen gardens.	Power point presentation, You study lecture related videos	
January/ February (7 th Week)	27/01/2025	1 H	Theory 7 : park, rock garden, water garden, terrace garden and kitchen garden).	Recognize the features of gardens, such as fences, hedges, edges, steps, drives, paths, arches, pergolas, and lawns.	Power point presentation, You study lecture related videos	
February (8 th Week)	03/02/2025	1 H	Theory 8: Features of a garden (fence, hedge, edge, steps, drives and paths; arches, pergolas, lawns,	Describe specific garden features like carpet beds, flower beds, shrubberies, borders, topiary, plant supports, and garden	Power point presentation, You study lecture related videos	
February (9 th Week)	10/02/2025	1 H	Theory 9: carpet bed, flower bed, shrubbery, border, topiary,	Explain the preparation of soil and methods for breaking seed dormancy.	Power point presentation, You study lecture related videos	
February (10 th Week)	17/02/2025	1 H	Theory 10: plant supports, garden adornments).	Compare methods of planting, including direct seeding and transplanting.	Power point presentation, You study lecture related videos	
February/ March	24/02/2025	1 H	Theory 11 : Preparation of soil, methods of breaking seed	Illustrate the processes of	Power point presentation, You study lecture related	

(11 th Week)			dormancy,	hardening, irrigation, and manuring.	videos	USA. Kumar, N (1997). Introduction to Horticulture. Rajalakshmi Publications, Nagercoil. Randhawa, GS and Mukhopadhyay, A (1986). Floriculture in India. Allied Publishers Limited, New Delhi. edition). MacMillan India Limited, New Delhi. Rao, PS (2016). Vegetable Crops Production. Sonali Publications, New Delhi. Sandhu, MK (1989). Plant Propagation. Wiley Eastern Ltd., Bangalore. Stevenson, V (1984). Plants and Flowers in the Home. Treasure Press, London.
March (12 th Week)	03/03/2025	1 H	Theory 12 : planting (direct seeding and transplanting),	Discuss techniques like staking, pinching, pruning, and defoliation for plant maintenance.	Power point presentation, You study lecture related videos	
March (13 th Week)	10/02/2025	1 H	Theory 13: hardening, irrigation, manuring,	Evaluate strategies for the management of pests and diseases in plant nurseries and gardens.	Power point presentation, You study lecture related videos	
March (14 th Week)	17/02/2025	1 H	Theory 14: staking, pinching, pruning and defoliation;	Demonstrate an understanding of staking, pinching, pruning, and defoliation techniques for plant growth and maintenance.	Power point presentation, You study lecture related videos	
March (15 th Week)	24/02/2025	1 H	Theory 15: management of pests and diseases	Analyze methods for identifying and managing pests and diseases in plants. .	Power point presentation, You study lecture related videos	
March (16 th Week)	31/03/2025	1 H	Theory 16 : Revisions	Revisions	Power point presentation, You study lecture related videos	
March/ April (17 th Week)	07/04/2025	1 H	Theory 17: Revisions	Revisions	Power point presentation, You study lecture related videos	

*Note: Data filled in the above form is sample data.