

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

Branch – **BOTANY**

MAJOR ELECTIVE COURSE – II : HORTICULTURAL TECHNIQUES

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Justify Horticulture deals with the cultivation of: a) Forest trees b) Fruit, vegetables, and flowers c) Cereals d) Pulses	K1	CO1
	2	Which irrigation system delivers water directly to the root zone? a) Surface b) Sprinkler c) Drip d) Canal	K2	CO1
2	3	Propagation using bulbs and corms is an example of: a) Sexual reproduction b) Asexual propagation c) Hybridization d) Budding	K1	CO2
	4	Grafting is a method of propagation involving: a) Joining of two plant parts b) Use of seeds c) Cross-pollination d) None of these	K2	CO2
3	5	Floriculture deals with the study of: a) Fruit crops b) Flower crops c) Field crops d) Plantation crops	K1	CO3
	6	Which of the following flowers is commercially important for cut flower production? a) Jasmine b) Rose c) Marigold d) Chrysanthemum	K2	CO3
4	7	Bonsai refers to: a) Terrace gardening b) Miniature tree cultivation c) Kitchen gardening d) Nursery culture	K1	CO4
	8	Hydroponics involves: a) Soil-less plant cultivation b) Aquatic plant culture c) Organic farming d) Seedless propagation	K2	CO4
5	9	Pomology is the branch of horticulture dealing with: a) Fruits b) Flowers c) Vegetables d) Medicinal plants	K1	CO5
	10	The synthetic plant growth regulator used to induce rooting is: a) IAA b) IBA c) GA ₃ d) 2,4-D	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	Justify. Explain the scope and importance of horticulture in India. (OR)	K2	CO1
	11.b.	Discuss the various types of irrigation systems used in modern horticulture.		
2	12.a.	Describe different methods of vegetative propagation in plants with examples. (OR)	K3	CO2
	12.b.	Explain the techniques and applications of plant tissue culture in horticulture.		
3	13.a.	Explain the factors affecting flower production and quality maintenance in floriculture. (OR)	K3	CO3
	13.b.	Discuss the cultivation and export potential of rose and orchids.		
4	14.a.	Explain the different types of gardens with suitable examples. (OR)	K4	CO4
	14.b.	Discuss the principles and advantages of hydroponic and vertical gardening.		
5	15.a.	Describe the uses of growth regulators in horticultural crops. (OR)	K4	CO5
	15.b.	Discuss the methods of pruning and training in fruit crops with examples.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Evaluate the impact of soil composition, fertilizers, and irrigation methods on crop yield in horticulture.	K5	CO1
2	17	Illustrate the process of propagation by specialized structures such as bulbs, corms, tubers, and rhizomes with diagrams.	K4	CO2
3	18	Analyze the post-harvest handling and packaging methods used in commercial floriculture.	K4	CO3
4	19	Construct and justify an innovative layout plan for indoor and outdoor gardens including suitable plant species.	K5	CO4
5	20	Formulate a horticultural business model highlighting the importance of entrepreneurship in floriculture and pomology.	K6	CO5