

**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 <sub>3</sub> d) 2,4-D	K2	CO5

Cont...

**SECTION - B (35 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Justify. Explain the scope and importance of horticulture in India.	K2	CO1
		(OR)		
	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.	K3	CO2
		(OR)		
	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.	K3	CO3
		(OR)		
	13.b.	Discuss the cultivation and export potential of rose and orchids.		
4	14.a.	Explain the different types of gardens with suitable examples.	K4	CO4
		(OR)		
	14.b.	Discuss the principles and advantages of hydroponic and vertical gardening.		
5	15.a.	Describe the uses of growth regulators in horticultural crops.	K4	CO5
		(OR)		
	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 × 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