

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 2024
(Second Semester)**

Branch - ZOOLOGY

PLANT BIOLOGY - II

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	What is the scientific name of Indian rose? (i) <i>Rosa indica</i> (ii) <i>Rosa rubiginosa</i> (iii) <i>Rosa centifolia</i> (iv) <i>Rosales</i>	K1	CO1
	2	Infer the act of growing plants inside the house is (i) Rock gardening (ii) Outdoor gardening (iii) Indoor gardening (iv) All of these	K2	CO2
2	3	Which is the branch of forestry deals with the timber production? (i) Silviculture (ii) Pisciculture (iii) Horticulture (iv) Dendrology	K1	CO1
	4	Show the objective of social forestry. (i) Ecological and environmental balance and purity (ii) Easy and abundant availability of fuel and firewood for families, fodder for their domestics and timber wood for domestic use (iii) Fostering of agro-based industries in rural areas for absorption of people in gainful employment (iv) All of the above	K2	CO2
3	5	How do dragonflies get rid of things? (i) Honey bees (ii) Mosquitoes (iii) Earthworms (iv) Aphids	K1	CO1
	6	Show the biologically active compound of <i>Vitex negundo</i> (i) Terpenoids (ii) Morphine (iii) Curcumin (iv) None of these	K2	CO2
4	7	Which of the following chemicals are most widely used for protoplast fusion? (i) Mannitol (ii) Sorbitol (iii) Mannol (iv) Polyethylene glycol	K1	CO1
	8	Show the incorrect match (i) Haberlandt -Father of tissue culture (ii) Cell suspension culture - production of secondary metabolites (iii) Synthetic seeds - Sodium alginate (iv) Root culture -Haploid plants	K2	CO2

Cont...

5	9	Which microorganism can be used for citric acid production? (i) <i>Mucor</i> (ii) <i>Aspergillus</i> (iii) <i>Rhizopus</i> (iv) erythrocytes	K1	CO1
	10	The enzyme zymase can be related to (i) Alcohol fermentation (ii) Citric acid production (iii) Amino acid production (iv) All of these	K2	CO2

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.	Explain the preparation a bonsai plant.	K5	CO4
	(OR)			
	11.b.	Compare the advantages and disadvantages of water gardens.		
2	12.a.	Explain the economic importance of Teak plant.	K5	CO4
	(OR)			
	12.b.	Interpret the principles of social forestry.		
3	13.a.	Prioritize the uses of medicinal plants in cosmetics.	K5	CO4
	(OR)			
	13.b.	Evaluate the therapeutic uses and active principles of <i>Asparagus racemosus</i> .		
4	14.a.	Evaluate the uses of artificial seeds.	K4	CO3
	(OR)			
	14.b.	Distinguish between dedifferentiation and redifferentiation.		
5	15.a.	Analyze the factors affecting the citric acid production.	K4	CO3
	(OR)			
	15.b.	List the advantages of mushroom cultivation.		

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	Explain the uses of Jasmine and Roses.	K5	CO4
2	17	Categorize Indian forest types.	K4	CO3
3	18	Elaborate the active principles of medicinal plants.	K6	CO5
4	19	Explain the various methods of protoplast isolation.	K5	CO4
5	20	Discuss the Penicillin production process.	K6	CO5

Z-Z-Z END