

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025  
(First Semester)

Branch- ZOOLOGY

PLANT BIOLOGY - I

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	<i>Oscillatoria</i> belongs to class _____ a) Chlorophyceae                      b) Xanthophyceae c) Chrysophyceae                      d) Cyanophyceae	K1	CO1
	2	<i>Adiantum</i> is a _____ a) Heterosporous                      b) Homosporous c) Homogametic                      d) Isomorous	K2	CO1
2	3	<i>Aspergillus</i> is classified as _____ a) A bacterium                      b) A Yeast c) A mold                      d) A protozoan	K1	CO2
	4	Red rot of sugarcane is caused by the fungus a) <i>Colletotrichum falcatum</i> b) <i>Streptomyces griseus</i> c) <i>Piricularia oryzae</i> d) <i>Oscillatoria</i> sp.	K2	CO2
3	5	What are the main bases of Bentham and Hooker's classification system? a) Phylogeny and evolutionary relationships b) Economic importance of plants c) Floral characters and the number of whorls d) Geographical distribution and habitats	K1	CO3
	6	Corolla is cruciform and unguiculate in a) Annonaceae                      b) Brassicaceae c) Rutaceae                      d) Arecaceae	K2	CO3
4	7	<i>Coffea</i> species belongs to the family a) Rubiaceae                      b) Asclepiadaceae c) Acanthaceae                      c) Euphorbiaceae	K1	CO4
	8	What is the characteristic inflorescence of the Euphorbiaceae a) Spike    b) Cyathium    c) Head    d) Umbel	K2	CO4
5	9	What are the main high-energy products produced during light-dependent reactions? a) Glucose and Oxygen                      b) ATP and NADPH c) Carbon dioxide and Water    d) ADP and NADP+	K1	CO5
	10	_____ is the primary function of auxins a) Inhibition of lateral bud growth b) Promotion of cell division in tissue culture c) Induction of seed dormancy d) Stimulation of leaf senescence	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.	Describe the thallus structure of <i>Ocillatoria</i> with suitable diagram.	K2	CO1
		(OR)		
	11.b.	Summarize the Internal structure of <i>Cycas</i> leaflet with suitable diagram.		
2	12.a.	Discuss the thallus structure of <i>Albugo</i> with suitable diagram .	K2	CO2
		(OR)		
	12.b.	Explain the common symptoms and Causative organisms for Tikka diseases .		
3	13.a.	Explore the primitive characters of family Annonaceae.	K3	CO3
		(OR)		
	13.b.	Expose the floral characters of family Apiaceae with suitable diagrams.		
4	14.a.	Provide the economic importances of family Rubiaceae.	K3	CO4
		(OR)		
	14.b.	Illustrate the floral characters of family Arecaceae with suitable diagrams.		
5	15.a.	Analyses the overall efficiency of Anaerobic respiration.	K4	CO5
		(OR)		
	15.b.	Point out the Physiological role of cytokinins.		

**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	Describe the sexual reproduction of <i>Volvox</i> with suitable diagrams.	K2	CO1
2	17	Review the symptoms of plant diseases and disease cycle of Red rot of sugarcane.	K2	CO2
3	18	Explore the Bentham and Hooker's system of classification.	K3	CO3
4	19	Examine the floral characters of family Euphorbiaceae with suitable diagrams.	K4	CO4
5	20	Summarize the Calvin Cycle with suitable diagrams.	K5	CO5

Z-Z-Z END