

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2026
(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	Sexual reproduction in <i>Volvox</i> is a) Isogamous b) Anisogamous c) Oogamous d) Antheridia	K1	CO1
	2	Special type of root found in <i>Cycas</i> is called a) Adventitious root b) Microbial root c) N ₂ fixing roots d) coralloid roots	K2	CO1
2	3	Conidiophore in <i>Aspergillum</i> arises from a) Foot cell b) Cap cell c) Meristematic cell d) Tapetum	K1	CO2
	4	_____ is the causal organism responsible for the rust of wheat? a) <i>Escherichia coli</i> b) <i>Puccinia</i> c) <i>Penicillium</i> d) <i>Rhizopus</i>	K2	CO2
3	5	Bentham and Hooker gave the classification based on a) Artificial system b) Natural system c) Phylogenetics system d) Numerical system	K1	CO3
	6	Which feature is common to the leaf base in the <i>Caesalpiniaceae</i> family? a) Nectar b) Bisexual flower c) Pulvinus d) Leaf wax	K2	CO3
4	7	Pollinium is found in family a) <i>Asclepiadaceae</i> b) <i>Rubiaceae</i> c) <i>Solanaceae</i> d) <i>Acanthaceae</i>	K1	CO4
	8	<i>Andrographis paniculata</i> belongs to the family _____ a) <i>Asclepiadaceae</i> b) <i>Rubiaceae</i> c) <i>Solanaceae</i> d) <i>Acanthaceae</i>	K2	CO4
5	9	Where does the Calvin cycle occur within the chloroplast? a) Thylakoid membrane b) Stroma c) Inner membrane d) Lumen	K1	CO5
	10	Which of the following is a primary physiological effect of cytokinins? (a) Induction of dormancy (b) Inhibition of cell division (c) Stimulation of cell division (d) Promotion of leaf abscission	K2	CO5

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>Dictyota</i> with suitable diagrams.	K2	CO1
		(OR)		
	11.b.	Summarize the importance of IKS in lower groups of plants.		

Cont...

2	12.a.	Discuss the thallus structure of <i>Aspergillus</i> with suitable diagram.	K2	CO2
	(OR)			
	12.b.	Explain the common symptoms and Causative organisms for Rust disease of Wheat.		
3	13.a.	Explore the floral characters of family Brassicaceae with suitable diagrams.	K3	CO3
	(OR)			
	13.b.	Expose the floral characters of family Caesalpiniaceae with suitable diagrams.		
4	14.a.	Illustrate the floral characters of family Asclepiadaceae with suitable diagrams.	K3	CO4
	(OR)			
	14.b.	Provide the important characters of family Acanthaceae with suitable diagrams.		
5	15.a.	Analyses the overall efficiency of Aerobic respiration.	K4	CO5
	(OR)			
	15.b.	Point out the Physiological role of Auxins.		

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>Anthoceros</i> with suitable diagrams.	K2	CO1
2	17	Review the symptoms of plant diseases and disease cycle of Blight disease of Paddy.	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