

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2023
(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	What is the main basis of classification in the five-kingdom system? (i) Asexual Reproduction (ii) Mode of Nutrition (iii) Structure of cell wall (iv) Structure of the nucleus	K1	CO1
	2	Show the shape of chloroplast present in <i>Volvox</i> . (i) cup-shaped (ii) ribbon-shaped (iii) girdle-shaped (iv) star-shaped	K2	CO1
2	3	Which one of the following sporophyte contains pseudoelators? (i) Riccia (ii) Marchantia (iii) Anthoceros (iv) Funaria	K1	CO2
	4	Relate the organism <i>Cercospora personatum</i> with one of the following disease. (i) Tikka disease of groundnut (ii) Powdery Mildew (iii) Downy Mildew (iv) Blight of Paddy	K2	CO2
3	5	Who among the following proposed a natural system of classification? (i) Bentham and Hooker (ii) Carl Linnaeus (iii) John Hutchinson (iv) Charles Darwin	K1	CO3
	6	Relate the Siliqua fruit is characteristic of family. (i) Asteraceae (ii) Brassicaceae (iii) Fabaceae (iv) Poaceae	K2	CO3
4	7	Which of the following plant belong to Poaceae family? (i) Tomato (ii) Rice (iii) Apple (iv) Sweet potato	K1	CO4
	8	Relate the process resupination to family. (i) Annonaceae (ii) Arecaceae (iii) Poaceae (iv) Orchidaceae	K2	CO4
5	9	Which element is essential for the evolution of oxygen during photosynthesis? (i) Cl (ii) Mg (iii) Fe (iv) All of the above	K1	CO5
	10	Show the incorrect match. (i) Abscisic acid - Stomatal closure (ii) IAA - Cell wall elongation (iii) Cytokinin - Cell division (iv) Gibberellic acid - Leaf abscission	K2	CO5

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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.	List the merits and demerits of five-kingdom classification.	K4	CO1
	(OR)			
	11.b.	Analyze the cell structure of <i>Oscillatoria</i> .		
2	12.a.	Analyze the structure of the mature sporophyte of <i>Anthoceros</i> .	K4	CO2
	(OR)			
	12.b.	Discover the development of <i>Cycas</i> female gametophyte.		
3	13.a.	Categorize the economic importance of Annonaceae.	K5	CO3
	(OR)			
	13.b.	Explain the floral characteristics of Caesalpiniaceae.		
4	14.a.	Explain the vegetative characteristics of Poaceae.	K5	CO4
	(OR)			
	14.b.	Explain the floral characters of Arecaceae.		
5	15.a.	Compose the significance of photosynthesis.	K6	CO5
	(OR)			
	15.b.	Discuss 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	Discuss the structure of <i>Aspergillus</i> .	K6	CO1
2	17	Explain the Tikka diseases of groundnut with reference to casual organism, symptoms and control measures.	K5	CO2
3	18	Classify the Bentham and Hookers system of classification.	K4	CO3
4	19	Explain the vegetative and floral characteristics of Euphorbiaceae.	K5	CO4
5	20	Distinguish between respiration and photosynthesis.	K4	CO5

Z-Z-Z END