

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

**BSc DEGREE EXAMINATION MAY 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	Blue-green algae belong to which group? (i) Bryophytes (ii) Fungi (iii) Prokaryotes (iv) Protista	K1	CO1
	2	Show the possible pathogen that produces Aflatoxin (i) <i>Aspergillus flavus</i> (ii) <i>Clostridium botulinum</i> (iii) <i>Bacillus anthracis</i> (iv) <i>Bacillus subtilis</i>	K2	CO1
2	3	Which of the given diseases is related to groundnut? (i) Tikka (ii) Phomopsis blight (iii) Leaf rust (iv) Alternaria blight	K1	CO2
	4	Show the largest sperm present in (i) Pinus (ii) Cycas (iii) Mango (iv) Sunflower	K2	CO2
3	5	Which of the following family belong to sub class polypetalae (i) Annonaceae (ii) Cyperaceae (iii) Verbenaceae (iv) Amaranthaceae	K1	CO3
	6	Show the classification given by Bentham and Hooker is (i) Natural (ii) Genealogy (iii) Artificial (iv) Numerical	K2	CO3
4	7	What is the common name of family Euphorbiaceae? (i) Banana family (ii) Castor family (iii) Pea family (iv) Sunflower family	K1	CO4
	8	Infer the endosperm is absent in (i) Orchidaceae (ii) Compositae (iii) Poaceae (iv) Malvaceae	K2	CO4
5	9	Where does the dark reaction take place? (i) Grana of chloroplast (ii) Lumen of chloroplast (iii) Stroma of chloroplast (iv) Thylakoids of chloroplast	K1	CO5
	10	Infer the <i>Avena</i> curvature test is an accurate bioassay for (i) ABA (ii) GA ₃ (iii) IAA (iv) Ethylene	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.	Examine the asexual reproduction of <i>Albugo</i> .	K4	CO1
		(OR)		
	11.b.	Analyze the cell structure and reproduction of <i>Oscillatoria</i> .		
2	12.a.	List the control method of rust disease in wheat crops.	K4	CO2
		(OR)		
	12.b.	Analyze the structure of the mature sporophyte of <i>Anthoceros</i> .		
3	13.a.	Explain the floral characters of Rubiaceae.	K5	CO3
		(OR)		
	13.b.	Categorize the economic importance of Brassicaceae.		
4	14.a.	Assess the economic importance of Poaceae.	K5	CO4
		(OR)		
	14.b.	Explain the floral characters Acanthaceae.		
5	15.a.	Discuss the physiological role of auxins.	K6	CO5
		(OR)		
	15.b.	Elaborate the aerobic respiration.		

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	Classify the five kingdoms classification with merits and demerits.	K4	CO1
2	17	Discuss the reproduction of <i>Cycas</i> .	K6	CO2
3	18	Categorize the systematic position and family characters of Rutaceae.	K4	CO3
4	19	Explain the vegetative and floral characters of Orchidaceae.	K5	CO4
5	20	Explain the Calvin cycle.	K5	CO5

Z-Z-Z

END