

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

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

Branch- **BOTANY**

PLANT DIVERSITY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

Question No.	Question	K Level	CO
1	What is the storage product of most algae? a) Cellulose b) Glycogen c) Starch and oil d) Fat	K1	1
2	What is the mode of reproduction in <i>Oscillatoria</i> ? a) Fragmentation b) Hormogone formation c) Both (a) and (b) d) Bulbils	K2	1
3	Agar agar is obtained from a) Gigartina b) Gelidium c) Gracillaria d) All the above	K1	2
4	Red colour of the red algae is due to a) γ -phycoyanin b) Xanthophyll c) Carotene d) γ -phycoerythrin	K2	2
5	Rhizome is present in a) Funaria b) Polytrichum c) Porella d) Anthoceros	K1	3
6	Who amongst the following is regarded as the "Father of Indian Bryology" a) Prof. K.C. Mehta b) Prof. D.D. Pant c) Prof. S.R. Kashyap d) Prof. P.N. Mehra	K2	3
7	Rhizophores are formed in a) Bryophytes b) Selaginella c) Pteridium d) Gymnosperms	K1	4
8	Pteridophytes differ from the Bryophytes in having a) Archegonia b) Spermatozoids c) Conducting system d) Separate gametophytes	K2	4
9	The father of India Palaeobotany is a) C. Linnaeus b) John Mendel c) Birbal Sahni d) J.Chandra Bose	K1	5
10	Impression are a) Negative compressions b) Positive petrifications c) Negative moulding d) Not of fossilization	K2	5

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks

(5 × 7 = 35)

Question No.	Question	K Level	CO
11.a.	Analyze the reproduction of <i>Oscillatoria</i> .	K4	1
	(OR)		
11.b.	Examine the structure of <i>Volvox</i> colony.	K5	2
12.a.	List out the economic importance of algae.		
	(OR)		
12.b.	Interpret the general characteristics of Diatoms.		

Cont...

13.a.	Discover the reproduction methods of <i>Anthoceros</i>	K4	3
	(OR)		
13.b.	Inspect the internal structure of <i>Polytrichum</i> capsule.		
14.a.	Briefly explain the morphology of <i>Adiantum</i> .	K5	4
	(OR)		
14.b.	Perceive the general characteristic features of Pteridophytes		
15.a.	Draw and compile the internal structure of Coralloid root of <i>Cycas</i> .	K6	5
	(OR)		
15.b.	Write an elaborate note on Geological era.		

SECTION -C (30 Marks)

Answer ANY THREE questions
ALL questions carry EQUAL Marks

(3 × 10 = 30)

Question No.	Question	K Level	CO
16	Elucidate the structure and reproduction of <i>Oedogonium</i> .	K6	1
17	Interpret the reproduction methods of <i>Sargassum</i> .	K5	2
18	Discuss in detail about the general characters of Bryophytes.	K6	3
19	Analyze the structure and reproduction of <i>Equisetum</i> .	K4	4
20	Examine the reproduction methods of <i>Gnetum</i> .	K4	5

Z-Z-Z

END