

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2024**(Regular/Improvement/Supplementary)****BOTANY****GBOT3B03T: PHYCOLOGY, BRYOLOGY, PTERIDOLOGY & GYMNOSPERMS****Time: 2 Hours****Maximum Marks: 60****SECTION A: Answer the following questions. Each carries *two* marks.****(Ceiling 20 marks)**

1. What are brachyblasts?
2. Comment on elaters.
3. List down the distinguishing features of Bryopsida.
4. What is known as peat?
5. Comment on the pigments of Chlorophyceae.
6. What are akinetes?
7. Enlist the salient features of Cycadales.
8. Write a note on pseudoparenchymatous thallus structure.
9. Write down the salient features of Gnetales.
10. What are homosporous ferns? Give an example.
11. What are protosteles? Give an example.
12. Define Apogamy.

SECTION B: Answer the following questions. Each carries *five* marks.**(Ceiling 30 marks)**

13. Describe the internal structure of *Cycas* rachis with the help of suitable diagrams.
14. With the help of suitable diagrams, explain the structure of capsule in *Funaria*.
15. Explain the structure of petiole in *Pteris* with the help of suitable diagrams.
16. Write a short essay on the seed habit of pteridophytes.
17. Describe the structure of frustule in Diatoms.
18. Write down the structure of strobilus in *Selaginella* with the help of suitable diagrams.
19. Give an account on the salient features of Anthocerotopsida.

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Discuss the ultrastructure of flagella algae with suitable diagrams. Comment on its types, number and position in different groups of algae.
21. 'Gymnosperms are considered to bridge the gap between Angiosperms and Pteridophytes'. Elucidate.

(1 x 10 = 10 Marks)