

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023

(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 planktophytes? Give an example.
2. Comment on the different types of flagella present in algae.
3. Name two examples for symbiotic algae.
4. Write a short note on the components of cell walls in Cyanophyceae and Rhodophyceae.
5. Write down the salient features of Hornworts.
6. What are peristomialteeths?
7. Distinguish between a Microphyll and megaphyll.
8. Comment on different types of sporangia based its development.
9. What are siphonosteles? Give an example.
10. What is Heterospory?
11. What are pollen chambers?
12. What are called “shower of sulphur”?

SECTION B: Answer the following questions. Each carries *five* marks.

(Ceiling 30 Marks)

13. With the help of suitable diagrams, explain the structure of sex organs in *Riccia*.
14. Write a short account on the economic importance of bryophytes.
15. Comment on the morphological nature of the synangium in *Psilotum*.
16. Comment on the asexual reproduction of *Voucheria*.
17. Explain the structure of ovule in *Cycas* with the help of suitable diagrams.
18. Briefly comment on the sexual reproduction of *Pinus*.
19. Comment on the morphological nature of envelope of ovules in *Gnetum*.

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

20. Write an essay on the alternation of generations in algae and the different types of life cycles.
21. Explain the stelar evolution and origin of pith in pteridophytes.

(1 x 10 = 10 Marks)