Reg. No ..... Name **21P2006**

M. Sc DEGREE END SEMESTER EXAMINATION - JULY 2021

SEMESTER 2 : BOTANY

COURSE : **16P2BOTT05 : BRYOLOGY AND PTERIDOLOGY**

(For Regular - 2020 Admission and Supplementary 2019/2018/2017/2016 Admissions)

Time : Three Hours Max. Marks: 75

PART A

Answer any 8 (2 marks each)

1. Mention the phylogenetic importance of *Rhynia*.
2. Write down four important features of Bryopsida.
3. Write down four important characters of Jungermaniales.
4. What are the characters common with Anthocerotopsida and Hepatilopsida?
5. Compare rhizoids of Lunularia and Pogonatum.
6. What is rhizophore and mention its fuctions?
7. Describe the range of habitat in Pteridophytes, with examples.
8. What is heterospory? Explain various arrangements of magasporophyll in Selaginella
9. Explain the structure of Equisetum sporangiophore.
10. Describe tassel in *Osmunda.*
11. Define Sorus and what are the different soral types based on origin.
12. The plant body of a Pteridophyte is sporophyte. Substantiate with reasons.

(2 x 8 = 16)

PART B

Answer any 7 (5 marks each)

13. In bryophytes, is the sporophyte a new individual or an outgrowth of the gametophytic plant? Give reasons in support of your answer.
14. Comment on the range of habitat in bryophytes.
15. How will you differentiate the antheridiophore and archegoniophore of Marchantia.
16. Describe the sex organs of Reboulia and compare it with that of Dumortiera.
17. 'Peridophytes were the simplest vascular plants'. Discuss.
18. "Psilotum combines the characters of simplicity and primitiveness",Discuss.
19. Write an account on Azolla sporophyte and economic importance.
20. Compare the sporophylls of Acrostichum, Adiantum, Pteris, Angiopteris and Gleichenia.
21. Describe the soral and sporangial variations in the ferns you have studied.
22. Give an account on ecological importance of *Pteridophytes*.

(5 x 7 = 35)

PART C

Answer any 2 (12 marks each)

23. Describe the range of thallus structure in bryophytes.

OR

24. Illustrate and compare the internal structure of gametophytes of *Riccia*, *Marchantia* and *Anthoceros*.

25. Give an account on the structure and development of gametophytse in Lycopsida.

OR

26. Explain the variation and advancement exhibited in gametophytic generation of pteridophytes.

(12 x 2 = 24)