



QP CODE: 21002168



21002168

Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2021**First Semester**

Faculty of Science

M Sc BOTANY

CORE - BY010103 - BRYOLOGY AND PTERIDOLOGY

2019 ADMISSION ONWARDS

3609C806

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)*Answer any **eight** questions.**Weight 1 each.*

1. Name a fossil liverwort.
2. Discuss the role of bryophytes in pollution monitoring.
3. Explain the rehydration techniques in bryophytes
4. What are pegwalled rhizoids? Explain its function
5. Explain the protonema stage of moss
6. Differentiate between solenostele and dictyostele
7. Mention the biological significance of heterospory.
8. How is the epidermis of Equisetum differ from other pteridophytes?
9. What is glochidia?
10. Name any two pteridophytes as ecological indicators and mention their importance.

(8×1=8 weightage)



**Part B (Short Essay/Problems)**

Answer any **six** questions.

Weight 2 each.

11. Give an account on the evolution and affinities of bryophytes.
12. Discuss the symbiotic association of bryophytes.
13. Write short note on the *in vitro* culture techniques in bryophytes.
14. Give an account of sporophyte of Anthocerotales
15. Anthocerotean origin of Pteridophytes. Illustrate.
16. Describe the identifying characters of Lepidodendron.
17. What are leptosporangiate ferns? Give two examples.
18. Briefly explain the role of pteridophytes in phytoremediation.

(6×2=12 weightage)

Part C (Essay Type Questions)

Answer any **two** questions.

Weight 5 each.

19. Outline the classification of bryophytes.
20. Write an essay on spore dispersal mechanism in bryophytes with suitable diagrams.
21. Give a brief outline of various systems of classification of pteridophytes.
22. Define the term stele. With the help of suitable sketches describe the stem anatomy in Lycopodium.

(2×5=10 weightage)

