

2023
M.Sc.
First Semester
 CORE – 02
BOTANY
Course Code: MBOC 1.21
 (Bryophytes & Pteridophytes)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Give a comparative account of the gametophytes of *Anthoceros* and *Funaria*. 14
2. (a) Describe the development of antheridium in *Pellia*. 7
 (b) Write a note on the classification of bryophytes. 7

UNIT-II

3. Write a note on colonization, succession and role of bryophytes in ecosystem. 14
4. Write notes on the following: 7×2=14
 (a) Economic importance of bryophytes
 (b) Bryophytes as site specific bio-indicator

UNIT-III

5. Write an account on the theories of the origin of pteridophytes. 14
6. Write notes on the following: 7×2=14
 (a) Heterospory and seed habit in *Selaginella*
 (b) Stellar evolution in pteridophytes

UNIT-IV

7. Describe the morphological and reproductive structures in *Lycopodium*, give appropriate diagrams. 14
8. Write notes on the following: 7×2=14
- (a) Reproductive structure in *Rhynia*
 - (b) Morphology and anatomy of *Azolla* leaf

UNIT-V

9. Write a note on the insect-microorganism-pteridophyte interaction. 14
10. Write a note on the following: 7×2=14
- (a) Economic importance of pteridophytes
 - (b) Affinities of pteridophytes with gymnosperms
-