

2023
B.A./B.Sc.
Second Semester
CORE – 4
BOTANY
Course Code: BOC 2.21
(Archegoniate)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Explain alternation of generations in relation to bryophytes. 14
2. Write brief notes on the following: 7×2=14
 - (a) Unifying characters of archegoniates
 - (b) General characteristics of bryophytes

UNIT-II

3. Explain in detail the reproductive structures of *Marchantia*. Give appropriate labelled diagrams. 14
4. Write brief notes on the following: 7×2=14
 - (a) Sporophyte of *Anthoceros*
 - (b) Economic importance of bryophytes

UNIT-III

5. Explain in detail, reproduction in *Equisetum* with appropriate diagrams. 14
6. Write brief notes on the following: 7×2=14
 - (a) Synangium and gemma cup
 - (b) Apospory and apogamy

UNIT-IV

7. Write a detailed note on the classification of gymnosperms. 14
8. Write notes on the following: 7×2=14
- (a) Reproductive structures of *Gnetum*
 - (b) General characteristics of gymnosperms

UNIT-V

9. Write a detailed note on the type of fossils and their formation. 14
10. Write a brief note on the following: 7×2=14
- (a) Geological time scale
 - (b) Paleobotany in relation to exploration of fossil fuels
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