

**2022**  
**B.A./B.Sc.**  
**Second Semester**  
CORE – 4  
**BOTANY**  
*Course Code: BOC 2.21*  
(Archegoniate)

*Total Mark: 70*

*Pass Mark: 28*

*Time: 3 hours*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. Define bryophytes. How are the bryophytes adapted to land habitat?  
Explain. 2+12=14
2. Discuss the unifying characters of archegoniate. Give the classification of bryophytes. 7+7=14

**UNIT-II**

3. *Marchantia* is a dioecious plant. Explain in detail with appropriate labelled diagrams. 14
4. Discuss the external structure of mature gametophores of *Sphagnum*.  
Mention some of the economic importance of bryophyte. 8+6=14

**UNIT-III**

5. Explain in detail the reproduction in *Selaginella* with appropriate diagrams. 14
6. Write notes on the following: 7×2=14
  - (a) *Equisetum* strobilus
  - (b) Stelar evolution

#### UNIT-IV

7. Discuss the systems of classification of gymnosperms. 14
8. Write notes on the following: 7×2=14
- (a) Reproductive structures of *Cycas*
  - (b) Economic importance of gymnosperms

#### UNIT-V

9. Give an account of dominant fossil flora of different ages. 14
10. What are fossils? Explain the various fossil types and add notes on the general process of fossilization. 2+8+4=14
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