

**2022**  
**B.A./B.Sc.**  
**First Semester**  
GENERIC ELECTIVE – 1  
**BOTANY**  
*Course Code: BOG 1.11*  
(Biodiversity: Microbes, Algae, Fungi & Archegoniate)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

**UNIT-I**

1. Describe the general structure of a virus and discuss its economic importance. 14
2. Write short notes on the following: 7×2=14
  - (a) Conjugation in bacteria
  - (b) RNA virus

**UNIT-II**

3. Give an account on the range of thallus organisation in algae. 14
4. Write short notes on the following: 7×2=14
  - (a) Life cycle of *Fucus*
  - (b) General characteristics of algae

**UNIT-III**

5. Explain the developmental stages and salient features on the life cycle of *Agaricus*. 14
6. Write short notes on the following: 7×2=14
  - (a) Reproduction in fungi
  - (b) Significance of lichens

## UNIT-IV

7. Describe the morphology and anatomy of *Marchantia* with labelled diagrams. 14
8. Write short notes on the following: 7×2=14
- (a) Alternation of generations in bryophytes
  - (b) Unifying features of archegoniates

## UNIT-V

9. Discuss briefly the stelar types and its evolution in pteridophytes. 14
10. Write short notes on the following: 7×2=14
- (a) Reproduction in *Pinus*
  - (b) Morphological features of *Cycas*
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