

2023
B.A./B.Sc.
Fourth Semester
CORE – 9
BOTANY
Course Code: BOC 4.21
(Plant Ecology & Phytogeography)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Explain the process of soil formation. How is soil important for plant growth and development? 10+4=14
2. Briefly explain the different states of water in the environment. How do different states of water influence biotic community? 9+5=14

UNIT-II

3. Explain the distribution of vegetation in response to temperature variation. Mention some adaptations of plants to variation in temperature. 10+4=14
4. What is a positive and negative biotic interaction? Describe commensalism and parasitism using two examples in each case. 4+5+5=14

UNIT-III

5. Write notes on the following: 7×2=14
 - (a) Ecological speciation
 - (b) Analytical characteristics of community
6. Explain the general process of succession. 14

UNIT-IV

7. Describe food chain and food web using appropriate examples.
How is ecological efficiency determined? 10+4=14
8. What is biogeochemical cycle? Explain the nitrogen cycle. 2+12=14

UNIT-V

9. Write notes on the following: 7×2=14
(a) Theory of tolerance
(b) Ecological significance of endemism
10. Give an account on the floristic regions of India. 14
-