

2024
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. Describe the various horizons of soil profile with appropriate diagram.
Discuss the physical and chemical components of soil. 6 + 8 = 14
2. Using appropriate diagram explain the different processes in hydrological cycle. Discuss the critical role of atmospheric moisture. 10 + 4 = 14

UNIT-II

3. Discuss the ecological role of fire. Explain the adaptations of plants to fire. 7 + 7 = 14
4. Briefly explain the concept of biotic interaction. Give a comparative account between mutualism and commensalism using suitable examples. 4 + 5 + 5 = 14

UNIT-III

5. Write notes on the following: 7 × 2 = 14
 - (a) Quantitative characters of plant community
 - (b) Ecotone and its importance
6. Give an account of the following: 7 × 2 = 14
 - (a) Types of succession
 - (b) Climax concept

UNIT-IV

7. Explain the different types of ecological pyramids in relation to different ecosystems. What is the importance of ecological pyramids? 12+2=14
8. Describe the different types of ecosystem productivity. How do we measure primary productivity in terrestrial and aquatic ecosystems? 7+7=14

UNIT-V

9. Give an account of the principles of continental drift. 14
10. Describe the tropical and tundra biomes of the world. 7+7=14
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