

2022
B.A./B.Sc.
First Semester
CORE – 2
ZOOLOGY
Course Code: ZOC 1.21
(Principles of Ecology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. How important are the ecological levels of organization in understanding the environment? 14
2. Write notes on the following: 7×2=14
 - (a) Shelford's law of tolerance
 - (b) Synecology

UNIT-II

3. What is survivorship? Discuss the types of survivorship curve with suitable examples. 2+12=14
4. Describe the density-dependent and density-independent regulation of population. 14

UNIT-III

5. Give an account on the following: 7×2=14
 - (a) Ecotone and edge effect
 - (b) Community stratification
6. Define succession. Describe the causes, trends, and basic types of succession. 2+12=14

UNIT-IV

7. Explain the following: 7×2=14
(a) Food chain
(b) Ecological pyramids
8. What do you understand by biogeochemical cycle? Give an account of nitrogen cycle in nature with the help of a diagram. 2+12=14

UNIT-V

9. Define biodiversity hotspot. Write an account of Indian biodiversity hotspots. 2+12=14
10. Define the terms "Wildlife Sanctuary" and "National Park". Describe the importance of wildlife sanctuaries and national parks in Indian subcontinent. 4+10=14
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