

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MAY 2015**Second Semester****Core Course 2—BIODIVERSITY AND MODERN SYSTEMATICS**

(Common for B.Sc. Zoology Model I, B.Sc. Zoology Model II, B.Sc. Industrial Microbiology and Zoology)

[2013 Admission onwards]

Time : Three Hours

Maximum : 60 Marks

Part A (Short Answer Questions)

Answer all questions. 1 mark each.

1. Define 'Ecosystem'.
2. There are so many species on earth, why will it matter if we lose a few ?
3. What is meant by invasive species ?
4. Define the term pollution.
5. What is IUCN ?
6. What is meant by "In situ" conservation ?
7. What is ICZN ?
8. Define the term "molecular taxonomy".

(8 × 1 = 8)

Part B (Brief Answer Questions)

Answer any six questions. 2 marks each.

9. What are the threats to Biodiversity ?
10. Explain the salient features of environmental protection act 1986.
11. Discuss the role of UNEP in biodiversity conservation.
12. Briefly explain Linear hierarchy.
13. Briefly explain the achievements of Rio Summit.
14. Differentiate between genetic diversity and species diversity.
15. What is a Sanctuary ? Give examples.
16. Explain Shannon-Weaver diversity index.

Turn over

17. What is dichotomous key ?
18. What is WCMC ? Explain.

(6 × 2 = 12)

Part C (Problems/Derivations)

Answer any four questions. 4 marks each.

19. Explain the importance of classification.
20. Explain the sampling techniques for biodiversity estimation.
21. Explain the criteria for attributing Hot Spot status to an area.
22. Explain the concept of Modern Taxonomy.
23. Explain Microbial Diversity.
24. Explain the biodiversity in the polar region.

(4 × 4 = 16)

Part D (Long Answer/Problem Questions)

Answer any two questions. 12 marks each.

25. Briefly explain the values of biodiversity.
26. Write an essay on biodiversity hot spots in India.
27. Explain the biodiversity conservation strategies.
28. Write an essay on Zoological Nomenclature.

(2 × 12 = 24)