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**Reg. No. : .....**

**Name : .....**

**Third Semester M.Sc. Degree Examination, February 2024**

**Zoology**

**ZO 232 : ECOLOGY, ETHOLOGY AND BIODIVERSITY CONSERVATION**

**(2013 Admission Onwards)**

Time : 3 Hours Max. Marks : 75

I. Answer **any ten** of the following. Each question carries **2** marks.

1. Briefly explain entropy.
2. Define edge effect and its significance in the environment.
3. Explain any four characteristics of population.
4. What are the major causes of biodiversity loss?
5. What is a “climax community”?
6. Differentiate between fundamental and realized niches with examples.
7. Describe “Project Tiger”.
8. Define the concept of Imprinting.
9. Explain the term “Migration” with examples.
10. Describe Territoriality.
11. Explain Sign stimulus.

**P.T.O.**

12. Explain the neural mechanism of learning and memory.

13. What is Alpha diversity?

14. Give an account of Megadiversity nations with examples.

15. Explain the migratory bird treaty act of 1918.

**(10 × 2 = 20 Marks)**

II. Answer **any six** of the following. Each question carries **4** marks.

16. Explain the Stockholm convention on the human environment (1972).

17. Explain Gause's principle and resource partitioning.

18. Write a note on co-evolution with examples.

19. Explain different types of succession.

20. Describe the objectives and plans of the 'National Biodiversity Action Plan 2008'.

21. Define navigation with examples.

22. Explain circadian rhythm.

23. Discuss insight learning and explain its role in learned behaviour?

24. Write a note on Ramsar sites in Kerala.

25. Give the details of the Kyoto Protocol and Framework Convention on Climate Change.

**(6 × 4 = 24 Marks)**

III. Answer **any three** of the following. Each question carries **7** marks.

26. Comment on different stages in Succession.

27. Explain Microhabitat and Niche.

28. Describe Pheromones.

29. Evolution of Reproductive behaviour and mating system.

30. In-situ and Ex-situ conservation.

**(3 × 7 = 21 Marks)**

IV. Answer **any one** of the following. Each question carries **10** marks.

31. Explain interspecific and intraspecific interactions of living organisms.

32. Describe different types of learning with examples.

**(1 × 10 = 10 Marks)**

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