

Reg. No. : .....

Name : .....

**Sixth Semester B.Sc. Degree Examination, April 2023**

**First Degree Programme under CBCSS**

**Zoology**

**Core Course X**

**ZO 1643 : ETHOLOGY EVOLUTION AND ZOOGEOGRAPHY**

**(2019 Admission Onwards)**

Time : 3 Hours

Max. Marks : 80

I. Answer the following questions in **one** or **two** sentence. **1** mark each.

1. What is imprinting?
2. What is echolocation?
3. Comment on altruism.
4. Comment on Bioluminescence.
5. Define Bruce effect.
6. Define Germplasm theory.
7. Comment on K-selection.
8. Define Hardy-Weinberg law.

9. Define Co-evolution.
10. What is Biodiversity hotspot?

(10 × 1 = 10 Marks)

II. Answer any **eight** of the following not to exceed **one** paragraph. Each carries **2** marks.

11. Comment on the role of hormones in behaviour.
12. Write short notes on stimulation in crickets.
13. Comment on UV vision in Birds.
14. Distinguish between Kairomones and allomones.
15. Write short notes on Trail pheromones.
16. Comment on the role of sounds in territory maintenance.
17. Define Wallace effect.
18. Explain Genetic drift
19. Comment on Neutral theory of evolution.
20. Write on the concept of Adaptive radiation.
21. What is the significance of fossils in evolution?
22. Write short notes on Allopatric speciation.

(8 × 2 = 16 Marks)

III. Answer any **six** of the following not to exceed one paragraph **120** words. Each carries **4** marks.

23. Explain the models of Motivation.
24. Briefly explain the sounds of Deep sea animals.
25. Write down the physiology of Bioluminescence.
26. Write an account on the role of pheromones in pest management.
27. Write briefly on Scent marking of carnivores.
28. What is Natural selection? Explain the types of Selection.
29. Discuss the paleontological evidences of evolution.
30. Write an account on speciation.
31. Differentiate Micro and Mega evolution.

**(6 × 4 = 24 Marks)**

IV. Answer any **two** of the following. **Each** carries **15** marks.

32. Define learning. Explain different kinds of learning.
33. Write an essay on auditory communication of animals.
34. Describe the theories of organic evolution.
35. Write an essay on Isolation and isolating mechanisms.

**(2 × 15 = 30 Marks)**