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Reg. No. : .....

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Sixth Semester B.Sc. Degree Examination, April 2022

First Degree Programme Under CBCSS

Zoology

Core Course X

ZO 1643 – ETHOLOGY EVOLUTION AND ZOOGEOGRAPHY

(2019 Admission)

Time : 3 Hours Max. Marks : 80

I. Answer the following questions. (One sentence to Maximum of **2** sentences. **1** mark each)

1. What is Latent learning?
2. Comment on Social stress.
3. Comment on Waggle dance.
4. Define Bioelectricity.
5. What is Gyplure?
6. Comment on Gene pool.
7. Comment on disruptive selection.
8. Comment on Sympatric speciation.
9. What is isolated distribution?
10. Comment on Palearctic realm.

(10 × 1 = 10 Marks)

P.T.O.

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

11. Distinguish between Altruism and Kin selection.
12. Write short notes on ultrasonic communication of bats.
13. Briefly describe molecular mechanism of vision.
14. What is Jacobson's organ?
15. Comment on bombykol.
16. Write short notes on motivation.
17. Briefly describe Lamarck's theory of evolution.
18. Comment on speciation through Hybridization.
19. Comment on Industrial melanism.
20. Comment on trace fossils.
21. Write short notes on Geographic isolation.
22. Write short notes on Genetic equilibrium.
23. Distinguish between r & k section.
24. Write short notes on Zoogeographical realms.
25. Write short notes on Continental islands.
26. Briefly describe the characteristic features of Galapagos islands.

(8 × 2 = 16 Marks)

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

27. Explain the neural mechanisms in behaviour.
28. Write an account on musth in elephants.
29. Discuss the role of sounds for courtship behaviour in birds.

30. Explain the role of Bioluminescence in Mollusca and Deep sea fishes.

31. Write an account on the role of pheromones in colony maintenance in honey bees.

32. Write an account on adaptive radiation with special reference to Darwin's finches.

33. Discuss the role of mutation in evolution.

34. Write an account on reproductive isolation.

35. Write an account on fossil dating techniques.

36. Write art account on Darwin's theory of natural selection.

37. Write an account on co-evolutionary relationship of animals and plants.

38. Explain the characteristic features of oceanic islands with an example.

(6 × 4 = 24 Marks)

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

39. Write an essay on Social groups in Mammals.

40. What is pheromone communication? Explain different modes of chemical communication.

41. Give an account on evolution above species level with suitable examples.

42. Write an essay on Evolution of human.

43. Write an essay on Neo-Darwinism.

44. Give an account on biogeography zones of India with special reference to western ghats.

(2 × 15 = 30 Marks)
