

Reg. No. : .....

Name : .....

**Sixth Semester B.Sc. Degree Examination, April 2022****First Degree Programme under CBCSS****Zoology****Core Course X****ZO 1642 : ECOLOGY, ETHOLOGY EVOLUTION AND ZOOGEOGRAPHY****(2018 Admission)**

Time : 3 Hours

Max. Marks : 80

I. Answer the following questions. (In one or two sentences. 1 mark each).

1. Who coined the term Ecology?
2. Imprinting.
3. Habituation.
4. Saprotrophs.
5. Ethology.
6. Latent learning.
7. Industrial melanism.
8. Germplasm theory.
9. Gene pool.
10. Insular fauna.

**(10 × 1 = 10 Marks)**

P.T.O.

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

11. Autotrophs.
12. IUCN.
13. Human pheromones.
14. Role of Hypothalamus in behaviour.
15. Conditioned reflex.
16. Geological time scale.
17. Hardy–Weinberg law.
18. Oceanic islands.
19. Western Chats.
20. Tropical rain forest.
21. Phototaxis.
22. Liebig's law of minimum.
23. Ecological indicators.
24. Mutation theory.
25. Sympatric and allopatric speciation.
26. Isolated distribution.

**(8 × 2 = 16 Marks)**

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

27. Explain the impacts of ionizing radiations on human health.
28. Explain the causes of extinction.
29. Write a note on pheromones and chemical communication.
30. Explain the models of motivation.

31. Write a note on social groups in mammals.
32. What is adaptive radiation? Give an example.
33. What is fossil dating? Give its significance.
34. What are zoogeographical realms?
35. What are the factors affecting animal distribution?
36. Write any four properties of population.
37. Comment on pesticides that affect our ecosystem.
38. What are the main postulates of Lamarckism?

(6 × 4 = 24 Marks)

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

39. Write an essay on the characters of community.
40. What are biogeochemical cycles? Explain nitrogen cycle.
41. Explain the theory of natural selection.
42. Trace the ancestors of Human being.
43. Write an essay on isolation and isolating mechanisms?
44. What are the components of an ecosystem?

(2 × 15 = 30 Marks)