(Pages : 3)

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2022

First Degree Programme Under CBCSS

Zoology

Core Course XI

ZO 1643 – ECOLOGY, ETHOLOGY, EVOLUTION AND ZOOGEOGRAPHY

(2014 Admission)

Time : 3 Hours

Max. Marks : 80

N - 1370

- I. Answer **all** the questions in one or two sentences. Each question carries **1** mark.
- 1. Saprotrophs.
- 2. Lithosphere.
- 3. S-Shaped Curve.
- 4. Darwin's Finches.
- 5. Cladogenesis.
- 6. Fossil Dating.
- 7. Cultural Evolution.
- 8. Isolated Distribution.
- 9. Imprinting.
- 10. Pheromones.

(10 × 1 = 10 Marks)

- II. Answer any eight of the following. Each question carries 2 marks.
- 11. Oceanic and Continental Islands.
- 12. Barriers to Animal Distribution.
- 13. Fossil men.
- 14. Gradualism v/s punctuated equilibrium.
- 15. Isolation and isolating mechanisms.
- 16. Biological Timescale.
- 17. Social groups in mammals.
- 18. Role of Hypothalamus in Behaviour.
- 19. Microbes and Waste management.
- 20. Carbon Trading.
- 21. Mangroves and Coastal Ecosystems.
- 22. Ecological Indicators.

(8 × 2 = 16 Marks)

- III. Answer **any six** of the following. Each question carries **4** marks.
- 23. Mention the salient features of Leibig's law of Minimum.
- 24. Explain Environmental Resistance and Carrying Capacity.
- 25. Give a short note on Radiation Accidents.
- 26. Briefly mention the types of Learning.
- 27. Explain Deutsch's model of Motivation.

- 28. What is Hardy-Weinberg Law?
- 29. Write a short account on *Biston betularia*.
- 30. Give the zoogeographical features of Oriental Realm.
- 31. Describe the types of Geographical Distribution in animals.

 $(6 \times 4 = 24 \text{ Marks})$

- IV. Answer **any two** of the following. Each question carries **15** marks.
- 32. Write an essay on the Genetic basis of Evolution.
- 33. Explain Speciation, mentioning the types, citing relevant examples for each.
- 34. Describe the History and Scope of Ethology.
- 35. List the Biotechnological methods in Pollution detection and abatement.

(2 × 15 = 30 Marks)