First Semester Zoology M.Sc. Degree Examination, June 2021
ZO 211 Evolution and Zoogeography
(2021 Admissions)

Time: 3 Hours **Max. Marks : 75**

I. Answer any ten of the following each in a paragraph. Each Question carries 2 marks (10x 2=20 marks)

1. What is the Haldane's concept
2. Define Species
3. Comment on Hot dilute soup
4. Write notes on Mr. Sclators region
5. Comment on adaptive radiation
6. Write brief notes on Coacervates
7. What is Biochemical evolution?
8. What are molecular clocks?
9. What is stellar systems?
10. Write notes on Proteomics
11. Differentiate continental and oceanic islands and give examples
12. What are Galaxies?
13. What is remote sensing?
14. Define Phenotype and genotype
15. What is Geographical Information system?

II. Answer any six of the following each not exceeding a page Each Question carries 4 marks (6x 4=24 marks)

16. Write notes on Galapagos island and Wallace region
17. Write notes on cosmic evolution
18. Write note on molecular clocks
19. Comment on geographical time scale
20. Briefly explain the evolution of human brain-communication, speech and language
21. Write short notes on Stellar systems
22. Briefly discuss about the possibility of existence of extra-terrestrial life
23. Explain the variety of island habitats and problems of island life
24. Give notes on microevolution with an example
25. Briefly explain the types of natural selection

III. Write short essay not exceeding two pages on any three of the following. Each question carries seven marks. (3x7=21 Marks)

26. Briefly explain the origin of continent plate tectonics and continental drift
27. Describe macroevolution with example
28. Explain the biogeography of Indian fauna
29. Discuss about the C-value paradox
30. Explain punctuated equilibrium.

IV. Answer any one of the following not exceeding four pages. The question carries ten marks. (1x10=10 Marks)

31. Explain the geographical distribution of animals with special emphasis on various zoogeographical realms and its typical fauna

32. Describe the origin and evolution of chordata and its major vertebrate classes.