

**Model Question Paper**  
**First Semester Zoology M.Sc. Degree Examination, June 2021**  
**ZO 211 : SYSTEMATICS AND EVOLUTIONARY BIOLOGY**  
**(2020 Admissions)**

**Time: 3 Hours**

**Max. Marks : 75**

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

1. Define the term systematics
2. Define Species
3. Comment on Hot dilute soup
4. Write notes on Bar coding of life
5. What is Chemotaxonomy?
6. Write brief notes on Coacervates
7. What is Biochemical evolution?
8. What are Allopatric species?
9. What is the significance of Gynogenesis?
10. Write notes on Proteomics
11. Comment on Vernacular nomenclature
12. What are Galaxies?
13. What is ICZN?
14. Define Phenon
15. What is Genomics ?

**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 scientific name
17. Write notes on cosmic evolution
18. Write note on molecular clocks
19. Write the types of lineage changes in speciation
20. What is Nucleotide sequence? Mention its importance
21. Write short notes on Stellar systems
22. Briefly discuss about the possibility of existence of Extra terrestrial life
23. Explain the importance and applications of systematic in biology
24. Give notes on microevolution with an example
25. Explain molecular taxonomy.

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

26. Explain ancient DNA
27. Describe macroevolution with example
28. Explain the bar code of life
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 taxonomic procedure for collections, their identification, curating and preservation techniques.
32. Describe the origin and evolution of chordata and its major vertebrate classes.