

## FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025

(Regular/Improvement/Supplementary)

## ZOOLOGY

## FZOL1C03- SYSTEMATICS AND EVOLUTION

Time: 3 Hours

Maximum Weightage: 30

**Part A: Answer any *four* questions. Each carries *two* weightage.***Write short notes on:*

1. Molecular clock.
2. Co evolution.
3. Nominalistic species concept.
4. Curation.
5. Bottle neck effect.
6. Orthologs and Paralogs.
7. Anagenesis.

**(4 × 2 = 8 weightage)****Part B: Answer any *four* questions. Each carries *three* weightage.***Write notes on:*

8. Principle of priority.
9. Ethics related to taxonomic collections.
10. Sexual selection.
11. Gradualism and Punctuated equilibrium.
12. Y-chromosomal Adam and mitochondrial Eve.
13. DNA barcoding and traditional taxonomy.
14. Speciation and its types.

**(4 × 3 = 12 weightage)****Part C: Answer any *two* questions. Each carries *five* weightage.**

15. What are taxonomic characters? Explain different kinds of taxonomic characters. Add a note on its functions.
16. Briefly explain different types of classification.
17. What are Taxonomic keys? Briefly explain different types of Taxonomic keys.
18. What is natural selection? Explain the mechanism of natural selection. Add a note on natural selection in islands.

**(2 × 5 = 10 weightage)**