

**FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021
(Regular/Improvement/Supplementary)**

**ZOOLOGY
FZOL1C03-SYSTEMATICS AND EVOLUTION**

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries *two* weightage.

1. Differentiate between chemo and serotaxonomy.
2. What is nomendubium?
3. Differentiate between alpha and beta taxonomy.
4. Brief on Good gene hypothesis.
5. Write notes on Hardy-Weinberg law.
6. What is co-evolution? Cite an example.
7. Comment on Neutral theory of molecular evolution.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries *three* weightage.

8. Write notes on different types of Species concepts.
9. Brief on the Ethics to be followed in taxonomy.
10. What is type method? Explain.
11. Brief on human mitochondrial molecular clock.
12. Write notes on types of speciation.
13. Briefly explain Biochemical evolution.
14. Write notes on Y-chromosomal Adam and mitochondrial Eve.

(4 × 3 = 12 weightage)

Part C: Answer any *two* questions. Each carries *five* weightage.

15. Elaborate on the Taxonomic impediments.
16. Write an essay on International Code of zoological nomenclature.
17. Discuss the natural selection and sexual selection with suitable examples.
18. Write an essay on the concept of Gradualism. How is it differing from punctuated equilibrium?

(2 × 5 = 10 weightage)