

**FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2022  
(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. Write on the significance of ICZN.
2. Comment on the goals of taxonomy.
3. Distinguish between typological classification and omnispersive classification.
4. Write on the “taxonomic diversity” within species.
5. Briefly explain sexy son hypothesis.
6. Write on Y- chromosomal Adam.
7. Explain the concept of genetic equidistance.

**(4 × 2 = 8 weightage)**

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

8. Comment on DNA bar coding.
9. With an example, explain the features of a simple dichotomous key.
10. Comment on the solutions to overcome the taxonomic impediments.
11. Explain Hardy-Weinberg principle.
12. Distinguish between gradualism and punctuated equilibrium.
13. Citing examples explain how natural selection operates in islands.
14. Explain the mechanism of microevolution.

**(4 × 3 = 12 weightage)**

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

15. Explain the procedure of taxonomic collection and preservation.
16. Elaborate on newer trends in systematics.
17. Write on different stages and trends in primate evolution.
18. Explain molecular evolution.

**(2 × 5 = 10 weightage)**