

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2025

(Regular/Improvement/Supplementary)

ZOOLOGY

FZOL2C05: ECOLOGY & ETHOLOGY

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries 2 weightage.

1. What is meant by stimulus filtering?
2. Write short notes on Selfish gene theory.
3. What is meant by kin selection?
4. Differentiate between autogenic and allogenic succession.
5. What is meant by resource partitioning?
6. Differentiate between r and k selection.
7. What is meant by Carbon credit?

(4 × 2 = 8 weightage)**Part B: Answer any *four* questions. Each carries 3 weightage.**

8. Elucidate Reafference theory.
9. Write notes on cultural transmission of behaviour with sufficient examples.
10. Discuss the basic principles of conservation.
11. Enumerate the various species diversity indices.
12. Describe nitrogen cycle.
13. Explain the single channel energy flow model.
14. Elaborate on Green building technology and its ecological importance.

(4 × 3 = 12 weightage)**Part C: Answer any *two* questions. Each carries 5 weightage.**

15. Write an essay on social behavior of termites.
16. Discuss the characteristics of biotic community. Add a note on edges and ecotones.
17. Describe any five biogeographic zones of India with emphasis on their faunal diversity.
18. Write down the various methods of estimating population density in detail. Add brief notes on survivorship curves and life tables.

(2 × 5 = 10 weightage)