

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024**(Regular/Improvement/Supplementary)****ZOOLOGY****FZOL4E10- ENVIRONMENTAL BIOLOGY-I: MAN, ENVIRONMENT & NATURAL RESOURCES****Time: 3 Hours****Maximum Weightage: 30****Part A: Answer any *four* questions. Each carries *two* weightage.**

1. What is dendroclimatology? Write notes on its significance.
2. Provide a brief account on demographic transition.
3. Briefly discuss ecological efficiency between trophic levels.
4. Write notes on the significance of sustainable development.
5. What is cloud burst? Mention its causes.
6. Give a brief account on tidal energy.
7. Briefly explain how ocean currents and continentality influence the climate.

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

8. Provide a comparative account of stratosphere and troposphere.
9. Distinguish between Cumulus and Stratus clouds.
10. Explain different types of population pyramids.
11. Briefly discuss the features of spacecraft ecosystem.
12. Discuss different factors controlling the development of ecosystem.
13. Write a brief account on freshwater ornamental fishes of Kerala.
14. Give an account on the external factors that affect climate.

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

15. Describe the causes and consequences of global climate changes.
16. Discuss in detail about the mineral resources of India. Add notes on problems of their over exploitation.
17. Explain energy flow in an ecosystem using different energy flow models.
18. Give a detailed account of conventional energy sources. Add notes on effects of their depletion.

(2 × 5 = 10 weightage)