

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2022
(Regular/Improvement/Supplementary)

ZOOLOGY

FZOL4E11 - ENVIRONMENTAL BIOLOGY-II: ENVIRONMENTAL POLLUTION

Time: 3 Hours

Maximum Weightage: 30

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

1. Describe the sizing and counting of particulate matter.
2. What is photochemical smog? Comment on its formation and consequences.
3. What are the sources and effects of noise pollution?
4. Distinguish between BOD and COD.
5. Explain the biological effects of ionizing radiations.
6. What is water act? Comment on water quality standards.
7. Briefly discuss the generation of biogas.

(4 × 2 = 8 weightage)

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

8. How air is sampled for pollution assessment?
9. Write a short essay on the occurrence, sources and sinks of carbon compounds in air as a primary pollutant.
10. Discuss briefly the effects of air pollution.
11. What is thermal pollution? Explain its sources, effects and control measures.
12. What are carcinogens? Survey different types of carcinogens in environment.
13. Discuss the design and operation of biological treatment systems adopted for the control of water pollution.
14. Describe different types of solid wastes.

(4 × 3 = 12 weightage)

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

15. Discuss the design and working of various air pollution abatement techniques.
16. Elaborate the sources of heavy metals and their effects on ecosystem and human population.
17. What are biocides? Classify them and explain their effects on ecosystem with special reference to biological magnification.
18. Write a detailed essay on various solid waste disposal methods. Add a note on problems of solid waste disposal.

(2 × 5 = 10 weightage)