(2 Pages)

Name..... Reg.No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024 (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. What is noise pollution? Comment on its effects and control measures.
- 2. Distinguish between projected diameter and statistical diameter of particulate matter.
- 3. What are green house gases? Give a short note on their sources and environmental impacts.
- 4. What are indicator species? Describe their importance in pollution assessment with examples.
- 5. What is meant by biological magnification? Explain with illustrations.
- 6. Comment on Water Act.
- 7. Discuss the production of biogas.

$(4 \times 2 = 8 \text{ weightage})$

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

- 8. Explain the design and working of any three air pollution abatement techniques in detail.
- 9. Describe the occurrence, sources and sinks of compounds of carbon, nitrogen and sulfur as primary air pollutants.
- 10. Evaluate the effects of air pollution on weather, atmospheric conditions, buildings and materials
- 11. Discuss the sources and effects of thermal pollution on ecosystem with its control measures.
- 12. What are the biological effects of ionizing radiations? Comment on nuclear waste disposal.
- 13. Enlist various environmental carcinogens with their sources and effects.
- 14. Briefly describe different types and sources of solid wastes.

$(4 \times 3 = 12 \text{ weightage})$

(P.T.O.)

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

- 15. Describe the sampling and monitoring methods for gaseous compounds of carbon and nitrogen.
- 16. Evaluate the sources and effects of heavy metals on ecosystem and human population.
- 17. Give a detailed account on various primary, secondary and tertiary systems used in waste water treatment.
- 18. Explain different solid waste disposal methods. Mention problems concerned with solid waste disposal.

 $(2 \times 5 = 10 \text{ weightage})$