

**M. Sc .DEGREE END SEMESTER EXAMINATION - APRIL 2021****SEMESTER 4 : ZOOLOGY****COURSE : 16P4ZOOT14EL : ENVIRONMENTAL POLLUTION AND TOXICOLOGY***(For Regular - 2019 Admission and Supplementary - 2018/2017/2016 Admissions)*

Time : Three Hours

Max. Marks: 75

**PART A****Answer any 8 (2 marks each)**

1. What is air pollution?
2. Mention 8 ways to reduce energy consumption
3. What is COD?
4. What are oxidation ponds?
5. What is the relevance of coliform bacteria in potable water?
6. What is proximate analysis of waste?
7. How does particle size influence waste packing?
8. What are chemical indicators to assess soil quality?
9. Explain the two major sources of oil pollution in nature.
10. What are the consequences of low level radiation on humans?
11. List the various end points in chronic toxicity testing.
12. Write a note on 'Anatagonism'. Give a few examples.

**(2 x 8 = 16)****PART B****Answer any 7 (5 marks each)**

13. Write a note on major air pollutants.
14. Briefly explain reverse osmosis
15. Write a note on chemical precipitation in waste water treatment.
16. Elaborate on chemical properties of Solid wastes
17. What are the management practices for handling biomedical waste?
18. What are the methods used to assess soil quality?
19. Briefly explain hazardous wastes compounds in soil
20. Describe the effects of *Exxon Valdez* oil spill on environment and marine animals.
21. Comment on the various adverse effects of radioactive pollution.
22. What do you mean by Reproductive toxicity? How is it evaluated?

**(5 x 7 = 35)****PART C****Answer any 2 (12 marks each)**

23. Elaborate on plastic and e-waste management.
24. Write any case study to highlight pollution in highland soils in Kerala.
25. Explain the sources and adverse effects of thermal pollution.
26. Work environment has a significant role in the occurrence of adverse human health effects due to chemical and biological hazards. Substantiate.

**(12 x 2 = 24)**