

Reg. No

Name

19P4021

MSc DEGREE END SEMESTER EXAMINATION - MARCH/APRIL 2019

SEMESTER 4 : ZOOLOGY

COURSE : 16P4ZOOT14EL: ENVIRONMENTAL POLLUTION AND TOXICOLOGY

(For Regular - 2017 Admission and Supplementary - 2016 Admission)

Time : Three Hours

Max. Marks: 75

Section A

Answer any 8 (2 marks each)

1. Define the term 'Pollution'.
2. What is the role of scrubbers in controlling air pollution?
3. Define 'electrodialysis'.
4. What is the relevance of coliform bacteria in potable water?
5. Give a schematic representation of the solid waste management hierarchy.
6. Mention the four important properties of waste when used as a fuel?
7. What are the ideal soil quality indicators?
8. Explain the two major sources of oil pollution in nature.
9. Mention the factors that influence the biological effects of internalized radionuclides.
10. What are the consequences of low level radiation on humans?
11. Write down the salient features of Cytochrome P450.
12. List the various end points in chronic toxicity testing.

(2 x 8 = 16)

Section B

Answer any 7 (5 marks each)

13. Write a note on major air pollutants.
14. Briefly describe the health effects of water pollution.
15. Write a note on waterborne and water related diseases.
16. Write a note on the various municipal collection services.
17. Elaborate on chemical properties of Solid wastes
18. Write a short account on soil enzymes.
19. Write notes on sources of soil pollution
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. Distinguish between Graded bioassay and End Point bioassay.

(5 x 7 = 35)

Section C

Answer any 2 (12 marks each)

23. Elaborate the various steps involved in the Sewage water treatment.
24. Discuss the various hazardous waste management practices.
25. Explain any case study to highlight pollution in wetland soil in Kerala.
26. Describe the factors that influence 'Biological Monitoring' studies.

(12 x 2 = 24)