

Reg. No

Name

23P4020

M. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023

SEMESTER 4 : ZOOLOGY

COURSE : 21P4ZOOT14 : ENVIRONMENTAL POLLUTION AND TOXICOLOGY

(For Regular - 2021 Admission)

Duration : Three Hours

Max. Weights: 30

PART A

Answer any 8 questions

Weight: 1

1. What is the role of scrubbers in controlling air pollution? (U, CO 1, CO 2)
2. Mention the social implications of nuclear accidents. (An)
3. Mention the important measurements for the study of the quality of air (U, CO 1)
4. What are chemical indicators to assess soil quality? (U, CO 4)
5. Write a short note on field capacity of solid waste in India. (U, CO 4)
6. What are oxidation ponds? (E, CO 2)
7. Comment on the selective toxicity of Malathion and Carbamate. (U, CO 8)
8. Comment about Urban Heat Island? (Cr)
9. Define the term 'TLV' in toxicology . Mention the units used to express TLV. (U, CO 8)
10. What is infiltration? (R, CO 4)

(1 x 8 = 8)

PART B

Answer any 6 questions

Weights: 2

11. What are the responsibilities of the government regarding e-waste management? (R, CO 4)
12. Briefly explain hazardous wastes compounds in soil (Cr, CO 3)
13. Evaluate the cause of Mumbai oil spill? (E)
14. Describe the causes of oil pollution? (A)
15. Write notes on the local ,regional and global aspects of Air ,Water and Soil pollution (U, CO 1)
16. Discuss the factors that govern the selection of a biological method for Monitoring toxicity . (U, CO 8)
17. Define radioactive pollution. Comment on the impact of radioactive pollution on ecosystem. (E)
18. Briefly explain various methods of constructed wetlands for the treatment of water pollution. (E, CO 2)

(2 x 6 = 12)

PART C

Answer any 2 questions

Weights: 5

19. Discuss the various hazardous waste management practices. (E, CO 3)
20. Explain the process of Bio-monitoring of toxic chemicals (U)

21. Elaborate the physical processes and types of equipment and methods for the control of gaseous emission (U, CO 8)
22. Explain the different advanced wastewater treatment processes along with their mode of working. (A)
- (5 x 2 = 10)**

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Summarize the concepts of pollution	Cr	1, 3, 15	4
CO 2	Examine the air and water pollution	E	1, 6, 18	4
CO 3	Evaluate the sources and the factors affected by soil pollution	E	12, 19	7
CO 4	Design the management of solid waste, the various rules in place regarding hazardous waste, biomedical and plastic waste	Cr	4, 5, 10, 11	5
CO 8	Summarize occupational toxicology, toxicity testing and biomonitoring of toxic chemicals	U	7, 9, 16, 21	9

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;