Reg. No	Name

M. Sc DEGREE END SEMESTER EXAMINATION - MARCH 2020 SEMESTER 4 : ZOOLOGY

COURSE: 16P4ZOOT14EL: ENVIRONMENTAL POLLUTION AND TOXICOLOGY

(For Regular - 2018 Admission & Supplementary 2017/2016 Admissions)

Time: Three Hours Max. Marks: 75

Section A Answer any 8 (2 marks each)

- 1. Classify air pollution
- 2. Write a note on secondary air pollutants.
- 3. write notes on adsorption
- 4. What are trickling filters?
- 5. Briefly describe advanced oxidation process in waste water treatment
- 6. What is the ultimate analysis of solid waste components?
- 7. What is meant by volume reduction in e-waste management?
- 8. Define bulk density
- 9. What is the effect of sound pollution in Show whales and European robins?
- 10. Define radioactive pollution. Comment on the role of nuclear weapons in radioactive pollution.
- 11. Comment on LD₅₀.
- 12. Define the term 'Toxin'.

 $(2 \times 8 = 16)$

Section B Answer any 7 (5 marks each)

- 13. Write the steps involved in sampling and analysis of SO2.
- 14. Comment on effects of water pollution on aquatic system
- 15. Write a note on waterborne and water related diseases.
- 16. Write a note on the various municipal collection services.
- 17. What are the responsibilities of the government regarding e-waste management?
- 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. Discuss briefly the important sources of radioactive pollution.
- 22. Discuss the factors that govern the selection of a biological method for 'Biological Monitoring'.

 $(5 \times 7 = 35)$

Section C Answer any 2 (12 marks each)

- 23. Discuss the various hazardous waste management practices.
- 24. Write an essay on the various soil quality indicators.
- 25. Discuss the sources and adverse effects of noise pollution.
- 26. Toxicity studies provide valuable information on the degree to which substances are toxic to animals. Discuss.

 $(12 \times 2 = 24)$