D	No	Name
RPO	NO	Name

MSc DEGREE END SEMESTER EXAMINATION - MARCH 2020 SEMESTER 4 : ZOOLOGY

COURSE: 16P4ZOOT13EL; ENVIRONMENTAL SCIENCE - CONCEPTS AND APPROACHES

(For Regular - 2018 Admission and Supplementary - 2017, 2016 Admissions)

Time: Three Hours Max. Marks: 75

Section A Answer any 8 (2 marks each)

- 1. Describe the colloidal properties of soil particles
- 2. Comment on solubility of gases in water
- 3. Comment on the influence of Corioli's force on winds
- 4. Briefly describe Köppen-Geiger climate classification system
- 5. Mention the seasons experienced in India.
- 6. Define ecological land classification
- 7. Comment on the impacts of land degradation
- 8. Comment on the importance of zoos as a biodiversity conservation approach
- 9. What is a reference ecosystem?
- 10. What are the areas designated as CRZs in India?
- 11. Comment on cavernicolous adaptations
- 12. Comment on 'propagule pressure hypothesis' for invasion success

 $(2 \times 8 = 16)$

Section B Answer any 7 (5 marks each)

- 13. Write on the theories of origin of sea water salinity. Add a note on the classification of aquatic habitats based on its salt content
- 14. Discuss solubility of gases in water and its ecological significance
- 15. Discuss the effects of climate change on human welfare
- 16. Comment on the role of topographic maps in landscape management
- 17. Give an account of biosphere reserves
- 18. Write notes on Kyoto Protocol
- 19. Write notes on Biodiversity Management Committee
- 20. Write notes on Biological Diversity Act 2002
- 21. Give an account of the biogeographical zones of India
- 22. Elaborate Elton's hypotheses on biological invasion

 $(5 \times 7 = 35)$

Section C Answer any 2 (12 marks each)

- 23. Discuss the various soil formation regimes and add a note on climatic and biological factors involved
- 24. Essay on climate system
- 25. Give an account of the drivers of biodiversity loss
- 26. Give an account of the strategies for biodiversity conservation

 $(12 \times 2 = 24)$