

B.Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022**SEMESTER 5 : CHEMISTRY****COURSE: 19U5CRCHE05 : ENVIRONMENTAL STUDIES***(For Regular - 2020 Admission and Supplementary 2019 Admission)*

Time: Three Hours

Max. Marks: 75

PART A**Answer any 10 (1 mark each)**

1. Mention any two adverse effects of soil erosion.
2. What is carbon nanotube?
3. What is Meteorological drought?
4. Mention any two alternate energy resources.
5. What is the role of CFCs in ozone depletion?
6. What is biomagnification?
7. Mention any two applications of radioisotope in medicine.
8. Give examples for xenobiotic substances.
9. Define atom economy.
10. Which is the fuel used in fast breeder reactor?
11. What is the main objective of Air (Prevention and control of Pollution) Act?
12. Suggest any two control measures to prevent marine pollution.
13. What is the toxic effect of Cd poisoning on humans?

(1 x 10 = 10)**PART B****Answer any 10 (2 marks each)**

14. Differentiate between renewable and non-renewable resources with examples.
15. What are the effects of over-utilization of water resources?
16. What is terrestrial ecosystem? Give two examples.
17. What are the major benefits of dams?
18. What is the purpose of water shed management?
19. What are greenhouse gases? Give examples.
20. How does eutrophication affect the aquatic organisms?
21. What is spallation reaction?
22. What is the significance of green chemistry?
23. What are the uses of radioactive tracers?
24. What are nano composites?
25. Explain the biochemical effects of oxides of nitrogen.
26. Which are the natural sources of air pollution?

(2 x 10 = 20)

PART C

Answer any 5 (5 marks each)

27. Write a note on Chipko Movement.
28. Explain the significance of food chains and food webs.
29. What are the issues and possible solutions related to environmental ethics?
30. Explain the techniques involved in rain water harvesting.
31. Give an account of control measures of thermal pollution.
32. Explain the biochemical effects of mercury on environment.
33. Give an account of nuclear shell model.
34. Explain the applications of nanomaterials in medicine?

(5 x 5 = 25)

PART D

Answer any 2 (10 marks each)

35. Discuss different methods for synthesis of nanomaterials.
36. What are major causes for conflicts over water? Briefly discuss one interstate conflict and one international conflict.
37. Explain the type, characteristics, and functions of a forest ecosystem.
38. What is nuclear waste management? Explain the impact of nuclear waste on the environment.

(10 x 2 = 20)
