

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, APRIL 2013**Sixth Semester****Choice Based Core Course—ENVIRONMENTAL CHEMISTRY**

(Common for B.Sc. Chemistry Model I, Model II B.Sc. Petrochemicals and B.Sc. Chemistry Environment and Water Management)

Time : Three Hours

Maximum Weight : 25

Section A*Answer all questions.**Each bunch of four questions carries a weight of 1.*

- I. 1. Mention one Non-conventional energy source.
2. SPM is _____.
3. One carcinogenic-air pollutant is _____.
4. One persistent organo chlorine pesticide is _____.
- II. 5. Fluoride present in small quantities in water will give an orange red dye when treated with _____ reagent.
6. Minamata disease was first reported in _____ (name of country).
7. Nuclear reactor produces _____ pollution.
8. Excessive algal growth in water is called _____.
- III. 9. The optimum DO value for good water quality is _____.
10. Asbestos dust can cause _____.
11. One common method used for sterilizing water is _____.
12. One water-borne disease is _____.
- IV. 13. What is SAR ?
14. Acidity and alkalinity of water is tested using _____.
15. Formation of Brown ring in Brown ring test for nitrate is due to _____.
16. COD value higher than _____ ppm is regarded as Indicative of pollution.

(4 × 1 = 4)

Section B*Answer any five questions.**Each question carries a weight of 1.*

17. What is photochemical smog ?
18. What are the adverse effect of pesticides ?

Turn over

19. How does carbon monoxide pollutant effect our body ?
20. What is the advantages of adding Gypsum to the soil ?
21. What is meant by Water Quality Index ? How is DO in water expressed ? What happens when DO falls very low ?
22. What do you mean by Renewable sources of energy ? Explain giving examples.
23. What are the sources of lead pollution ? Explain the Toxic effect of lead pollution.
24. What is meant by Noise Pollution ? What are its consequences ?

(5 × 1 = 5)

Section C

*Answer any four questions.
Each question carries a weight of 2.*

25. Describe Briefly on Noise Pollution.
26. Discuss briefly on solid waste-management.
27. Discuss air pollution with special references to oxides of sulphur and oxides of Nitrogen.
28. Write briefly on Non-conventional sources of energy and its advantages in detail.
29. Discuss briefly on the Scope and concepts of Environmental Planning.
30. Discuss briefly on water quality parameters and their standards.

(4 × 2 = 8)

Section D

*Answer any two questions.
Each question carries a weight of 4.*

31. Analyse critically the factors responsible for air pollution and suggest remedial measures.
32. Describe Briefly on the following :
 - (a) Ozone depletion.
 - (b) Indoor air pollution.
 - (c) Effect of Electric and Magnetic field in the Environment.
33. Describe the methods for the estimation of the following water quality parameters :
 - (a) Sulphide.
 - (b) Chloride.
 - (c) Hardness.
 - (d) Phosphate.
 - (e) Mercury.

(2 × 4 = 8)