

**B.S.C. DEGREE (C.B.C.S.S) EXAMINATION, OCTOBER 2018****(2016 Admission Regular & 2015 Admission Supplementary)****SEMESTER V - OPEN COURSE ( CHEMISTRY )****CH5B09TB - ENVIRONMENTAL CHEMISTRY****Time : 3 Hours****Maximum Marks : 80****Part A****I. Answer all questions. Each question carries 1 marks (6x1=6)**

1. ----- is the world environment day
2. Name the heavy metal pollutant that caused "Itai..itai"disease.
3. Gas responsible for Bhopal gas tragedy is -----
4. Name some inorganic pollutants in water
5. HVS is used in sampling.....in air
6. Leaf neurosis is due to.....

**Part B****II. Answer any Seven questions. Each question carries 2 marks (7x2=14)**

7. What are non-renewable energy sources? Give examples
8. Give two methods to achieve EMS
9. How does CO pollutant effect our body?
10. What are the antidotes used for cyanide pollution?
11. What are the major pathways of lead in the environment?
12. What is SPM? What are its sources.
13. Define builders with suitable examples.
14. How is water desalination done by ion exchange method?
15. What is Greenhouse effect?
16. Define gypsum requirement of soil.

**Part C****III. Answer any Five questions. Each question carries 6 marks (5x6=30)**

17. What are the steps involved in environmental planning. Explain
18. Describe the toxic effects of oxides of nitrogen and sulphur.
19. Write a note on radiation pollution, its source and impact on environment
20. Discuss briefly on water quality parameters and their standards
21. Write a note on (a) Water Quality Index and (b) water Quality Standards
22. Suggest methods that can be adopted to control air pollution.
23. Explain in brief any two methods used in sampling of ambient air?
24. Write a note on "soil horizon".

**Part D****IV. Answer any Two questions. Each question carries 15 marks (2x15=30)**

25. a. What is environmental management system [EMS]. How can it be achieved. b. What are the biochemical effects of cyanide? Suggest antidotes for cyanide poison
26. What is meant by ozone layer? What is its significance? What are the reasons for the depletion of ozone layer? Comment on the consequences of ozone layer depletion
27. a. Discuss briefly on the methods used for waste water treatment. b. Write notes on how plants, animals and microorganisms for controlling pollution and treatment of effluents.
28. Discuss briefly on sampling procedures and analysis of soil normally done for Kerala type Agriculture?