

**B.S.C. DEGREE (C.B.C.S.S) EXAMINATION, JANUARY 2019**  
**(2016 Admission Supplementary)**  
**SEMESTER V - OPEN COURSE ( CHEMISTRY )**  
**CH5BO9TB - 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. As(III) attacks.....groups of an enzymes
3. Smog is a mixture of ----- and -----
4. Name the heavy metal connected with Minamata disaster.
5. HVS is used in sampling.....in air
6. Calcium deficient soils are treated with.....

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

7. Define source. Give example
8. Discuss two benefits of ISO14001
9. What are the major pathways of lead in the environment?
10. Suggest antidote for Hg poison and remedial measures for Hg poison
11. What are the remedial measures to prevent Hg pollution?
12. Oxygen plays a key role in the troposphere while ozone in the stratosphere. Explain.
13. Define builders with suitable examples.
14. Differentiate between COD and BOD
15. How is water desalination done by ion exchange method?
16. Mention few cleaning options of soil.

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

17. Explain briefly on non-conventional energy sources
18. Explain the biochemical effects of As and Cd.
19. Write a note on radiation pollution, its source and impact on environment
20. Write a note on (a) Water Quality Index and (b) water Quality Standards
21. Describe the Ultra Filtration technique and Electro dialysis for water purification
22. What are the important methods to remove particulates in purifying air?
23. Explain in brief any two methods used in sampling of ambient air?
24. Explain the sampling procedures used to determine soil pollution?

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

25. a. Briefly discuss the basic principles and methodology if ISO14001 system b. What are the biochemical effects caused by pesticides. Give examples?
26. What is acid rain? Explain its formation, adverse effects and control measures.
27. a. Define Water pollution. Briefly discuss about different type of waste pollution. b. Write an essay on solid waste management.
28. How dangerous is the impact caused by plastic effects soil? Suggest measures to overcome it?