

**COURSE CODE - 6030202**

**M.PHIL DEGREE EXAMINATION - JAN 2009**

**M.PHIL (CHEMISTRY)**

**ENVIRONMENTAL CHEMISTRY**

**(For Candidates admitted from the calendar year 2007 onwards)**

**Time: 3 Hours**

**Max Marks: 100**

**Section - A**

**Answer ALL the Questions:**

**10 X 3 = 30**

1. What are the main sources of phosphorus which play a key role in the biological system?
2. What are the main objects of IPNS?
3. Organochlorine pesticides are generally called ecopoisons. Justify?
4. The problem of adequately handling industrial waste water is more complex and more difficult than domestic sewage. Give reason?
5. Congestive heart failure are linked to CO. Why?
6. For evaluating the actual pollution of air it is very important to measure the quality of air, but air quality is difficult to measure. Why?
7. List out the nature of pollutants from thermal power plant?
8. Dumping of waste have many disadvantages, especially in respect of economy and environment. Discuss?
9. Define clean Technology?
10. Which chemical causes Bhopal disaster and what is the impact of it?

**Section - B**

**Answer any FIVE Questions:**

**5 X 6 = 30**

11. Explain sulphur cycle?
12. How the plastics and metals are polluting the environment?
13. Write short notes on water quality parameters by taking any three parameters?
14. With suitable example give notes on oil spill?
15. How the increase in population leads to chemical and photochemical reaction in atmosphere?
16. How you will you reduce CO<sub>2</sub> emissions from power plants?
17. a. How the hydrological balance of the region is affected by mining?  
b. Give some preventive method for industrial pollution?
18. What do you mean by biodegradation? Discuss the role of microbes involved in deodorisation?

**Section - C**

**Answer any TWO Questions:**

**2 X 20 = 40**

19. Discuss in detail about the soil composition, micro and macro and nutrients present in it?
20. Write an essay on disposal of wastes and their management?
21. Write short notes on pollution made by
  - a. Drug industry
  - b. Nuclear power plant
  - c. Paper and pulp industry
  - d. Petroleum