

**Avinashilingam Institute for Home Science and Higher Education for Women  
Coimbatore – 641 043**

Master's Degree Examination – November 2017  
III Semester

Class : II PG  
Major : CHEMISTRY

Time: 3 hours  
Max. Marks: 60

**12MCHC18 Environmental Chemistry (Self Study)**

**Part A**

**10 x 1/2 = 5**

**Choose the correct answer**

1. The toxic metal that can pollute the environment is  
a. Ni                      b. Cu                      c. Au                      d. Pb
2. The gases in atmosphere which cause acid rain is  
a. HCl                      b. SO<sub>2</sub>                      c. NO<sub>2</sub>                      d. All the above
3. Which gas is called as Green house gas ?  
a. Cl<sub>2</sub>                      b. O<sub>2</sub>                      c. H<sub>2</sub>S                      d. CO<sub>2</sub>
4. DDT is  
a. Antibiotics                      b. Herbicides                      c. Insecticide                      d. Anesthetics
5. An average sewage has a BOD of ----- mg/ litre.  
a. 100 to 150                      b. 1000 to 1500                      c. 10000 to 11000                      d. 500 to 1000
6. COD Values are generally ----- BOD.  
a. Equal to                      b. Higher than                      c. Lesser than                      d. More or equal.
7. The Diseases Caused by the Presence of particulate Pollutants in the atmosphere is /are  
a. Bronchial asthma                      b. Ulcer                      c. Disentry                      d. Cold
8. The CFC is released from  
a. Refrigeration                      b. Water                      c. Chemical industry                      d. leather industry
9. The most harmful effect of radio active rays on men causes  
a. Fever                      b. Skin cancer                      c. Scurvy                      d. Night blindness.
10. CO is  
a. Secondary Pollutant                      b. Tertiary Pollutant  
c. Primary Pollutant                      d. None of the above

**Part B**

**5 x 4 = 20**

**Answer ALL questions**

**Each answer should not exceed 200 words or one page**

- 11.a. What is mean by pollution ? How is it Classified ? Give an examples for each type.  
(Or)
- 11.b. Give an account of acid rain.
- 12.a. What are pesticides ? Give any two examples. Highlight the influence of Pesticides as an aquatic pollutant.  
(Or)
- 12.b. What are the main sources of water Pollution ? How is it Controlled?
- 13.a. What is mean by Dissolved oxygen ? How is it analysed ?  
(Or)
- 13.b. What is mean by BOD and COD ?
- 14.a. Give an account of Soil Pollution and its control.  
(Or)
- 14.b. Mentions the Various Sources of Soil pollution. What are the harmful effects of soil pollution?
- 15.a. write a Short note on radio active pollution .  
(Or)
- 15.b. what are industrial effluents / Mention their harmful effects.

**Part C**

**5 x 7 = 35**

**Answer ALL questions**

**Each answer should not exceed 600 words or three pages**

- 16.a. What is Ozone hole? Explain its Causes and Consequences. Write the chemical reactions involved in the depletion of ozone by nitric oxide.  
(Or)
- 16.b. What is photo chemical smog? What is green House effect ? How is it Caused ? What are the adverse effect of Green house effect?
- 17.a. Define the term fluorosis? Discuss the types of fluorosis symptoms and Preventive measures.  
(Or)
- 17.b. Write a brief note on hydrological cycle.
- 18.a. How is BOD is experimentally determined? What is its Significance?  
(Or)
- 18.b. What is the importance of dissolved oxygen in Water? How is COD experimentally determined? What are its significances? What are soil pollutants?
- 19.a. How do insecticides pollute the soil? How is it Controlled?  
(Or)
- 19.b. Describe the Pollution due to fertilizers and pesticides.
- 20.a. Write the various sources of harmful effects and control of radioactive pollution.  
(Or)
- 20.b. Discuss briefly about environmental pollution due to the various industrial effluents.

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