

DVMHSS, THALAIYUR, SANKARI TALUK'

11th Standard

**Chemistry****T2 - Environmental Chemistry**

Total Mark : 70

**Multiple Choice Question**

15 x 1 = 15

- 1) The gaseous envelope around the earth is known as atmosphere. The region lying between an altitudes of 11-50 km is \_\_\_\_\_  
(a) Troposphere (b) Mesosphere (c) Thermosphere (d) stratosphere
- 2) Which of the following is natural and human disturbance in ecology?  
(a) Forest fire (b) Floods (c) Acid rain (d) Green house effect
- 3) Bhopal Gas Tragedy is a case of \_\_\_\_\_  
(a) thermal pollution (b) air pollution (c) nuclear pollution (d) land pollution
- 4) Haemoglobin of the blood forms carboxy haemoglobin with  
(a) Carbon dioxide (b) Carbon tetra chloride (c) Carbon monoxide (d) Carbonic acid
- 5) Which sequence for green house gases is based on GWP?  
(a) CFC > N<sub>2</sub>O > CO<sub>2</sub> > CH<sub>4</sub> (b) CFC > CO<sub>2</sub> > N<sub>2</sub>O > CH<sub>4</sub> (c) CFC > N<sub>2</sub>O > CH<sub>4</sub> > CO<sub>2</sub>  
(d) CFC > CH<sub>4</sub> > N<sub>2</sub>O > CO<sub>2</sub>
- 6) Photo chemical smog formed in congested metropolitan cities mainly consists of  
(a) Ozone, SO<sub>2</sub> and hydrocarbons (b) Ozone, PAN and NO<sub>2</sub> (c) PAN, smoke and SO<sub>2</sub>  
(d) Hydrocarbons, SO<sub>2</sub> and CO<sub>2</sub>
- 7) The pH of normal rain water is  
(a) 6.5 (b) 7.5 (c) 5.6 (d) 4.6
- 8) Ozone depletion will cause  
(a) forest fires (b) eutrophication (c) bio magnification (d) global warming
- 9) Identify the wrong statement in the following  
(a) The clean water would have a BOD value of more than 5 ppm  
(b) Greenhouse effect is also called as Global warming  
(c) Minute solid particles in air is known as particulate pollutants  
(d) Biosphere is the protective blanket of gases surrounding the earth
- 10) Living in the atmosphere of CO is dangerous because it  
(a) Combines with O<sub>2</sub> present inside to form CO<sub>2</sub> (b) Reduces organic matter of tissues  
(c) Combines with haemoglobin and makes it incapable to absorb oxygen (d) Dries up the blood
- 11) Release of oxides of nitrogen and hydrocarbons into the atmosphere by motor vehicles is prevented by using \_\_\_\_\_  
(a) grit chamber (b) scrubbers (c) trickling filters (d) catalytic convertors
- 12) Biochemical oxygen Demand value less than 5 ppm indicates a water sample to be  
(a) highly polluted (b) poor in dissolved oxygen (c) rich in dissolved oxygen (d) low COD
- 13) Match the List I with List II and select the correct answer using the code given below the lists

List I	List II
A. Depletion of ozone layer	1. CO <sub>2</sub>
B. Acid rain	2. NO
C. Photochemical smog	3. SO <sub>2</sub>
D. Green house effect	4. CFC

(a)	(b)	(c)	(d)
A B C D	A B C D	A B C D	A B C D
3 4 1 2	2 1 4 3	4 3 2 1	2 4 1 3

14) Match the List I with List II and select the correct answer using the code given below the lists

List I	List II
A. Stone leprosy	1. CO
B. Biological magnification	2. Green house gases
C. Global warming	3. Acid rain
D. Combination with haemoglobin	4. DDT

(a)	(b)	(c)	(d)
A B C D	A B C D	A B C D	A B C D
1 2 3 4	3 4 2 1	2 3 4 1	4 2 1 3

15) Assertion (A): If BOD level of water in a reservoir is more than 5 ppm it is highly polluted

Reason(R) : High biological oxygen demand means high activity of bacteria in water

- (a) Both (A) and R are correct and (R) is the correct explanation of (A)  
 (b) Both (A) and R are correct and (R) is not the correct explanation of (A)  
 (c) Both (A) and R are not correct (d) (A) is correct but (R) is not correct

## 2 Mark Questions

6 x 2 = 12

- 16) What would happen, if the greenhouse gases were totally missing in the earth's atmosphere?  
 17) Define smog.  
 18) Which is considered to be earth's protective umbrella? Why?  
 19) What are degradable and nondegradable pollutants?  
 20) A person was using water supplied by corporation. Due to shortage of water he started using underground water. He felt laxative effect. What could be the cause?  
 21) What is green chemistry?

## 3 Mark Questions

6 x 3 = 18

- 22) Dissolved oxygen in water is responsible for aquatic life. What processes are responsible for the reduction in dissolved oxygen in water?  
 23) From where does ozone come in the photo chemical smog?  
 24) Even though the use of pesticides increases the crop production, they adversely affect the living organisms. Explain the function and the adverse effects of the pesticides.  
 25) On the basis of chemical reactions involved, explain how do CFC's cause depletion of ozone layer in stratosphere?  
 26) Explain how oxygen deficiency is caused by carbon monoxide in our blood? Give its effect  
 27) What are the various methods you suggest to protect our environment from pollution?

## 5 Mark Questions

5 x 5 = 25

- 28) Mention the standards prescribed by BIS for quality of drinking water
- 29) How does classical smog differ from photochemical smog?
- 30) What are particulate pollutants? Explain any three.
- 31) Ethane burns completely in air to give  $\text{CO}_2$ , while in a limited supply of air gives CO. The same gases are found in automobile exhaust. Both CO and  $\text{CO}_2$  are atmospheric pollutants
- i) What is the danger associated with these gases
- ii) How do the pollutants affect the human body?
- 32) How is acid rain formed? Explain its effect

