12. ENVIRONMENTAL CHEMISTRY

PREVIOUS EAMCET BITS

1. The chemical entities present in thermosphere of the atmosphere **(E-2009)**

   1) O_2^+, O^+, NO^+ 2) O_3 3) N_2, O_2, CO_2, H_2O 4) O_3, O_2^+, O_2

   Ans: 1

Sol: chemicals present in thermosphere

$= O_2^+, O^+, NO^+$

2. Which of the following oxides finally dissolve in water to cause acid rains **(M-2009)**

   1) NO, NO_2 2) NO_2, SO_2 3) NO_2, SO_3 4) N_2O_5, SO_3

   Ans: 4

Sol: $N_2O_5 + H_2O \longrightarrow 2HNO_3$

$SO_3 + H_2O \longrightarrow H_2SO_4$

3. Bhopal gas tragedy of 1984 was caused by **(E-2007)**

   1) Carbon monoxide 2) Phosgene

   3) Methyl cyanate 4) Methyl Isocyanate

   Ans: 4

Sol: Bhopal tragedy was caused by . Methyl isocyanate

4. Which of the following is not an air pollutant **(M-2007)**

   1) CO 2) SO_2 3) NO 4) N_2

   Ans: 4

Sol: N_2 is not an air pollutant

5. $CFCl_3$ is responsible for the decomposition of ozone to oxygen. Which of the following reacts with ozone to form oxygen **(E-2006)**

   1) Cl_2 2) Cl^- 3) F^- 4) $Cl^\bullet$

   Ans: 4

Sol: $Cl^\bullet + O_3 \longrightarrow ClO^\bullet + O_2$

6. An object is located at a height of 5 km from the surface of the earth. The object is located in which part of atmosphere **(M-2006)**

   1) Thermosphere 2) Mesosphere 3) Stratosphere 4) Troposphere

   Ans: 4

Sol: Troposphere is 0 – 11 km

7. Which of the following is not an air pollutant? **(E-2005)**

1) N_2 2) N_2O 3) NO 4) CO

Ans: 1

Sol: N_2 is not an air pollutant. Others are air pollutants

8. In which part of atmosphere, Ozone layer is present? **(M-2005)**

1) Troposphere 2) Thermosphere 3) Mesosphere 4) Stratosphere

Ans: 1

Sol: Ozone layer is present in stratosphere

9. Identify the correct decreasing order of the following with respect to altitude from atmosphere.

I) Troposphere II) Mesosphere III) Thermospere **(E-2004)**

1) II, III, I 2) III, II, I 3) I, II, III 4) I, III, II

Ans: 2

Sol: Atmosphere is divided in to four parts

1. Troposphere (0 – 11km) 2. Stratosphere (11 – 50 km)

3) Mesosphere (50 –85 km) 4) Thermosphere (85-500 km)

Decreasing order of altitude III, II, I

10. What is the reagent used for testing fluoride ion in water? **(M-2003)**

1) alizarin - S 2) quinalizarin 3) phenolphthalein 4) benzene

Ans: 1

Sol: Zirconium – Alizarin S dye is used to test fluoride in water

11. Water is considered to be polluted if the dissolved oxygen (DO) content is less than.....ppm **(E-2003)**

1) 5 2) 10 3) 15 4) 100

Ans: 1

Sol: Good sample of water has 4 – 6 mg/lit = 4 – 6 ppm of O_2

12. The reagent used in the detection of fluoride in water is **(M-2002)**

1) Zirconium alizarin - S – dye 2) Baeyer's reagent

3) Soda lime 4) Phenolphthalein

Ans: 1

Sol: Zirconium – Alizarin S dye is used to test fluoride in water

13. Fluorosis disease is caused due to the reaction .... with excess of fluoride in the body **(E-2002)**

1) Ca 2) Mg 3) Fe 4) K

Ans: 1

Sol: $Ca + F_2 \longrightarrow CaF_2$

14. Which one of the following regions of atmosphere contains Ozone? **(M-2001)**

1) Troposphere 2) Thermosphere 3) Mesosphere 4) Stratosphere

Ans: 4

Sol: In atmosphere stratosphere mainly consist of ozone layer.

15. Which one of the following is mainly responsible for depletion of ozone layer? **(E-2001)**

1) Methane 2) Carbon dioxide 3) Water 4) Chloro fluoro carbons

Ans: 4

Sol: Important compounds which deplete the ozone layer are

1) Chloro-fluorocarbon 2) Nitric oxide 3) Chlorine

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