

Chemistry - 10th Class Chemistry English Medium Chapter 14 Preparation

Q1. Give three effects of water pollution .

Ans 1: 1: It is damaging aquatic life , thus breaking a link of food chain
2: It reduces the aesthetic quality of lakes and rivers
3: It is unfit for cleaning or washing purposes

Q2. What do you mean by boiler scales ? How are they removed ?

Ans 1: Hard water is unfit for use in steam engines ,boilers and turbines because insoluble calcium and magnesium salts deposit inside . They are called scales They are bad conductors of heat and hence more fuel is used . Insoluble calcium and magnesium sulphates not only reduce the efficiency of the engine but also cause the boiler to burst . They can be removed by using HCL

Q3. Why is ozone depleting in atmosphere?

Ans 1: chlorofluorocarbons (CFCs) (used as refrigerants in air conditioners and refrigerators) are major cause of depletion of ozone layer. These compounds leak in one way or other escape and diffuse to stratosphere. Ultraviolet radiations break the C-Cl bond in CFC₃ and generates chlorine free radicals

Q4. How water rises in plants ?

Ans 1: It has high surface tension . This unique property of water is responsible for its high capillary action . Capillary action is the process by which water rises up from the roots of plants to leaves . This process is vital for the survival of the land plants

Q5. How combustion of fossil fuels in internal combustion engine produces oxides of nitrogen?

Ans 1:
Combustion of fossil fuels in internal combustion engines, in thermal power stations and factories where huge amount of coal is burnt, NO is formed by the direct combination of nitrogen and oxygen as shown
$$\text{N}_2(\text{g}) + \text{O}_2 \rightarrow 2\text{NO}(\text{g})$$

However, it quickly reacts with air to form nitrogen dioxide. NO₂ is highly toxic gas.
$$2\text{NO}(\text{g}) + \text{O}_2(\text{g}) \rightarrow 2\text{NO}_2(\text{g})$$

Q6. What disease or hazards are for human beings b acute cadmium , lead and mercury poisoning can causes?

Ans 1: Acute cadmium poisoning causes . High blood pressure , kidney damage and destructing of red blood cells
1: Acute lead poisoning causes dysfunction of kidney , liver , brain , nervous system and reproductive system
2: Mercury poisoning causes , Neurological damage

Q7. What is water pollution ?

Ans 1: Water pollution is contamination of water bodies e.g lakes , rivers , oceans and ground water . Water pollution occurs when pollutants are discharged directly or indirectly into water bodies without adequate treatment to remove harmful compounds

Q8. Define pollutant, also writes its factors on which it depends?

Ans 1: A pollutant is a waste material that pollutes air, water and soil. *Factors. * Chemical nature * Concentration *Persistence.

Q9. What is capillary action ?

Ans 1: Capillary action is a process by which rises up from the roots of plants to leaves . This process is vital for the survival of the land plant

Q10. What is ozone layer.

Ans 1: The maximum concentration of ozone is called ozone layer.
