

Chemistry - 10th Class Chemistry English Medium Chapter 14 Preparation

Q1. How detergents make the water unfit for aquatic life ?

Ans 1: The detergent remains in water for a long time and makes the water unfit for aquatic life . The phosphates salts present in detergents cause rapid growth of alga in water bodies , which flow over the surface of water . These plants ultimately die and decay . Decaying plants being biodegradable consume oxygen gas present in water . Thus depletion of oxygen gas results in death of aquatic life

Q2. Write is difference between atmosphere and environment?

Ans 1: Atmosphere is the envelope of different gases around earth.

Ans 2: Environment is the part of atmosphere in which living thing interact with non-living things.

Q3. What do you mean by boiler scales ? How are they removed ?

Ans 1: Hard water is unfit for use in stem 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

Q4. Which salts are responsible for hardness of water ?

Ans 1: The rain water while coming down absorbs carbon dioxide from the atmosphere . The water mixed with carbon dioxide , when passes through the beds of the soil converts insoluble carbonates of calcium and magnesium into soluble bicarbonates . It may also dissolve chlorides and sulphates of calcium and magnesium . These salts make the water hard

Q5. Why the water molecule is polar ?

Ans 1: Water molecule has polar structure i-e one end of the molecule is partially while the other end is partially negative because of electronegativity difference between oxygen and hydrogen atoms

Q6. What do you mean by an air pollutant?

Ans 1: The harmful substances present in air are called air pollutants. Air pollutants change the weather, badly affects the human health, damage the plants and destroy buildings.

Q7. List down the names of layers of atmosphere.

Ans 1: i. Troposphere ii. Stratosphere iii. Mesosphere iv. Thermosphere

Q8. Why acid rain damages buildings?

Ans 1: Acid rain attacks the calcium carbonate present in the marble and limestone of buildings and monuments. Thus, these buildings are getting dull and eroded day by day.

Q9. Tell some use of water in our life .

Ans 1: Uses of water in our daily life are for drinking ,cooking , washing , purposes etc

Q10. How limestone dissolves in water ?

Ans 1: Gypsum is sparingly soluble in water , while limestone is insoluble in water . However in the presence of carbon dioxide small quantity of limestone is soluble in water according to the chemical reaction

Ans 2: $\text{CaCO}_3(\text{s}) + \text{CO}_2(\text{g}) + \text{H}_2\text{O}(\text{l}) \rightarrow \text{Ca}(\text{HCO}_3)_2(\text{aq})$
