

# Chemistry - 12th Class Chemistry Chapter 16 Short Questions Preparation

## Q1. How detergent are treat to aquatic animal?

**Ans 1:** Detergents are excessively used in industry and household as cleaning agents, The amount of disposed detergent in waste water is increasing day by day, This waste water when discharged in rivers, sea , greatly affects the aquatic life. Detergent content of waste water mobilize the bound toxic ions of heavy metals.

## Q2. What is chemical oxygen demand? How it is measured?

**Ans 1:** The organic content of water which consumes oxygen during chemical oxidation is evaluated by its chemical oxygen demand. The oxygen demand of water can be determined directly by treating it with dichromate ions, which is powerful oxidizing agent, The organic matter in water oxidized, while the remaining dichromate is determined titrimetrically.

#### Q3. Explain purification of water by use of coagulating agent.

Ans 1: The coagulant such as aluminium sulphate or alum is added to the raw water, which cause the precipitation of suspend impurities, For example aluminium hydroxide is precipitated when alum is added to water in alkaline medium.

Many suspended particles get absorbed on the surface of gelatinous aluminium hydroxide precipitate, Ferric salts are commonly used as coagulants but they are difficult to handle.

## Q4. What do you know about reducing smog and oxidizing smog?

**Ans 1:** The smog contain high content of So<sub>2</sub>it is chemically reducing in nature and is known as reducing smog, The main cause of reducing smog is combustion of coal. Photochemical smog consists of higher concentration of oxidants like ozone and is also termed as oxidizing smog,

## Q5. What are primary and secondary pollutants in atmosphere?

**Ans 1:** Primary Pollutants: The waste product given out from chimneys of industrial units and exhaust of automobiles may contain gases such as sulphur dioxide.sulphur trioxide, nitrogen oxides, carbon monoxide compound of fluorine and radioactive material. The waste products are called primary pollutants.

Secondary Pollutants: The primary pollutants in the atmosphere through various reaction product some pollutants such as sulphuric acid, nitrogen monoxide, carbonic acid, Hydrofluoric acid keatons and peroxybenzolara called secondary pollutants.

## Q6. Detergents are threat to aquatic life. Explain.

**Ans 1:** Detergents are excessively used in industries and households as cleaning agents. The amount of disposed detergents in waste water is increasing day-by day, This waster water when discharge in river or sea, greatly affects the aquatic life.

## Q7. What is the effect of Acid rain on earth?

Ans 1: Acidification of the soil and rocks can leach metals like aluminium, mercury, lead and calcium and discharges them into water bodies. These heavy metals are accumulated in the fished and are health hazards for human and birds they eat these fishes, The elevated concentration of aluminium is harmful for fished as it clogs the gills this causing suffocation, Acidification of the soil can also each nutrient thus damaging leaves and plants and growth of forest.

## Q8. What is leachate?

**Ans 1:** The groundwater which seeps in the landfill and liquid from the waster itself all percolate through the refuse producing leachate, The leachater contains dissolved, suspended and microbial contaminants.

## Q9. What are the primary pollutants?

**Ans 1:** The waste product given out from chimneys of industrial units and exhaust of automobiles may contain gases such as sulphur dioxide.sulphur trioxide,nitrogen oxides,carbon monoxide compound of fluorine and radioactive material. The waste products are called primary pollutants.

#### Q10. Write the harmful effects of Chlorination of water?

**Ans 1:** Harmful effects of chlorination of water are due to its reaction with dissolved ammonia and organic matters present in water, The hypochlorous acid reacts with dissolved ammonia to form chloramines.

Chlorination of water containing organic material aslo forms some organic compound which are toxic.