

Chemistry - 12th Class Chemistry Chapter 16 Short Questions Preparation

Q1. How do leather tanneries pollute the water?

Ans 1: Many leather tanning units, varying from the cottage scale to big industrial units are working in and around many big cities of Pakistan. They use large quantities of chromium salts for leather tanning. They are producing good variety of exportable leather but only some units have facilities of waste water treatment by reducing Cr into trivalent state followed by alkaline precipitation by $\text{Cr}(\text{OH})_3$. These industries are the big source of chromium pollution on the environment. Chromium is highly toxic and is known to cause cancer.

Q2. What are the conditions for the formation of smog?

Ans 1:

1. There must be sufficient NO , hydrocarbons and volatile organic compound emitted by the vehicular traffic.
2. Sunlight, so that some of the chemical reaction may occur at a rapid rate.
3. The movement of air mass must be little so that reaction are not disturbed.

Q3. Name the factors which affect the quantity of water?

Ans 1:

1. Dissolved Oxygen
2. Biochemical Oxygen Demand
3. Chemical Oxygen Demand

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

Ans 1: The smog contains high content of SO_2 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. 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 also forms some organic compounds which are toxic.

Q6. How do gases in the atmosphere absorb?

Ans 1: The gases in the atmosphere absorb most of the cosmic rays and the major portion of the harmful electromagnetic radiation coming from the sun. The absorption of this harmful radiation protects life on the earth.

Q7. What are the effects of dumping waste in sea and rivers.

Ans 1: Water covers more than 710% of the earth and is valuable source for food and mineral,Sea and rivers have long been used for dumping waste of industries and municipal discharges such as acids,refinery wastes,pesticides water,garbage and radioactive waste etc.

Q8. Define environmental chemistry and what are the components of Environment?

Ans 1: Environmental chemistry deals with the chemicals and other pollutants in the environment,In this way we study the sources,reaction ,transportation of the chemical and other toxic substance especially created by human activity in the environment and their adverse effect on human being.

The environment consists of the following

- 1.Atmosphere
- 2.Hydrosphere
- 3.Lithosphere
- 4.Biosphere

Q9. What is Acid Deposition?How does it affect the building material?

Ans 1: The rain contains acid is called acid rain now a days it termed as acid deposition,It produce serious environmental problems.Acid rain is produced due to the presence of CO_2 and NO_x in atmosphere convert it into carbon dioxide,.ACid rain damage building material such as steel,pain,plastics ,cement masonry work.

Q10. What is effect of aeration on quality of raw water?

Ans 1: The quality of raw water is improved by aeration.In this process air is passed through water to remove the dissolved gasses such as foul smelling,organo-sulphur compound and volatile organic compound,Some of the organic material in the raw water which could be easily oxidized with air produce in the aeration process,.
