
CLASS X CHEMISTRY

Q1) Give an example of a reaction which takes place in the presence of sunlight.

Q2) On heating blue coloured powder of copper (II) nitrate in a boiling tube, copper oxide (black), oxygen and a brown gas X is formed.

- (a) Write a balanced chemical equation of the reaction.
- (b) Identify the brown gas evolved.
- (c) Identify the type of reaction.

(d) What could be the pH range of aqueous solution of the gas? Q3)

Define the following terms:-

- (i) Ionic equation
- (ii) Skeletal equation

Q4) How can you study experimentally that water is made of hydrogen and oxygen combined together in the ratio of 2:1 by volume? Q5) What do you mean by the term rancidity? Write the different methods to prevent rancidity. Q6) Why does the colour of silver nitrate change when a coin of copper is dipped in it? Q7) Write the balanced chemical equation for the following reactions and identify the type of reaction in

each case.

(i) Magnesium reacts with $\text{Fe}(\text{OH})_3$ oxide to produce hydrogen gas and form solid magnesium hydroxide.

(iii) Ethanol is burnt in air to form carbon dioxide, water and releases heat.

Q8) Identify the oxidizing agent (oxidant) in the following reactions:

(a) $\text{Pb}_3\text{O}_4 + 8\text{HCl} \longrightarrow 3\text{PbCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$

(b) $2\text{Mg} + \text{O}_2 \longrightarrow 2\text{MgO}$

(c) $\text{CuO} + \text{H}_2 \longrightarrow \text{Cu} + \text{H}_2\text{O}$ Q9) Which among the following are physical or chemical changes?

- (a) Evaporation of petrol.
- (b) Curdling of milk.
- (c) Sublimation of solid ammonium chloride.
- (d) Burning of LPG.
- (e) Rusting of iron. Q10) Why do we store silver chloride in dark colour bottles?