

Chapter 01

CHEMICAL REACTIONS & EQUATIONS

Oxidation and Reduction reactions:

Oxidation:

The reaction in which a substance gains oxygen or loses hydrogen is known as oxidation reaction.

Reduction:

The reaction in which a substance loses oxygen or gains hydrogen is known as Reduction reaction.

Redox reaction:

A chemical reaction in which both oxidation and reduction occurs is known as redox reaction.

Oxidant (or) oxidizing agent: The element, which is undergoing Reduction and oxidises the other element is known as Oxidant.

Reductant (or) Reducing agent: The element, which is undergoing oxidation and reduces the other element is known as Reductant. In a redox reaction



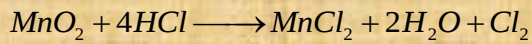
CuO is losing oxygen

Hence CuO is undergoing reduction and it is oxidizing agent.

H_2 is gaining oxygen.

Hence H_2 is undergoing oxidation and it is reducing agent.

- In a reaction



MnO_2 is reduced – Hence it is oxidant

HCl is oxidised – Hence it is reductant

