

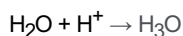
Chemistry - 10th Class Chemistry English Medium Chapter 10 Preparation

Q1. What are complex salts.

Ans 1: These salts on dissociation provides a simple cation and a complex anion or vice versa only simple ions yields the characteristics test for cation or anions.

Q2. Water is amphoteric specie according to Bronsted-Lowry concept . What is its nature according to Lewis concept

Ans 1: According to Lewis concept water is Lewis base , as it has lone pair in central atom (oxygen) which can be donated to any electron deficient species e.g



Base Acid adduct

Q3. Name the salts which are formed when Zn metal react with nitric acid , phosphoric and acetic acid ?

Ans 1: 1:With nitric acid :

When Zn react with nitric acid it will produce zinc nitrate $\text{Zn}(\text{NO}_3)_2$

2: With phosphoric acid : When zinc reacts with phosphoric acid then zinc phosphate $\text{Zn}_3(\text{PO}_4)_2$ is produce

Ans 2: 3: Acetic acid : When zinc react with acetic acid then zinc acetate is formed $\text{Zn}(\text{CH}_3\text{COOH})_2$

Q4. Why BF_3 behave as a Lewis acid ?

Ans 1:

The central atom in BF_3 has only six electrons around it . In order to complete its valence shell it needs two or more electrons . So it can accept electron pair and act as Lewis acid

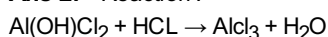
Q5. Define and give the characteristics of a Lewis acid.

Ans 1: The substance which can accept the lone pair is called lewis acid. Characteristics. Incomplete octet: The molecules in which central atom has the incomplete octet e.g. BF_3 , AlCl_3 , FeCl_3

Q6. How basic salts turns into normal salts ?

Ans 1: Basic salts are turn into normal salts by further reaction with acids

Ans 2: Reaction :



(basic salt) (Neutral salt)

Q7. Name an alkali in alkaline batteries

Ans 1: Potassium hydroxide (KOH) is used in alkaline batteries

Q8. Who are analytical chemists ?

Ans 1: Analytical chemist examine substances qualitatively and quantitatively . They identify substances and evaluate their properties
They have a wide area for working ranging from basic research in laboratories to analytical research in industries . They work in almost all industries including manufacturing , pharmaceuticals , healthcare , forensics and public protection , where they test air , water , industrial waste , drugs and food to make sure they are safe . They ensure the quality of the product in industry

Q9. Give uses of sulphuric acid

Ans 1: 1: Sulphuric acid is used to manufacture the fertilizers e.g ammonium sulphate , calcium superphosphates

Ans 2: 2: It is used in explosive materials

Ans 3: 3: They are used in dyes and paints

Ans 4: 4: Sulphuric acid used in the preparation of drugs

Q10. Name an alkali used in alkaline batteries.

Ans 1: potassium hydroxide is used in alkaline batteries.
