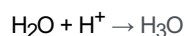


Chemistry - 10th Class Chemistry English Medium Chapter 10 Preparation

Q1. 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

Q2. What do you mena by neutralization reaction according to Arrhenius acid -base concept.

Ans 1: According to Arrhenius concept neutralization reaction occur when an Arrhenius acid donate H^+ which is accepted by Arrhenius base.

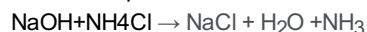
Q3. What are complex salts.

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.

Q4. Name the gas librated when alkalies react with ammonium salt

Ans 1: When alkalies react with ammonia gas is evolved

Ans 2: Equation:



Q5. HCL and H₂SO₄ are strong acid while their solutions are equal molar , they have different pH value , why?

Ans 1: The basis of pH scale is the concentration of hydrogen ion (H^+). As HCL and H₂SO₄ produce one and two H^+ on dissociation respectively that is why they have different value of pH

Q6. 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

Q7. Name an alkali in alkaline batteries

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

Q8. How will you justify salts are neutral compounds?

Ans 1: Although salts do not compose of equal number of positive and negative ions, but they have equal number of positive and negative charges e.g

NaCl : It has equal number of positive and negative ions as well as equal no. of charges

Ans 2: CaCl_2 : It has equal number of positive and negative charges but the no of positive and negative ions are different

Q9. 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

Q10. 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
