

Chemistry - 10th Class Chemistry English Medium Chapter 10 Preparation

Q1. Why BF₃ behave as a Lewis acid?

Ans 1:

The central atom in BF₃has 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

Q2. Define acid rain

Ans 1: Acid rain is formed by dissolving acidic air pollutants like oxides of sulphur and nitrogen by rain water. As a result of pH of the rain water decreases i-e it becomes acidic. When this acid rain falls down, it damages plants animals, building, water bodies and even soil

Q3. 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: CaCl₂:It has equal number of positive and negative charges but the no of positive and negative ions are different

Q4. Define preservatives in food.

Ans 1: Chemicals used to prevent food spoilage are called preservatives. Food spoiling way be due to microbial action or chemical reactions. So preservatives serve as either anti microbial or antioxidants or both. 1. Manufacturers add preservatives mostly toprevent spoiling may be due to microbial foods for a period of time. 2. Natural food preservatives are salts, sugar, alcohol, vinegar, etc they efficiently control the growth of bacteria in food. they are used to preserve meat, fist, etc.

Q5. Why pure water is not a strong electrolyte?

Ans 1: Water is a weak electrolyte as it ionizes very slightly into ions in a process called autoionization due to strong forces of attraction in it

Q6. Define Acid Rain.

Ans 1: Acid rain is formed by dissolving acidic air pollutants like oxides of sulphur and nitrogen by rain water as a result pH of the rain water decreases, i.e. it becomes acidic when this acid rain falls down it damages animals, plants, buildings, water bodies and even soil.

Q7. 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 Zn(NO₃)₂

2: With phosphoric acid: When zinc reacts with phosphoric acid then zinc phosphate Zn(PO4)2 is produce

Ans 2: 3: Acetic acid: When zinc react with acetic acid then zinc acetate is formed Zn(CH₃COOH)₂

Q8. What is the function of HCL in stomach?

Ans 1: Stomach secretes chemicals in a regular way to digest food . These chemicals mainly consists of hydrochloric acid along with other salts . Although , hydrochloric acid is highly corrosive , but stomach is protected from its effects because it is lined with cells that produce a base . The base neutralized stomach acid . The important function of this acid is to break down chemical bonds of foods in the digestion process . Thus big molecules of food are converted into small ones . It also kill the harmful bacteria of certain foods and drinks

Q9. How many water of crystallization are present in?

Ans 1: CuSO4.5H2O. It has five water of crystallization. CaSO4.2H2O It has two water of crystallization.

Q10. Give preventive measures of hyperacidity

Ans 1: The best prevention from hyperacidity is:

- 1: Avoiding over-eating and staying away from fatty acids and spicy foods
- 2: Simple and regular eating, remaining in an upright position for about 45 minutes after taking a meal
- 3: Keeping the head elevated while sleeping