Topics: Acids, Bases and Salts
Subtopics:Chemical Properties of Acids and Bases

Questions

Q1. Which gas is usually liberated when an acid reacts with a metal ? How will you test for the presence of this gas ?

Q2.Metal compound A reacts with dilute hydrochloric acid to produce effervescence. The gas evolved extinguishes a burning candle. Write a balanced chemical equation for the reaction if one of the compounds formed is calcium chloride.

Q3.Write word equations and then balanced equations for the reaction taking place when
(a) dilute sulphuric acid reacts with zinc granules
(b) dilute hydrochloric acid reacts with magnesium ribbon
(c) dilute sulphuric acid reacts with aluminium powder
(d) dilute hydrochloric acid reacts with iron filing

Q4. Write a balanced chemical equation for any neutralisation reaction, mentioning the physical state of the reactants and the products.

Q5.Equal lengths of magnesium ribbons are taken in test tubes A and B. Hydrochloric acid (HCl) is added to test tube A, while acetic acid (CH_3COOH) is added to test tube B. In which test tube will the fizzing occur more vigorously and why ?

Q6.Write a balanced chemical equation for the reaction between sodium carbonate and hydrochloric acid indicating the physical state of the reactants and the products.

Q7. Name the products formed in each case when
(a) hydrochloric acid reacts with caustic soda.
(b) granulated zinc reacts with caustic soda.

Q8.Ammonia is a base but does not contain hydroxyl group.Give reason.

Q9. What is the colour of litmus in a solution of ammonium hydroxide?

Q10.Define olfactory indicators. Name two substances which can be used as olfactory indicator.