

Acids, Bases and Salts

ONE MARKS QUESTION

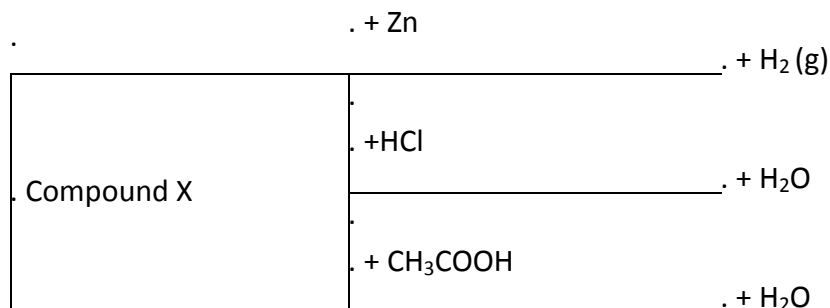
1. Name the gas formed when sodium hydroxide reacts with zinc.
2. Write the chemical name of baking soda.
3. What happens when gypsum is heated at 373K?
4. Which has a higher pH value 1M HCl or 1M NaOH solution?
5. Hydrogen ion concentration of an acid is 1×10^{-2} mol/l. what is its pH?
6. Write the name of the products formed by heating gypsum at 373K.
7. Write the chemical name and formula of the bleaching powder.

TWO MARKS QUESTION

8. Explain the preparation of washing soda.
9. Why does tooth decay start when the pH of mouth is lower than 5.5?
10. What is baking powder? How does it make the cake soft and spongy?
11. Give Arrhenius definition of an acid and a base. Choose strong acid and strong base from the following: CH_3COOH , NH_4OH , KOH , HCl
12. Given below are the pH values of different liquids. 7.0, 14.0, 4.0, and 2.0. Which of these could be that of (a) lemon juice (b) distilled water (c) sodium hydroxide solution (d) tomato juice.

THREE MARKS QUESTION

13. What happens when nitric acid is added to egg shell? Give the chemical equation.
14. A student prepared solutions of an acid and a base in two separate beakers. She forgot to label the solutions and litmus paper is not available in the laboratory. Since both the solutions are colourless, how will she distinguish between the two?
15. Identify the compound 'X' on the basis of the reactions given below. Write the names and chemical formulae of A, B, C



28. How is plaster of Paris prepared? What is its chemical formula? Write its chemical name.
29. Write the chemical name of Plaster of Paris. Write a chemical equation to show the reaction between Plaster of Paris and water. Name the compound produced in this reaction.
30. A gas X reacts with lime water and forms a compound Y which is used as bleaching agent in the chemical industry. Identify X and Y. Give the chemical equation of the reaction involved.

FIVE MARKS QUESTION

32. (a) Define strong acid and weak acid.
- (b) A student working in the laboratory added some water to a syrupy liquid taken in tube. The tube immediately cracked and the liquid escaped out, that produced blisters on the skin of the student. Why?
31. A milk man adds a very small amount of baking soda to fresh milk. Why does he shift the pH of the fresh milk from 6 to slightly alkaline?
32. a) Mention pH range within which our body works?
b) Explain how antacids give relief from acidity.
33. Mention the nature of tooth pastes. How do they prevent tooth decay?
34. a) Crystals of a substance changed their color on heating in a closed test tube but regained it after some time when they were allowed to cool down. Name the substance and write its formula. Explain the phenomenon.
b) How is sodium carbonate prepared? Give two uses of the compound.