

CBSE TEST PAPER-04

SCIENCE & TECHNOLOGY (Class-10)

Chapter 2. Acids, Base and Salts

1. What is the name given to a reaction between an acid and a base? (1 mark)
2. Name the raw materials used for preparing bleaching powder. (1 mark)
3. What is the chemical name and chemical formula of baking soda? (1 mark)
4. Under what soil conditions do you think a farmer would treat the soil of his fields with quick lime (calcium oxide) or slaked lime (calcium hydroxide) or chalk (calcium carbonate)? (1 mark)
5. What effect does the concentration of H^+ (aq) have on the acidic nature of the solution? (1 mark)
6. A house-wife found that the cake prepared by her is hard and small in size. Which ingredient has she forgotten to add that would have made the cake fluffy. Give reason. (2 marks)
7. Equal lengths of magnesium ribbon 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? (2 marks)
8. Plaster of Paris should be stored in a moisture – proof container. Explain why? (2 marks)
9. Why do HCl, HNO_3 , etc. show acidic characters in aqueous solutions while solution of compounds like alcohol and glucose do not show acidic character? (2 marks)
10. You have been provided that three test-tubes? One of them contains distilled water and the other two contains an acidic solution and a basic solution respectively. If you are given red litmus paper, how will you identify contents of each test-tube? (3 marks)
11. A milkman adds a very small amount of baking soda to fresh milk” (3 marks)
 - (i) Why does he shift the pH of the fresh from '6' to slightly alkaline?
 - (ii) What do you expect to observe when this milk comes to boil?
 - (iii) Why does this milk take a long time to set as cur?
12. A compound X of sodium form a white powder. It is a constituent of baking powder and is used in some antacid prescriptions. When heated, X gives out of a gas and steam. The gas forms a white precipitate with lime water. Write the chemical formula and name of X and the chemical equation for its decomposition on heating. What is its role in baking powder and in antacids? (3 marks)
13. (a) What is acid rain? How does it affect our aquatic life?
 - (b) What happens during a bee sting? What is its remedy?
 - (c) Two solutions X and Y are tested with universal indicator. Solution X turns orange whereas solution Y turns red. Which of the solution is a stronger acid? (5 marks)