

CBSE TEST PAPER-05

SCIENCE & TECHNOLOGY (Class-10)

Chapter 2. Acids, Base and Salts

1. What is common to all acids? (1 mark)
2. A white chemical compound becomes hard on mixing proper quantity of water. It is also used in surgery to maintain joints in a fixed position. Name the chemical compound. (1 mark)
3. Name two constituents of baking power. (1 mark)
4. A farmer has found that the pH of soil in his fields is 4.2. Name any two chemical materials which he can mix the soil to adjust its pH. (1 mark)
5. Write the pH value, after which teeth start decaying? (1 mark)
6. How is the concentration of hydroxide ions (OH⁻) affected when excess base is dissolved in a solution of sodium hydroxide? (2 marks)
7. A white substance having a strong smell of chlorine is used to clean water in water storage tank. Identify the substance. Write its chemical name and the reaction for its preparation. (2 marks)
8. How is plaster of Paris obtained? What reaction is involved in the setting of a paste of plaster of Paris. (2 marks)
9. Name the gas evolved when dilute sulphuric acid acts on sodium carbonate. Write the chemical equation for the reaction involved. (2 marks).
10. What is meant by the term 'pH of a solution'? The pH of gastric juices extracted from the stomach of two persons A and B were found to be 1 and 3 respectively. The stomach juice of which person is more acidic? (2 marks)
11. Fresh milk has pH of 6. How do you think the pH will change as it becomes sour? Explain your answer. (2 marks)
12. (i) Write the chemical names and formula of bleaching powder.
(ii) Why does bleaching powder smell of chlorine when exposed to air?
(iii) Write chemical equation to represent the action of dilute hydrochloric acid on bleaching powder. (3 marks)
13. What happens when
 - (i) Aluminum metal reacts with dilute HCl?
 - (ii) Potassium oxide is dissolved in water?
 - (iii) Sodium hydroxide reacts with sulphuric acid completely?Give equation for the chemical reactions involved. (3 marks)
14. Which gas is usually liberated when an acid reacts with a metal? Illustrate with an example. How will you test for the presence of the gas? (3 marks)