

CBSE TEST PAPER-04

SCIENCE & TECHNOLOGY (Class-10)

Chapter 4. Carbon and its compounds

1. What are oxidizing agents? (1 mark)
2. Why are carbon and its compounds used as fuels for most applications? (1 mark)
3. Explain the formation of scum when hard water is treated with soap. (1 mark)
4. What change will you observe if you test soap with litmus paper (red and blue)? (1 mark)
5. Name the product other than water formed on burning of ethanol in air. (1 mark)

6. Write chemical equation of the reaction of Ethanoic acid with: (2 marks)
(i) Soda lime (ii) Sodium carbonate.
7. Write the electron dot structure of ethyne. A mixture of oxygen and ethyne is burnt for welding. Why do you think a mixture of ethyne and air is not used? (2 marks)
8. A mixture of oxygen and ethyne is burnt for welding. Can you tell why a mixture of ethyne and air is not used? (2 marks)
9. What is hydrogenation? What is its industrial application? (2 marks)
10. Give a test to differentiate chemically between butter and cooking oil. (2 marks)

9. What happens when ethanol reacts with (3 marks)
(i) Sodium
(ii) Chromic anhydride and
(iii) Alkaline potassium permanganate solution? Write the necessary chemical equations for the reaction involved in the above cases.
10. What are hydrocarbons? Give two points of difference between saturated and unsaturated hydrocarbons. (3 marks)

11. (i) Explain the process of preparation of soaps in the laboratory.
(ii) Why is common salt (sodium chloride) added during the preparation of soap.
(iii) Why is soap not suitable for washing clothes, when the water is hard?
(iv) What is a detergent? Name one detergent. (5 marks)