

CBSE TEST PAPER-02
CLASS - X (Carbon and its compound)

1. Rectified spirit is (1)
(a) 50% ethanol (b) 80% ethanol
(c) 95% ethanol (d) 40 to 50%
2. Dilute alkaline KMnO_4 solution is (1)
(a) an oxidising agent (b) a reducing agent
(c) a bleaching agent (d) none of these
3. The by product in soap industry is (1)
(a) Isoprene (b) Ethylene glycol
(c) glycerol (d) butane
4. An example of soap is (1)
(a) $\text{C}_{15}\text{H}_{31}\text{COONa}$ (b) CH_3COONa
(c) $\text{C}_6\text{H}_5\text{COONa}$ (d) $\text{C}_{17}\text{H}_{35}\text{OSO}_3\text{Na}$
5. The number of C-H bonds in ethane C_2H_6 molecule are (1)
(a) 4 (b) 6
(c) 8 (d) 10
6. Write the structures of (2)
(i) Ethanoic acid (ii) Hexanal
7. Name the following compounds (2)
(a) $\text{CH}_3-\overset{\text{H}}{\text{C}}=\text{O}$ (b) $\text{CH}_3-\text{CH}_2-\text{OH}$
8. Which organic compound is added to make ethanol unfit for drinking purposes? (2)
What is the name of the mixture formed?
9. Write a test to identify the presence of ethanoic acid? (2)
10. Give names of the following (3)

- (a) An aldehyde derived from ethane
(b) Ketone derived from butane
(c) Compound obtained by the oxidation of ethanol by chromic anhydride
11. What is meant by denatured alcohol? (3)
What is the need to denature alcohol?
12. Write chemical equations of the reactions of ethanoic acid with (3)
(a) Sodium (b) Sodium carbonate
(c) Ethanol (d) The presence of conc H_2SO_4
13. Complete the reaction and names of the products formed (3)
(i) $CH_3COOH + NaOH \xrightarrow{\text{heat}}$
(ii) $C_2H_5OH + O_2 \xrightarrow[\text{KMnO}_4]{\text{alkaline}}$
(iii) $CH_3COOH + C_2H_5O_4 \xrightarrow{\text{Conc } H_2SO_4}$
14. (a) Name the gas evolved during fermentation process? (5)
(b) What role is played by yeast in the conversion of cane sugar ($C_{12}H_{22}O_{11}$) to ethanol?
(c) How may the following be obtained from pure ethanol? Express chemical reactions by the chemical equations.
(i) Sodium ethoxide (ii) Ethyl ethanoate (iii) Ethanal