

CBSE TEST PAPER-01

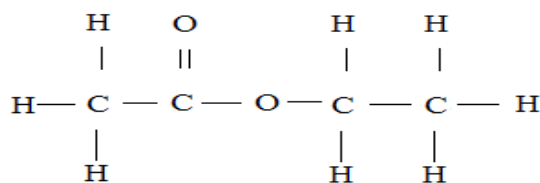
SCIENCE & TECHNOLOGY (Class-10)

Chapter 4. Carbon and its compounds

1. Give the names of the functional groups.

(i) —CHO (ii) $\begin{array}{c} | \\ \text{—C=O} \end{array}$ (1 marks)

2. The structural formula of an ester is (1 marks)



Write the molecular formula of the alcohol and the acid from which it would have been formed.

3. Give the IUPAC names of ethyl alcohol and acetic acid. (1 marks)

4. What will be the formula and electron dot structure of cyclopentane? (1 mark)

5. Give the names of the following functional groups: (1 mark)

(i) —OH (ii) —COOH

6. An organic compound 'A' is a constituent of wine and beer. This compound, on heating with alkaline potassium permanganate forms another organic compound 'B' which turns blue litmus to red. Identify the compound 'A'. Write the chemical equation of the reaction takes place to form the compound 'B'. Name the compound 'B'. (2 marks)

7. What type of compounds show substitution reaction? Explain it by an example. (2 marks)

8. Write the structure and electron dot formula of the first two carboxylic acids. (2 marks)

9. What is meant by denatured alcohol? How is it prepared? (2 marks)

10. An organic compound 'X' which is sometimes used as an antifreeze has the molecular formula $\text{C}_2\text{H}_6\text{O}$. 'X' on oxidation gives a compound 'Y' which gives effervescence with a baking soda solution. What can 'X' and 'Y' be? Write their structural formula. (2 marks)

11. What are synthetic detergents? Give one example of a synthetic detergent. Write its two advantages over soap. (3 marks)

12. (a) A gas has two carbon atoms in its molecule. It burns with a sooty flame and is obtained by the cracking of kerosene. Identify the gas.

(b) Write its electronic and structural formulae. What happens when bromine water is added to this gas? Write the chemical equation of the reaction involved. (3 marks)