

---

**CBSE TEST PAPER-04**  
**CLASS - X (Carbon and its compound)**

---

1. An unknown compound has the smell of vinegar. Identify it. (1)
2. Out of butter and groundnut oil which is unsaturated in nature. (1)
3. Which has triple bond,  $C_2H_4$ ,  $C_3H_4$ ,  $C_3H_6$  (1)
4. Which substance is added for the denaturation of ethyl alcohol (1)
5. Which ions are responsible for making water hard? (1)
6. Why carbon and its compounds used as fuels in most cases? (2)
7. A compound X has the molecular formula  $C_3H_6O$  with structural formula  $CH_3CH_2CHO$ . Give its IUPAC name. Can another compound have the same molecular formula? Give the structure and IUPAC name of that compound also. (2)
8. Why CHO group cannot be present in the middle of the carbon atom chain? (2)
9. Two carbon atoms cannot be linked to each other by more three covalent bonds. Why? (2)
10. Write three difference between ethanol and ethanoic acid on the basis of chemical properties? (3)
11. Given a chemical test to distinguish between (3)  
(i) Ethane and ethene (ii) Ethanol and ethanoic acid (iii) Soaps and Detergents
12. Name the functional groups present in the following compounds? (3)  
(i)  $CH_3 - CH_2 - CH_2 - OH$  (ii)  $CH_3 - CH_2 - CH_2 - COOH$  (iii)  $CH_3 - CH_2 - CHO$
13. What are esters? Write an equation to show the formation of ester? (3)
14. (a) Why does carbon form largest number of compounds? (5)  
(b) Why are some of these called saturated and other unsaturated compounds?  
(c) Which of these two is more reactive?  
(d) Write the names of the following compounds  
(i)  $CH_2 - CH_2 - Br$  (ii)  $CH_3 - CH = CH - CH - C \equiv C - H$