

JSUNIL TUTORIAL

Class 10th

Carbon and its compounds

CBSE TEST PAPER

I. One marks questions

1. Draw the electron dot structure of O_2 and N_2 molecules.
2. A test – tube contains a brown coloured liquid in it. The colour of the liquid remains unchanged when methane is passed through it but disappears when ethane is passed. Suggest the name of the compound giving brown colour to the liquid.
3. Draw the structure of chloro butane.
4. What happens when ethanol is oxidized with alkaline potassium permanganate (or acidified potassium dichromate)? Write the equation of the reaction involved.
5. Name the product other than water formed on burning of ethanol in air.

II. Very short type question

2marks

5. What would be the electron dot structure of carbon dioxide which has the formula CO_2 ?
6. An organic compound 'A' is a constituent of antifreeze. The compound on heating with oxygen forms another compound 'B' which has a molecular formula $C_2H_4O_2$. Identify the compound 'A' and 'B'. Write the chemical equation of the reaction to form the compound 'B'.
7. Give two tests to demonstrate that acetic acid (CH_3COOH) is acidic in nature.
8. What is detergent? Explain giving reasons: Detergents made up of molecules, in which branching is minimum, are prepared these days.
9. What type of compounds show additional reactions? Explain with an example.

III. Short type questions. 5 marks.(ANY THREE)

10. Draw the structural formulae of all the possible isomers of pentane
11. Explain the cleaning action of soaps.
12. (i) Describe with chemical equation how Ethanoic acid may be obtained from (a) ethanol and (b) methanol.
13. (i) Why is ethanol used as a fuel?
(ii) Why is the conversion of ethanol into Ethanoic acid an oxidation reaction?
(iii) Why, methanol is much more dangerous to drink than ethanol?