CBSE TEST PAPER-03

CLASS - X (Carbon and its compound)

1. The odour of acetic acid resembles that of (1)
   (a) Rose
   (b) Burning Plastic
   (c) Vinegar
   (d) Kerosene

2. Diamond is not a good conductor of electricity because (1)
   (a) is very hard
   (b) Its structure is very compact
   (c) It is not soluble in water
   (d) It has no free electrons to conduct electric current.

3. Alcohols can be produced by the hydration of (1)
   (a) Alkenes
   (b) alkynes
   (c) alkenes
   (d) acids

4. The IUPAC name of CH_3CHO is (1)
   (a) Acetaldehyde
   (b) formaldehyde
   (c) methyl formaldehyde
   (d) ethanol

5. IUPAC name of first member of homologous series of ketones is (1)
   (a) Ethanone
   (b) methanone
   (c) Propanone
   (d) Butanone

6. What are the properties of carbon which lead to the huge number of carbon compounds we see around us? (2)

7. Name the following compound (2)

(a) CH_3-CH_2-Br

(b) $CH_3 - CH_2 - CH_2 - C \equiv CH$

8. Why is conversion of ethanol into ethanoic acid an oxidation reaction? (2)

9. A mixture of ethyne and oxygen is used for welding. Can you justify why a mixture of ethyne and air is not-used? (2)

10. What is a homologous series? State any two characteristics of homologous series? (3)

11. Give the structural formulas for (3)

(i) Methyl Ethanote

(ii) Ethyl ethanoate

Write two uses of Ester?

12. What are enzymes? Name the enzymes required for the fermentation of sugar cane to ethanol? (3)

13. The formula of an ester is $C_3H_7COOC_2H_5$ write the formulae of the acid and alcohol from which the ester is prepared. (3)

14. An organic compound A is widely used as a preservative in pickles and has a molecular formula $C_2H_4O_2$. This compound reacts with ethanol to form a sweet smelling compound B. (5)

(a) Identify the compound A.

(b) Write the chemical equation for its reaction with ethanol to form compound B.

(c) How can we get compound A back from B.

(d) Name the process and write the corresponding chemical equation.

(e) Which gas is produced when compound A reacts with washing soda? Write the chemical equation?