

Guess Paper – 2012
Class – X Subject - Science
Carbon and its compounds

Answer the following questions:

Section A – one mark each

1. Alcohols can be produced by the hydration of.
2. Write the name of C_{60} molecule.
3. The property of carbon to form a long chain in compounds is called
4. Which of the following compounds have triple bond
 C_2H_4 , C_3H_4 and C_3H_6
5. The general formula C_nH_{2n} for cyclo alkanes is the same as that of
6. Write structure formula of 2- methyl propane.
7. The IUPAC name of acetylene is
8. Name the functional groups present in the following compounds
 CH_3COOH , $CH_3COCH_2CH_3$
9. -----and -----are molecular formula of ethanol and propane.
10. The IUPAC name of CH_3CHO is -----

Section B – 2 marks each

11. Write the chemical equation of the reaction which takes place during burning of ethanol in air.
12. The molecular formula present in ester $C_3H_7COOC_2H_5$. Write the molecular formula of the alcohol and the acid from which it might be prepared.
13. A mixture of ethyne and oxygen is used for welding. Can you justify why a mixture of ethyne and air is not-used?
14. Write the reaction which is used as a test for ethanol and dehydration of ethanol.
15. What is reaction with ethanoic acid with ethanol?

Section C – 3 marks each

16. Write any three physical and chemical properties of ethanoic acid.
17. Write any three tests of carboxylic acids.
18. How many structural isomers are possible for pentane? Draw the structural formulae of all the possible isomers of pentane.
19. What are enzymes? Name the enzymes required for the fermentation of sugar cane to ethanol?
20. 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.