

ASSIGNMENT X CARBON AND ITS COMPOUNDS

- 1 WHY does carbon form covalent bond?
- 2 Define covalent bond and its types with examples.
- 3 Give 4 reasons for large numbers of compounds of carbon.
- 4 Define functional group , homologous series, isomerism, & catenation.
- 5 Draw the isomers of butane & pentane.
- 6 Identify the functional group, give IUPAC name , & draw structure of the given compounds. $\text{CH}_3\text{CH}_2\text{OH}$, HCHO , CH_3COOH , $\text{CH}_3\text{CH}_2\text{Br}$, C_6H_{12} , C_5H_{12} , CH_3COCH_3 .
- 7 Name the fourth member of series having general formula C_nH_{2n}
- 8 Write 3 characteristics of homologous series.
- 9 Differentiate between the allotropes of carbon.
- 10 (a) Calculate the difference in the molecular formula for (i) CH_3OH & $\text{C}_2\text{H}_5\text{OH}$ (ii) $\text{C}_2\text{H}_5\text{OH}$ & $\text{C}_3\text{H}_7\text{OH}$ (iii) $\text{C}_3\text{H}_7\text{OH}$ & $\text{C}_4\text{H}_9\text{OH}$
(b) Is there any similarities between these series.
(c) Arrange in increasing order with name.