



Std. - XI

Unit Test

Time - 1 hrs

Sub- Chemistry - II

(Ch - Alkanes)

Max Marks - 20

**Q.1 Select the right option from given below - (04)**

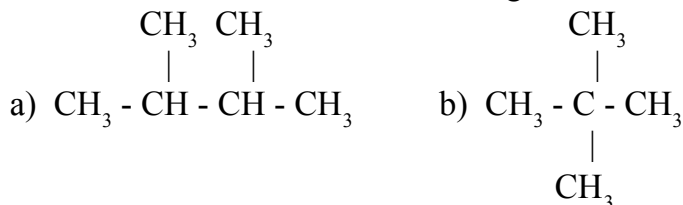
- The general formula of alkanes is
  - $C_nH_{2n}$
  - $C_nH_{2n-2}$
  - $C_nH_{2n+2}$
  - $C_{2n}H_n$
- Alkanes are defined as
  - Saturated hydrocarbons
  - Saturated aliphatic hydrocarbons.
  - Unsaturated aliphatic hydrocarbons.
  - Cyclic hydrocarbons.
- Which of the following compound is used as starting material for preparation of ethane by Wurtz reaction ?
  - $CH_3Cl$
  - $C_2H_5Cl$
  - $C_3H_7Cl$
  - both (a) and (b)
- Which one of the following alkane is NOT prepared by Wurtz reaction ?
  - ethane
  - methane
  - butane
  - hexane.

**Q 2. A) Attempt any FOUR of the following : (08)**

- What are alkanes ? How are they classified.
- Explain Wurtz reaction.
- What is pyrolysis ? Give the products of pyrolysis of propane.
- What are the physical properties of alkanes.
- Define isomerism ? Write isomers of Butane.

**Q.2 B) Answer of the following. (04)**

- i) Write IUPAC names of the following.



- ii) Write structure of the following compounds.  
a) n-butane    b) iso-pentane

**Q.3 A) Answer the following ( Any two ) (04)**

- What is the action of following on methane.
  - $Cl_2$  in u.v. light
  - $HNO_3$  acid
- How will you Convert the Ethyl bromide into ethane.
- How will you Convert the Ethylene into ethane.
- How will you Convert the Methyl chloride into ethane.