



## CHEMISTRY

CH:13 HYDROCARBONS

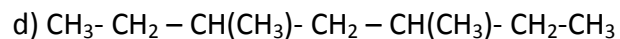
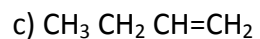
Class: XI

### ANSWER THE FOLLOWING

1. Explain the following reactions with examples
  - i) cracking
  - ii) Wurtz reaction
  - iii) Kolbe's electrolytical method.
  - iv) Decarboxylation
  - v) Isomerisation
  - vi) Substitution reactions
  - vii) Friedel-Craft's reaction.
2. Describe a method to distinguish between the following pairs of compounds.
  - i) ethane or ethylene from acetylene.
  - ii) 1-butyne and 2-butyne.
3. Give the different conformations of ethane with their Sawhorse representation and Newmann projection formulae.
  - i) What is beta elimination?
  - ii) What are the expected products when 2-bromo butane is dehydrogenated with alc.KOH ?
4. Will propene exhibit geometrical isomerism? Why?
5. State Markownikoff's rule. Explain it with an example.
6. Arrange the following set of compounds in order of their decreasing relative reactivity with an electrophile.
7.
  - i) Chlorobenzene, 2,4-dinitrobenzene, p-nitro chloro benzene
  - ii) Toluene, p-methyl toluene, p-methyl nitrobenzene, 1,4-dinitro benzene.
8. Write the IUPAC names of the following.
  - a)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_3$
  - b)  $\text{CH}_3\text{-CH=CH-CH=CH-CH}_3$



## INDIAN SCHOOL NIZWA - WORKSHEET



9. Give reasons for the following.

- i) Boiling point of alkanes increases with increase in molecular mass.
- ii) Boiling point of branched chain alkanes is lower than that straight chain alkanes.
- iii) Peroxide effect is not observed in addition of HCl and HI.