INDIAN SCHOOL NIZWA - WORKSHEET

CHEMISTRY

CH:12 SOME BASIC PRINCIPLES & TECHNIQUES IN ORGANIC CHEMISTRY

Name: _____ Date:_____ Class: XI Sec: ___

1. Write IUPAC names of the following.

i) CH_3-CH_2 –CH- CH_2 - CH_2CH –CH_2 –CH_3
   | |
   CH_3 CH -CH_3
   |
   CH_2CH_3

ii) CH_3- CH CH - CHO
   | |
   CH_3 CH_3

iii) CH_3 – CH= CH –CO –CH_2 - CH_3

iv) CH_3 –CH – CH – CH – C – CH_3
   | | | |
   OH CH_3 OH CH_3
   (with CH_3 attached to C)

2. Explain the following with the help of examples.
   i) nucleophile & electrophiles
   ii) homolytic and heterolytic fission
   iii) inductive effect
   iv) resonance effect
   v) electromeric effect
   vi) hyperconjugation

3. Suggest a method to purify : i) A mixture of liquid (b.p 365K) and liquid B (b.p 356K)
   ii) O-Nitrophenol and P-nitro phenol .iii) A liquid which decomposes at its boiling point
   iv) Camphor and $CaSO_4$. v) A mixture of liquid C(b.p 353K) and liquid D(b.p 413K)

4. Explain different types of isomerism with the help of examples.

5. The R_f value of A&B in a mixture determined by TLC in a solvent mixture are 0.65 and 0.42 respetively. If the mixture is separated by column chromatography using the same solvent mixture as mobile phase, which of the two components, A or B will elute first? Explain.