# 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- $CH_2$ - $CH_2$CH –$CH_2$ –$CH_3$
$CH_3$ 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 $CH_3$ $CH_3$

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.