

Org

U-1

- 1) Rule for Nomenclature for
 - i) O, N, S containing compound
 - ii) Fused ring system
 - iii) ali, bi, tri cyclic comp.

- 2) Carbocation prep, prop, uses, structure
Carbanion "
Free radical "

- 3) Inductive effect & Resonance effect
- 4) Hyperconjugation and steric effect
(Baker nathan effect)

- 5) Hydrogen bonding

- 6) Carbenes and Nitrenes (prep, prop, Str, uses)

U-2

- 1) Elements of Symmetry

- 2) Projection $\rightarrow$ Newman, Sawhorse, Fishers.

- 3) R-S nomenclature of chiral comp (cyclic)

- 4) Asymmetric synthesis

- 5) Optical purity

- 6) Determination of enantiomeric excess by NMR

- 7) Prochirality

- 8) Enantiotopic & diastereotopic

- 9) Stereoselective and Stereospecific reactions

- 1) E-Z identification and Nomenclature
- 2) cis trans nomenclature (3,4,6 cyclic system)
- 3) geometrical isomers.
- 4) Winstein elie equation
- 5) with hammet principle
- 6) Saponification of ester
- 7) Esterification of an alcohol
- 8) chromic acid oxidation of cyclohexanols

- 1) Huckle's theory of aromaticity
- 2) Craig's rule
- 3) NMR (aromaticity & Non-aromaticity)
- 4) Non benzoic aromatic compound
- 5) Mobius aromaticity
- 6) Annulenes
- 7) SDmnes and fullerenes.
- 8) Baeyer villiger oxyd
- 9) Jacobsen epoxidation
- 10) Shi epoxidation
- 11) Jones reagent
- 12) Luche reduction
- 13) L & K Selectride
- 14) Stereoselectivity reduction (chiral Boranes)
- 15) Triacetoxy borohydride