

Section A :- Unit I, II

- Localized and Delocalized bonds
- Conformation (i) Cyclohexane  
(ii) n-butane
- E-Z and R-S configuration
- Conditions for geometrical isomers
- Acidic strength comparison
- Inductive, Resonance, Electromeric Effect
- Molecular Chirality
- Enantiomers and diastereomers
- Vander Waal's force and factor on which it depend
- Hyperconjugation



Section B :- Unit II, III

- Sachse - Mohr theory
- Bayer's strain theory
- Free radical
- Carboanion
- Carbocation
- Carbenes
- Bond cleavage (i) Homolytic  
(ii) Heterolytic
- Naming Res<sup>n</sup>
- Electrophile - Nucleophile
- Energy level diagrams for catalyst & uncatalyst Res<sup>n</sup>
- Isotope effect.

