

Subject:- Organic Chemistry

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July Week 1 (16th - 21st July):-

I Structure & Bonding:-

- Localized & delocalised bonds, Vanderwall's interaction, Resonance, & Resonance effect.

July Week 2 (23rd - 28th July):-

- Hyper conjugation, Inductive effect.

July Week 3 (30th July - 4th August):-

- Electromeric effect & their comparison.

August Week 4 (6th August - 11th August):-

II # Stereochemistry of organic Compounds-I

- Concept of isomerism, Types of isomerism
- Optical isomerism - Elements of symmetry, molecular chirality.

August Week 5 (13th Aug - 18th August):-

- Enantiomers, Optical Activity, properties of enantiomers
- Chiral & Achiral molecules.

August Week 6 (20th Aug to 25th Aug):-

- Diastereomers, threo & erythro Diastereomers
- Meso compounds.

August Week 7 (27th to 1st September):-

- Resolution of enantiomers Inversion.
- Retention & Racemisation.

September Week 8 (3rd Sep - 8th Sep):-

III: Stereochemistry of Organic Compounds - II

- Relative & absolute configuration, Sequence Rule for R & S nomenclature.

- Confirmation of cyclohexane.

September 10 week (17th - 22nd Sep):-

- Newmann & Sawhorse projection
- Difference between Configuration & Conformation

September 11 week (24th - 29th Sep):-

III Mechanism of Organic Reaction:-

Arrow Representation, Homolytic & Heterolytic bond breakage
Types of Reagents, Types of Organic Reactions

October 12 week (1st Oct to 6th October):-

- Energy Consideration.
- Reaction Intermediates.

October 13 week (8th Oct - 13th Oct):-

IV Alkanes & cycloalkanes

- IUPAC nomenclature
- Classification & isomerism.
- Methods of formation of alkanes.

October 14th Week (15th - 20th Oct):-

- Physical & chemical Reaction of alkanes.
- Test.

October 15th Week (22nd - 27th Oct):-

- Cycloalkanes, Photochemical cycloaddition Reaction.

October 16th Week (29th & 3rd Nov):-

- Dehalogenation of α, ω -dihalides
- Pyrolysis of Calcium salts of dicarboxylic acids

November 17th Week (5th - 17th Nov):-

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- Baeyer's strain theory & its limitations
- Theory of stainless steels

November 18th Week (19th to 24th November):-

- Discussion of last year papers.
- Revision

November 19th Week (26th Nov - 30th Nov):-

- Doubts
- Class test of whole syllabus

Signature of Associate Professor:-