### (2011 Scheme)

# (Pharmaceutical Chemistry)

## Paper II– Advanced Organic Chemistry

#### Time: 3 hrs

#### • Answer all questions

• Draw diagrams wherever necessary

#### Essays:

- 1. Explain the mechanism and stereochemistry of : 

  Aliphatic nucleophillic substitution.
- 2. Explain the mechanism of oxidation-reduction reactions of: 
   Wolf Kishner reduction
   Oppeneaur oxidation
   Catalytic hydrogenation
   Birch reduction

### Short Essays:

- 3. Explain the chemistry of electron sources of electron rich sigma bond and aromatic rings
- 4. Explain the term photochemistry. Mention Franck & condon principle and types of excitations.
- 5. Explain pka rule and pi bond stabilization
- 6. Explain the mechanism and reactivity of elimination reactions.
- 7. Explain the asymmetric synthesis of amino acids.
- 8. What are enantiomers. Mention the characterization of enantiomers by chiroptical methods.

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QP Code: 106331

# Reg No: .....

Maximum Marks: 100

(2x20 =40)

(6x10=60)