[Time: 3 Hours] [Max. Marks: 75]

Advanced Organic Chemistry -II Q.P. CODE: 5158

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)

3 X 10 = 30 Marks

- Write the methods involved in resolution of racemates briefly explain each.
- 2. Explain principle and applications of phase transfer catalysis.
- 3. Explain the side reactions in peptide synthesis.
- 4. Explain the applications in various organic reactions and heterocyclic synthesis of microwave assisted reactions.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Write a note on photo oxidation and photo addition reactions.
- 6. Write a note on polymer supported catalysts.
- 7. What are electrocyclic reactions? Explain the mechanism in Diels Alder reaction.
- 8. Principles of solid phase peptide synthesis.
- 9. Write a note on peptide bond formation.
- 10. Explain principle of liquid phase peptide synthesis.
- 11. Note on green reagents.
- 12. Explain enantiopure separation and stereo selective synthesis with examples.
- 13. Explain axis of symmetry and meso compounds.
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