[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

- What is green chemistry? Discuss the principle and applications of green chemistry. 1.
- 2. Explain strategies for solution phase peptide synthesis.
- 3. With help of correlation diagram, show that cyclisation of hexatriene to cyclohexadiene on heating proceeds by disrotatory mode.
- 4. Write about Chan, Ingold and Prelog (CIP) sequence rule.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Write the principle and advantages of continuous flow reactors.
- 6. Write a note on liquid-solid reaction and synthetic application.
- 7. Write note on solid phase peptide synthesis.
- 8. Explain in details about various solid supports and linkers.
- 9. Explain FMO method for analyzing an electrocyclic reaction by taking one example.
- Advantages and disadvantages of catalysis 10.
- 11. Write a note on regeneration of heterogenous catalysts.
- 12. Use of enzymes in organic synthesis
- ******

 ***** 13. Explain about the chiral pool and the asymmetric drug synthesis techniques.
- Discuss any three methods for resolution of racemic compounds. 14.

