M.PHARM. DEGREE EXAMS FIRST YEAR BRANCH II – PHARMACEUTICAL CHEMISTRY PAPER II – ADVANCED ORGANIC CHEMISTRY

O.P. Code: 262905

Time: 3 hours Maximum: 100 marks

I. Elaborate on : (2x20=40)

1. a) Explain in detail about the various types of pericyclic reactions and their mechanism.

- b) What do you mean rearrangement reaction? Classify them. Explain the different steps involved in it.
- 2. a) Discuss on combinatorial chemistry with special reference to its application in drug discovery.
 - b) Write a note on aliphatic nucleophilic substitution.

II. Write notes on: (10x6=60)

- 1. Mechanism of Walden inversion.
- 2. Orbital symmetry rules and its applications.
- 3. Oppenauer oxidation.
- 4. Theory of Photochemical reactions.
- 5. Mechanism and applications of Ozonolysis.
- 6. 'Cotton effect' and 'Octant rule'.
- 7. Synthesis of Phenothiazine and Purine.
- 8. Steps involved in Free radical reactions
- 9. Chemical bonding.
- 10. Techniques for preparing chiral drugs.
