

FACULTY OF PHARMACY

**M. Pharmacy (Pharm. Chemistry) II-Semester (PCI) (Main) Examination,
August 2018**

Subject : Advanced Organic Chemistry-II

Time: 3 Hrs

Max. Marks: 75

Note: Answer any five questions. All questions carry equal marks.

1. a) Discuss the basic Principles of green chemistry
b) Discuss the merits, demerits and any five applications of micro wave assisted reactions. (8+7)
2. What are pericyclic reactions? Discuss Cycloaddition and electrocyclic reactions in presence of heat and photo light with mechanism and stereochemistry.
3. a) What is homogens and heterogons catalysis? Explain advantages and disadvantages. Discuss examples of drug syntheses involving Wilkinson catalyst and Ziegler – Natta catalyst (one each)
b) Discuss the theory and applications of phase transfer catalysts (8+7)
4. Discuss different methods of asymmetric synthesis with suitable examples
5. Explain the basic principles of solid phase peptide synthesis. Write abt solid supports, linkers, protecting and de protecting grps used in solid phase peptide synthesis
6. a) Discuss any five synthetic applications of Ultra snd assisted reactions
b) Discuss sequential strategies in solution phase peptide synthesis with two case studies (5+10)
7. a) Explain Cahn, Ingold, Prelog (CIP) sequence rules with suitable examples
b) Discuss cis-trans isomerism in cyclic and dble bond containing compo unds (7+8)
8. Write a note on: (5+5+5)
 - a) Photo-oxidation reactions
 - b) Sigmatropic reactions
 - c) Bio catalysts
