

FACULTY OF PHARMACY

**M. Pharmacy (Pharmaceutical Chemistry) II-Semester (PCI) (Main) Examination,
August 2019**

Subject: Advanced Organic Chemistry – II

Time: 3 Hrs

Max. Marks: 75

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

- 1 (a) Explain the principle involved in the continuous flow reactors. Discuss their industrial Applications.
(b) Write a note on solvents used in microwave assisted synthesis. (8+7)
- 2 (a) Discuss the sequential strategies for solution phase peptide synthesis.
(b) Write a note on side reactions in peptide synthesis. (8+7)
- 3 (a) What are pericyclic reactions? Discuss any two types of pericyclic reactions with mechanism.
(b) Discuss the basic principles of photo chemical reactions. (10+5)
- 4 (a) What is heterogeneous catalysis? Write the advantages and disadvantages
(b) Discuss in detail about the homogeneous catalysis used in drug synthesis with example. (8+7)
- 5 (a) Write a note on chiral auxiliaries and catalytic asymmetric synthesis. (9+6)
(b) What are racemates? Explain resolution of racemates and its applications.
- 6 Write a short note on : (3+6+6)
(a) Specific rotation
(b) Protecting agents in peptide synthesis
(c) Microwave assisted synthesis
- 7 (a) Discuss about protection, solid supports, linker activation procedures in solid phase peptide synthesis.
(b) HF cleavage protocols. (10+5)
- 8 Write a short note on:
(a) Applications of Microwave technology in organic reactions.
(b) Phase transfer catalysis (8+7)
