

Roll No.

Total No. of Pages : 01

Total No. of Questions : 06

M.Pharma. (Pharmaceutical Chemistry) (Sem.-2)

ADVANCED ORGANIC CHEMISTRY-II

Subject Code : MPC-202T

M.Code : 74956

Date of Examination : 06-07-22

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. a) Discuss the effects of solvents in microwave assisted synthesis. 5
b) Describe various types of sonochemical reactions. 5
c) Citing one example, discuss the role of microwave technology in synthesis of heterocyclic compound. 5
2. a) Give outline for Fmoc protocol for solid phase peptide synthesis. Give brief account of coupling methods in Fmoc SPPS. 7.5
b) What is sequential strategy for solution phase peptide synthesis? 7.5
3. a) Explain photo-oxidation by citing one suitable example. 5
b) Describe Woodward-Hoffmann rules for cycloadditions. 5
c) Describe [1,3] and [1,5] sigmatropic reactions. 5
4. a) Briefly describe the preparation of heterogeneous catalysts. 5
b) Describe role of Ziegler-Natta catalyst in synthetic organic chemistry. 5
c) What are the advantages of using immobilized enzymes as catalyst? 5
5. a) Give the various methods used to resolve raceme mixture. Briefly explain biochemical method for the same. 5
b) Explain the cis and trans isomerism in cyclic compounds. 5
c) Describe stereoselective synthesis by giving one example. 5
6. a) Write short notes on:
b) Theory of Phase transfer catalysis. 7.5
c) Coupling reaction in peptide synthesis. 7.5

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.