

M. PHARMACY
1st YEAR; 2nd SEMESTER EXAM, 2025
SUB: ADVANCED ORGANIC CHEMISTRY -II
SUB CODE: MPC202T

Full Marks-75

Time- 3 hrs

Answer any five questions taking at least one from each Group.

Group A

1. a) Discuss the coupling reagents used in peptide synthesis. [10]
b) What are the principles of solid-phase peptide synthesis? [5]

2. a) Discuss the methodologies of solid phase peptide synthesis with their strategies. [15]

Group-B

1. Write about Chiral auxiliaries and catalytic asymmetric synthesis. 15
2. a) Classify symmetry with suitable example. 6+3+4+2=15
b) What do you mean by pseudo-asymmetry center? Explain with suitable example.
c) Write in details about CIP rules.
d) Explain E notation with suitable examples.

Group-C

3. Discuss the 12 principles of green chemistry. 15
4. Discuss the principles of microwave activation. Write an account on microwave assisted organic reactions and hetero-cycles reaction. Discuss the advantages and disadvantages of microwave-assisted reactions. 5 + 6 + 4 = 15
5. Discuss the principle and mechanisms of sonochemical reactions. Discuss three classes of sonochemical reactions. Write in detail about the applications of sonochemical reactions with proper examples. 5 + 3 + 7 = 15