

**Second Semester M. Pharm Degree Supplementary Examinations
August 2021**

M.Pharm (Pharmaceutical Chemistry)

Paper II - Advanced Organic Chemistry-II (MPC 202T)

Time: 3 Hours

Total Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays

(3x10=30)

1. Explain side reactions in peptide synthesis.
2. Write the theory involved in phase transfer catalysis and applications.
3. Discuss the mechanism, cycloaddition and electrocyclic reaction with examples in pericyclic reactions.

Short Notes

(9x5=45)

4. Explain resolution of racemic mixtures.
5. Using suitable examples explain transition metal and organo-catalysis in organic synthesis.
6. Explain E and Z notation of geometric isomers.
7. Explain site specific chemical modifications of peptides.
8. List out the merits and demerits of ultra sound synthesis.
9. Discuss hydrogenation and hydroformylation.
10. Outline the basic principles of green chemistry.
11. Explain photo fragmentation reaction with example.
12. Explain working of continuous flow reactors.
