

QP CODE: 113331

Reg. No:.....

**First Semester M.Pharm Degree Regular/Supplementary Examinations  
April 2023**

**M.Pharm (Pharmaceutical Chemistry)**

**Paper III – Advanced Medicinal Chemistry (MPC 103T)**

**(Common for 2017 and 2019 Scheme)**

**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. What are the various stages of drug discovery. Add a note on lead discovery
2. Describe the principles of enzyme inhibitors and explain the rational design of covalently binding enzyme inhibitors
3. Explain the design of peptidomimetics by manipulation of amino acids.

**Short Notes**

**(9x5=45)**

4. Discuss the role of stereochemistry in drug action
5. Design of prodrug for sustained drug action
6. What are the various types of receptors
7. Discuss the strategies to combat drug resistance in antibiotics
8. Describe the mechanism of action of H<sub>1</sub> and H<sub>2</sub> receptor antagonist
9. Explain the analog design approach for changes in ring size
10. Discuss the chemistry of thromboxanes.
11. Give the synthesis and mechanism of action of any one antineoplastic agents
12. Describe the SAR for the  $\beta$ -adrenergic blocking agents.

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