

QP CODE: 113331

Reg. No:.....

First Semester M.Pharm Degree Supplementary Examinations July 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. Explain the theories of drug receptor interaction. Explain Agonist vs Antagonist
2. Explain the rational design of non-covalently binding enzyme inhibitors with 2 case studies.
3. Explain the design of peptidomimetics by modification of the peptide backbone.

Short Notes

(9x5=45)

4. Discuss the role of optical isomerism in selective and specific therapeutic agents.
5. Design of prodrug for drug solubility.
6. Explain artificial enzymes with examples.
7. Discuss the strategies to combat the drug resistance in antibiotics therapy.
8. Classify antineoplastic drugs. Discuss synthesis of any one antineoplastic drug.
9. Define analog design. Explain rigid analogs with examples.
10. Discuss the chemistry of leukotrienes.
11. Classify antihypertensives. Write the synthesis and mechanism of action of any one antihypertensive drug.
12. Explain target validation steps in drug discovery.
