

QP CODE: 113331

Reg. No:.....

**First Semester M.Pharm Degree Regular/Supplementary Examinations  
November 2021  
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. Discuss the various stages involved in identification of a lead molecule. Explain the methods of lead optimization and its objectives.
2. Discuss the modification of various functional groups in the design of Prodrugs.
3. What are Psycho active drugs. Classify with examples, Write the synthesis and mechanism of action of Promethazine.

**Short Notes**

**(9x5=45)**

4. Add a note on Antiviral agents.
5. Explain the effect of Enantio selectivity in drug absorption and metabolism.
6. Explain the design of Peptidomimetics by manipulation of the amino acids.
7. Outline the importance of high throughput screening with application.
8. Classify anti-convulsant agents with examples. Write the Mechanism of action and Synthesis of Phenobarbitone.
9. Write a note on design of stereoisomer and geometric isomer with respect to analog design of drugs.
10. Explain the Chemistry of Leukotrienes.
11. Explain the chemistry and Mechanism of action of Cholinergic agents.
12. Explain the SAR of H<sub>1</sub> receptor antagonist and write the synthesis of Ranitidine.

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