QP CODE: 113331 **Reg. No:……**

First Semester M.Pharm Degree Regular/Supplementary Examinations April 2025

M.Pharm (Pharmaceutical Chemistry)

Paper III – Advanced Medicinal Chemistry (MPC 103T)

(Common for 2019 and 2024 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 elaborately the types of receptors, forces involved and the theories of drug receptor interactions.

2. Discuss in detail about various stereo chemical aspects involved in drug action.

3. Classify antineoplastic agents with examples. Describe the SAR and mechanism of action of antineoplastic agents. Outline the synthesis of any two alkylating agents.

Short Notes **(9x5=45)**

4. Write a note on the utilization of changes in ring size and alteration of chain branching approach in analog design.

5. Classify H_1 receptor antagonists based on chemical structure. Write down the structure activity relationship of H_1 receptor antagonists.

6. Briefly explain about the aspect of enzyme kinetics.

7. Explain the techniques used in peptidomimetic design.

8. Briefly explain the chemistry of prostaglandins.

9. Discuss briefly about the mechanism of action, structure and synthesis of any one viral DNA polymerase inhibitors.

10. Briefly explain the identification, validation and diversity of drug targets.

11. Write a note on cholinergic agents.

12. Brief out on the types and practical applications of prodrugs.

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