Seat No.: _____ **Enrolment No.: _____**

PARUL UNIVERSITY

FACULTY OF PHARMACY

M.Pharm. Winter 2022-23 Examination

Semester: 1 **Date: 17/03/2023**
Subject Code: MPC103T **Time: 10:00 am to 01:00 pm**
Subject Name: Advanced Medicinal Chemistry **Total Marks: 75**

Instructions:
1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (15 marks each) **(30)**

1. a) Discuss the theories involved in drug receptor interaction.
   b) Write a brief note on the various bioisosteric replacement strategies applied for drug discovery.
2. a) Classify Antineoplastic agents with suitable examples.
   b) Discuss the importance of enantio selectivity in drug ADME.
3. a) Explain principles of enzyme inhibitors.
   b) Write a note on strategies employed to design peptidomimetics.

Q.2 Short Essay type Questions. (Any 5 out of 6) (5 marks each) **(25)**

1. Define Lead. Explain methods of lead discovery.
2. Describe with example, the design of prodrug to improve patient acceptability & site Specific drug delivery.
3. Discuss SAR of ACE Inhibitors.
4. Explain rational design of non-covalently and covalently binding enzyme inhibitors.
5. Discuss the chemistry of leukotrienes.
6. Explain strategies to combat drug resistance in antibiotics therapy.

Q.3 Answer in short. (2 marks each) **(20)**

1. Describe carrier linked prodrugs.
2. Write in brief about artificial enzymes.
3. What do you mean by Analog Design?
4. Enumerate stages of drug discovery.
5. Differentiate: Adrenergic agent Vs. Cholinergic agent
6. Outline the synthesis of any one H1 receptor antagonist.
7. Discuss role of enzyme inhibitor in medicine.
8. What is enzyme kinetics?
9. Explain the term peptidomimetics with example.
10. What are Prostaglandins?