

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**  
**M.Pharm. Winter 2017 - 18 Examination**

**Semester: 1**  
**Subject Code: MPC103T**  
**Subject Name: Advanced Medicinal Chemistry**

**Date: 12/01/2018**  
**Time: 10:00 am to 1:00 pm**  
**Total Marks: 75**

---

**Instructions:**

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

**Q.1 Essay Type Questions. (any 2 out of 3) (15 Marks Each) (30)**

1. Explain how enzyme inhibitors are used against microorganisms and the body's own enzymes to produce effective therapeutic agents? Explain in detail with examples.
2. What do you mean by Analog Design? Explain in detail Bioisoteric Replacements and Rigid Analogs.
3. Discuss the importance of enantio selectivity in drug absorption, metabolism, distribution and elimination.

**Q.2 Short Essay Type Questions. (any 5 out of 6) (5 Marks Each) (25)**

1. SAR of ACE Inhibitors
2. Define peptidomimetics and design of peptidomimetics by modification of the amino acid.
3. Discuss about drug receptor interactions in detail.
4. Give detailed account in new generation of alkylating agents as anti-neoplastic drugs.
5. Explain role of chirality in selective and specific therapeutic agents.
6. What are Prostaglandins? How are they useful in the design of new drugs?

**Q.3 Short Answers. (2 Marks Each) (20)**

1. Discuss mode of action of antiviral agent.
2. Outline synthesis of Nifedipine.
3. Define bioprecursor prodrug in brief.
4. Give structure and use of dopamine.
5. Give structure and use of Prazosin.
6. Give structure and use of Hydralazine.
7. Describe in brief lead molecule in drug design.
8. Describe leukotrienes in brief.
9. Describe enzyme inhibitor in brief.
10. Define ring position isomer.