MANIPAL COLLEGE
OF PHARMACEUTICAL SCIENCES
MANIPAL
A constituent institution of Manipal University

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY, MCOPS, MANIPAL
Specialisation: M. Pharm – Pharmaceutical Chemistry
First Semester- End-Semester (Make up) Examination-2023

PCH-MPC103T Advanced ~~Pharmaceutical~~ Medicinal Chemistry

Date: 20-01-2023 **Duration:** - 10:00 am to 01:00 pm **Max. Marks:** 75

Instructions: Answer ALL questions.

Answer the following. **5 Q × 10 marks = 50 marks**		
Question	**Marks**	
1. Explain various stages of clinical stages of drug discovery. Explain the need for binding groups with correct size and their proper positioning in design of receptor agonists.	10	
2. Explain the various types of forces Involved in forming the Enzyme-Inhibitor Complex. Classify receptors and explain the function of any one.	10	
3. What are Twin drugs and explain how this approach is used in designing analogues with appropriate example.	10	
4. What is Bioisoterism? How can it be used in designing analogues? Explain with an example.	10	
5A. Classify and explain prodrugs with examples. 5B. Explain ADEPT in terms of its principle and applications.	5+5	
Answer the following with specific answers 5 Q × 5 marks = 25 marks		
Question	**Marks**	
6A. What is Fragment based drug design? Explain methods involved in fragment screening.	5	
6B. Describe any one type of parallel synthesis by combi-chem technique.	5	
6C. What is HTS? Explain the detail methodology of carrying out HTS.	5	
6D. Write a note on the effect of stereo chemistry on biological activity.	5	
6E. What are the disadvantages of Native peptides? Define peptide-mimetic drug design. Enlist various strategies used in designing peptide-mimetic.	5	

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