

Question Paper

Exam Date & Time: 01-Dec-2017 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

**MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES
END SEMESTER THEORY EXAMINATIONS - NOVEMBER 2017**

PROGRAM : MPHARM SEMESTER I

DATE : 01-12-2017

TIME : 2:00PM - 5:00PM

Advanced Medicinal Chemistry [PCH-MPC103T]

Marks: 50

Duration: 180 mins.

Answer the following (5 marks x 8 = 40 marks)

- 1) Explain the various theories proposed for drug receptor interactions. (5)
- 2) What are important properties that an ideal enzyme inhibitor should possess? (5)
- 3) List out the strategies necessary for a LEAD modification. Explain any three in detail. (5)
- 4) Enumerate the applications of prodrugs. (5)
- 5) Explain alteration of interatomic distance and bioisosteric replacement as tools in analogue design (5)
- 6) Discuss the solid phase technique in combinatorial synthesis (5)
- 7) What are peptidomimetics? Explain the incorporation of conformationally rigid analogues in peptidomimetic design (5)
- 8) How is chirality important in drug? Explain how geometrical isomer effects pharmacokinetics and pharmacodynamics properties of drugs (5)

Answer the following with specific answers (2 marks x 5 = 10 marks)

- 9) Justify that Penicillin is a suicide inhibitor. (2)

A)

- B) What is Michaelis-Menton equation? Mention its significance. (2)
- C) Give an example of a rigid analogue in analogue design (2)
- D) Give an example of Peptidomimetic drug design by peptide bond isosteres (2)
- E) What are the applications of HTS? (2)

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