

Exam Date & Time: 05-Dec-2018 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

Specialization: Pharmaceutical Chemistry

Date: 05-12-2018

Advanced Medicinal Chemistry [PCH-MPC103T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

Answer the following (10 marks x 5 = 50 marks)

- 1) Explain the various strategies for finding/ identifying a Lead molecule (10)
- 2) Explain homology by monoalkylation and homology in cyclic compounds as tools in analogue design (10)
- 3) A. Discuss the different types of receptors with example. (5)
B. Explain the categories of the enzyme inhibitors with examples. (5) (10)
- 4) A. What are prodrugs? Give examples. Explain the different types of prodrugs with examples.(5)
B. What is Michaelis-Menton equation? Mention its significance. List out the advantages of prodrugs. (5) (10)
- 5) A. Write about deconvolution techniques used in combinatorial chemistry.(5)
B. Write short notes on cell based assays and biochemical assays.(5) (10)

SECTION - B

Answer all the questions.

Answer the following (5 marks x 5 = 25 marks)

- 6) What is the goal of fragment based drug design? Explain the process of FBDD (5)
- 7) Outline the methods used in high throughput screening (5)
- 8) Outline Merrifield's method of peptide synthesis. (5)
- 9) Classify stereoisomers. Explain with examples ,where the stereoisomers exhibit independent therapeutic activity, one isomer is inactive, distomer having harmful effects and eutomer, distomer have opposite activity. (5)
- 10) Write a note on analogues by Vinology in analogue design (5)