

Question Paper

Exam Date & Time: 27-Nov-2023 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

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) a) List out the forces involved in non-covalent interactions in ES complex. (10)
4 marks
b) Explain hydrogen bonding and Van der Waals forces. 6 marks
- 2) Differentiate solution phase and solid phase peptide synthesis. Write a note on the importance of protection and deprotection in peptide synthesis with examples. (5 + 5) marks (10)
- 3) What are the applications of prodrugs? (10)
- 4) How the QSAR and SAR plays an important role in analogue designing? (10)
- 5) Write a note on G-protein-coupled receptors and Ligand gated receptors. (10)

SECTION - B

Answer all the questions.

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

- 6) Why lead modification is important? (5)
- 7) What are the stages of drug discovery? (5)
- 8) Give the importance of stereochemistry in modern pharmaceutical research and development. Mention few examples. (5)
- 9) What are the categories of drug analogues? (5)
- 10) What is the difference between peptidomimetics and peptides as drugs? Explain the concept of "bioisosteres" in peptidomimetic design. (5)

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