

Question Paper

Exam Date & Time: 06-May-2019 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

MPharm - Pharmacology

MPharm Semester II - End-Semester Examination May 2019

Date : 06/05/2019

Principles of Drug Discovery [PHA-MPL203T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Discuss the methods of traditional drug design with their advantages and disadvantages over the modern methods. (10)
- 2) With the help of examples describe the target identification and validation process in drug discovery (10)
- 3) With examples explain the applications of X-ray crystallography and NMR spectroscopy in drug discovery (10)
- 4) Discuss the advantages and disadvantages of combinatorial chemistry and high throughput screening (10)
- 5) Discuss structure-based and ligand-based drug design with examples (10)

SECTION - B

Answer all the questions.

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

- 6) How the protein structure can be predicted using computers? (5)
- 7) What are the basic concepts of bioinformatics? (5)
- 8) Which steps are involved in de novo drug design. What are the primary and secondary target constraints? (5)
- 9) What are the strategies in the development of a pro-drug? (5)
- 10) What are the advantages of QSAR in drug design. (5)

-----End-----