Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

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

Principles of Drug Discovery [PHA-MPL203T -S1]

Marks: 75   **Duration: 180 mins.**

SECTION - A

Answer all the questions.

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

1)	With the help of a flow chart explain the steps involved in the docking studies.	(10)
2)	Explain the target identification process using an example.	(10)
3)	Compare the traditional and rational drug design methods with suitable examples.	(10)
4)	Discuss the protein structure. With examples, describe threading and homology modelling of protein structure prediction	(10)
5)	Describe 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)	Explain the applications of transgenic animals in target validation.	(5)
7)	Discuss the term drug-likeness with a suitable example.	(5)
8)	What is pharmacophore? Discuss the drug design based on pharmacophore modelling.	(5)
9)	What are physico-chemical properties? Explain the role of hydrophobicity in drug design process.	(5)
10)	Discuss the concept of bioinformatics in drug discovery.	(5)

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