Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES
END SEMESTER THEORY EXAMINATIONS- MAY 2018
PROGRAM: MPHARM SEMESTER 2 (PHARMACOLOGY)
DATE: 07/05/2018
TIME: 2:00 PM - 5:00 PM

Principles of Drug Discovery [PHA-MPL203T]

Marks: 50   **Duration: 180 mins.**

a

Answer all the questions.

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

1) Discuss the target identification process with an example (5)

2) Explain the genomic methods for drug target discovery (5)

3) Discuss the use of X-ray diffraction and NMR in drug discovery (5)

4) Describe High-throughput screening in drug discovery with example (5)

5) Explain the steps involved in structure based drug design. List their disadvantages. (5)

6) Explain the methods for traditional drug design. List their disadvantages. (5)

7) Describe carrier linked and bio precursor pro-drug design (5)

8) Explain the QSAR based drug design with steps involved and its advantages. (5)

b

Answer all the questions.

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

9)
A) What are the primary and secondary constraints in De Novo Drug Design? (2)

B) Define pharmacophore. Mention the ways to develop pharmacophore. (2)

C) Explain the meaning of 'Hit' in drug discovery (2)

D) Explain with example how pro-drug approach improves lipophilicity and duration of action of a drug (2)

E) How do SiRNA modulates gene expression? (2)

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