647510 **MSC4ascE0112** **Seat No :_____**

M.Sc. Semester - 4 (*CBCS*) Examination
August/September -2020 [OLD COURSE]
ADVANCED MEDICINAL CHEMISTRY (ELECTIVE - 1)

Time: 2:00 Hours **Marks: 56**

Instructions:

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any four of the following questions.

Q.1 Answer any seven of the following ten questions: (14)

(1) What is Craig's Plot?
(2) Why Lead Optimization is required?
(3) Enlist the mechanism of drug absorption.
(4) Define the terms: MIC and ED_{50}
(5) What is hard drug and soft drug?
(6) Define the term combinatorial library.
(7) What is Pseudo polymorphism?
(8) Define the term IPR.
(9) Explain Chiral drug with suitable example.
(10) Enlist the linker used in combinatorial chemistry.

Q.2 Answer any two of the following three questions. (14)

(1) What is trademarks? Differentiate trade mark and trade secretes?
(2) Draw the flow chart and stepwise diagram of drug discovery processes.
(3) How to increase potency of the lead compound by functional group modification.

Q.3 Answer the following questions: (14)

(1) Discuss Lipophilic parameters used in QSAR studies.
(2) Explain passive diffusion in drug absorption.
(3) Discuss the electronic effects in QSAR studies.

OR

Q.3 Answer the following questions: (14)

(1) Write a note on polymorphism and amorphism.
(2) What types of invention can be patented?
(3) Explain in detail: Ion-channel linked receptors.

Q.4 Answer any two of the following three questions. (14)

(1) Discuss Phase-I reactions in biotransformation process.
(2) Give any one method for the synthesis of Oseltamarir phosphate.
(3) Write a note on Furka's mix and spit method.

Q.5 Answer any two out of the following four questions. (14)

(1) Discuss full agonist, inverse agonist, partial agonist, antagonist with diagram.
(2) Write the synthesis of S-Ceertizine Di-hydrochloride
(3) Explain Tea-Bag method to prepare combinatiorial library with suitable example.
(4) Classify the Pro-drugs with examples.

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