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

M.Sc. Semester - 4 (CBCS) Examination
March/April- 2019
ADVANCED MEDICINAL CHEMISTRY
(ELECTIVE - 1)

Time: 2:30 Hours **Marks: 70**

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

Que-1 Answer the followings: (Any Seven) (14)

1. Define the term: (1) SAR (2) QSAR
2. Why water and n.octanol are accepted system for the determination of partition coefficient?
3. Explain Drug Absorption showing suitable graph.
4. Explain the role of side effect in drug discovery process.
5. What is Trademark? Explain with suitable example.
6. Enlist the analytical methods for the characterization of combinatiorial libraries.
7. Define the terms: (1) MEL (2) EC_{50} (3) MEC (4) MIC
8. Enlist the electronic descriptors used in QSAR with their symbol.
9. Explain "Ficks Law of Diffusion".
10. Explain 'Geographical Indication' with suitable example.

Que-2 Answer the followings: (Any two) (14)

1. Discuss rigidity and flexibility in drug design.
2. Discuss Phase – II reaction with suitable example.
3. Discuss free Wilson model in QSAR and also dicuss its advantages and limitations.

Que-3 Answer the following questions. (14)

1. Describe intellectual property rights, it's need and promotion. (05)
2. Define the term, 'Combnatorial chemistry' and depicted it's aim. (05)
3. Give a brief account on Hydrogen bond donor and acceptor. (04)

OR

Que-3 Answer the following questions.

1. Explain the dose response curve and it's significance. (07)
2. Explain DNA based encoding for the characterization of combinatorial library. (07)

Que-4(A) Answer the followings (Any two) (10)

1. Write UBC Synthesis of cetrizine dihydrochloride.
2. Describe, Active site identification in Drug-Design.
3. Explain the chemical pathway of drug biotransformation.

Que-4(B) Answer the followings: (Any one) (04)

1. Write a note on copyright
2. Explain alcohol as a linkers with suitable example.

Que-5 Answer the followings. (Any two) (14)

1. Explain Gileads first process route to synthesize oseltamivir phosphate.
2. Give the synthesis of Enantiourerically pure clopidogrel.
3. Write a note on hydrolytic, oxidative and reductive reactions in drug metabolism.
4. What is Drug Design? Explain the fundamental types of Drug Design.

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