Roll No. | | | | | | | | | | | | | Total No. of Pages : 1

Total No. of Questions : 06

M.Pharma(Pharmaceutical Chemistry) (2017 & Onwards) (Sem.–1)

ADVANCED MEDICINAL CHEMISTRY

Subject Code : MPC-103T

Paper ID : [74665]

Time : 3 Hrs. Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE questions out of SIX questions.**
2. **Each question carries FIFTEEN marks.**

1. a. Give outline for various stages of drug discovery. Comment on its time and cost constrains. (7.5)

   b. Discuss the chemical aspect of drug receptor interactions. (7.5)

2. a. Explain the concept of bioprecursors by citing example of oxidoreductase based metabolic activation. (7.5)

   b. By citing example of morphine, explain the analog designing by fragmentation of lead molecules. (7.5)

3. a. Describe different targets of currently marketed antiviral drugs. (5)

   b. Discuss the SAR of nitrogen mustard for cytotoxic effects. (5)

   c. Describe synthesis of any one selective COX-2 inhibitors. (5)

4. By citing suitable example, describe various types of enzyme inhibitors used as drugs. Discuss the rational designing of non-covalent enzyme inhibitors. (15)

5. a. Discuss the therapeutic values of peptidomimetics. (5)

   b. Give structures of some unnatural amino acids which impose conformational constraints when introduced in peptidomimetic's designing. (5)

   c. Describe the chemistry of leukotrienes. (5)

6. Write short notes on **any two** : (7.5×2)

   a. Mechanism of alkylating agents for anticancer activity.

   b. Second generation non-sedating anti-histaminics.

   c. SAR of phenylethanolamines as adrenergic agonists.