

**M. PHARM. (PHARMACEUTICAL CHEMISTRY) SEM-I**  
**(CBCS- 2019 COURSE): WINTER 2021**  
**SUBJECT: ADVANCED MEDICINAL CHEMISTRY**

Day: Wednesday  
Date: 17-11-2021

Time: 10:00 AM-01:00 PM  
Max. Marks: 75

**W-20727-2021**

**N.B.:**

- 1) Attempt **ANY FIVE** questions.
- 2) Figures to the right indicate **FULL** marks.

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- Q.1** a) Brief out on the identification, validation and diversity of biological targets in drug discovery. (10)
- b) Discuss various forces involved in drug receptor complex formation. (05)
- Q.2** a) What are the driving force for the design of peptidomimetics? Discuss modification of peptide backbone on the basis of amino acid to peptidomimetic design. (10)
- b) Explain with examples prodrugs to improve physicochemical and pharmacokinetic properties of drugs. (05)
- Q.3** a) What are the causes of drug resistance? Explain the strategies to combat the resistance in anticancer therapies. (07)
- b) Discuss in brief about Chemistry, SAR & MOA of psychoactive drugs with suitable examples. (08)
- Q.4** a) Discuss about role of chirality with examples in selective and specific therapeutic agents. (07)
- b) Explain the importance of enzyme inhibition in drug design process. Analyze design of covalent and non-covalent binding of enzymes with suitable examples. (08)
- Q.5** a) Discuss in brief about Classification, chemistry, SAR & MOA of COX 1 inhibitors. (07)
- b) Describe in detail analog design based on changes in ring size, alteration of chain branching with examples. (08)
- Q.6** Write Short notes: (15)
- a) Site specific prodrugs
  - b) High throughput screening
  - c) Adrenergic antagonists

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