[Total No. of Questions - 18] [Total No. of nted Pages - 2] (2126)

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## B. Pharmacy 5th Semester Examination Medicinal Chemistry-I (NS) BP-352

Time: 3 Hours

Max. Marks: 70

The candidates shall limit their answers precisely within the answerbook (40 pages) issued to them and no supplementary/continuation sheet will be issued.

## SECTION - A (Attempt any two questions)

- 1. How physicochemical properties are related to biological action? Write a detailed note on bioisosterism.
- What are different forces involved in drug receptor interaction? Describe transduction mechanisms in detail.
- Classify anticonvulsants with suitable examples. Discuss mechanism of action and structure activity relationship of barbiturates and benzodiazepines. (10×2=20)

## SECTION - B (Attempt any eight questions)

- Write a note on different softwares used in molecular modeling.
- 5. Give synthesis and mechanism of action of lignocaine.
- Write SAR of any one chemical category belonging to CNS stimulants.
- What do you understand from carrier linked and bioprecursor prodrugs? Discuss in detail with examples.
- 8. Enumerate Hansch and Free Wilson approaches.

- 9. Classify antidepressants with suitable examples.
- 10. Give mechanism of action and synthesis of Atropine.
- 11. Write mechanism of action of Levodopa and also mention, why carbidopa is given in combination with levodopa.
- 12. Discuss briefly about electronic, steric and topological descriptors used in QSAR.
- 13. Discuss phase-II biotransformations in detail with a special comment on glueuronidation pathway. (5×8=40)

## SECTION - C (Attempt all questions)

- 14. Define analeptics and neuroleptics.
- 15. Write the name of any two non-depolarising blockers.
- 16. What are mutual prodrugs? Give any one example.
- 17. What is the statement of Easson-Stedemann Hypothesis.
- 18. Name any two opioid receptor antagonists. (2×5=10)