

QP Code: 422006

Reg. No.....

**Fourth Semester B.Pharm Degree Supplementary Examinations**

**March 2025**

**Medicinal Chemistry - 1**

**(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw diagrams wherever necessary

**Essays**

**(2x10=20)**

1. What is the purpose of Phase-I metabolism. Explain Oxidation and Hydrolysis metabolic reactions of Phase-I with examples.
2. How do you synthesise Phenylephrine and Salbutamol. Write the mechanism of action of these drugs.

**Short Notes**

**(7x5=35)**

3. With suitable example explain the effect of optical isomerism and geometrical isomerism of drugs on biological activity.
4. What do you mean by sympathomimetic drugs with mixed mechanism. Give examples and mechanism of action these drugs.
5. What are irreversible Cholinesterase inhibitors. Give examples and mechanism of action.
6. Synthesis and mechanism of action of dicyclomine.
7. Classify anticonvulsant drugs giving the examples. Write the mechanism of action of these drugs
8. What are ultrashort acting barbiturates. Write the structure of one and its mechanism of action.
9. Draw the structure and uses of
  - a) Metoprolol
  - b) Malathion
  - c) Thioridazine
  - d) Diclofenac

**Answer Briefly**

**(10x2=20)**

10. What is Phase-II metabolism. Give one example
11. Give a note on Imidazoline containing adrenergic agonists.
12. Write any four important structural features of cholinergic antagonists
13. Structure and uses of chlorpromazine.
14. What is the mechanism of action of Halothane.
15. Enlist any four important classes of NSAIDS.
16. Write any two important structural features of Morphine analogues.
17. Write the structure and uses of Adrenaline.
18. Enlist important effect of Acetylcholine.
19. Mechanism and uses of Narcotic antagonists.

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