

QP Code: 422006

Reg. No.....

**Fourth Semester B.Pharm Degree Regular/Supplementary
Examinations February 2024
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 are Beta blockers. Give examples. Explain important structure activity relationship features. How do you synthesise Propranolol.
2. Explain Hydrogen bonding and Protein binding of drugs and their effect on biological activity with example.

Short Notes

(7x5=35)

3. What is bioisosterism. Classify and give examples
4. Indirectly acting sympathomimetic agents. Give structure and mechanism of action of any one drug.
5. What are Solonaceous alkaloids. Give examples and their mechanism of action.
6. Write a note on reversible Cholinesterase inhibitors giving examples and mechanism of action
7. Classify antipsychotic agents giving examples for each class. Write the general mechanism of action and uses of these drugs.
8. Draw the structure and uses of
 - a) Salbutamol.
 - b) Ibuprofen.
 - c) Methacholine
 - d) Methadone.
9. Explain the SAR of barbiturates.

Answer Briefly

(10x2=20)

10. Enlist any four factors effecting metabolism of drugs.
11. Distribution of cholinergic receptors in body.
12. How do you synthesise Carbachol.
13. Write the structure of Chlordiazepoxide and give its mechanism of action.
14. Give the synthetic route for Diphenylhydantoin.
15. Write the general mechanism of action of NSAIDS
16. Write the structure and uses of Physostigmine.
17. Structure and uses of Glutethimide.
18. Write the chemical structure and uses of Ephedrine.
19. Enlist important effect of Adrenaline.
