

QP Code: 422006

Reg. No.....

**Fourth Semester B.Pharm Degree Regular/Supplementary
Examinations March 2023
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. Explain drug metabolism with examples. Outline the phase one metabolism with suitable examples.
2. Classify parasympathomimetic agents with examples. Give the chemical structures of any two agents from each class. Write the synthesis and mechanism of action of dicyclomine hydrochloride.

Short Notes

(7x5=35)

3. Explain the biological significance of ionization and optical isomerism of drugs.
4. Explain the Structural Activity Relationship (SAR) of sympathomimetic drugs.
5. Give the synthesis, mechanism of action and uses of propranolol.
6. Classify antipsychotics with structural examples.
7. Outline the chemical synthesis and mechanism of action of ketamine hydrochloride.
8. Classify anti-inflammatory drugs with structural examples.
9. Give the structures and uses of
 - Phenylephrine • Carbachol • Diazepam • Carbamazepine • Acetaminophen.

Answer Briefly

(10x2=20)

10. Explain any two factors affecting the drug metabolism.
11. What are adrenergic antagonists.
12. List any two important structural requirements for cholinergic blocking drugs.
13. Outline the mechanism of action of cholinesterase inhibitors.
14. Enlist the barbiturate class of sedatives and hypnotics along with their structures.
15. Write the chemical structure and uses of ethosuximide.
16. List important structural requirements for phenothiazine class of antipsychotic drugs.
17. Write the chemical structure and uses of methohexital sodium.
18. Give a note on morphine analogues.
19. Outline the chemical synthesis of mefenamic acid.
