

2010 scheme

QP CODE: 401006

Reg. No:

Final Year B.Pharm Degree Supplementary Examinations April 2025 Pharmaceutical Chemistry - V (Medicinal Chemistry)

Time: 3 Hours

Total Marks: 100

- *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*
- *Write chemical structures wherever necessary.*

Essays

(3x10=30)

1. Define the terms and give their biological significance of Hydrogen bonding and Ionization. Define CADD and Molecular modeling. (6+4)
2. Classify anti-neoplastic agents giving examples for each class. Outline the mechanism of action of Thiotepa and 5-Fluorouracil. (6+4)
3. Classify sedatives and hypnotics giving examples of each class. Draw the synthetic route of any one drug under hypnotic and sedative class. (6+4)

Short notes

(14x5=70)

4. With a suitable example, explain the effect of optical isomerism on biological action of Drugs
5. Classify anti-convulsant with examples. Give the synthesis of any one.
6. Write a note on Imidazoline containing adrenergic drugs.
7. Write the structure, Mechanism of action and synthesis of Sulfone drugs.
8. What is the structure of Chloroquine. Mention its mode of action and specific use.
9. Classify and explain structural features of Cholinergic drugs.
10. Mechanism of action and uses of cholinergic blockers
11. Classify NSAIDS with examples. Write the structure of one such and its mechanism of action.
12. Structure, mechanism of action and uses of tolinaftate.
13. Classify oral antidiabetic drugs with examples and write the mechanism of any two classes.
14. Classify penicillins with examples. Write their general mechanism of action.
15. What are pro-drugs. Classify and give examples of prodrugs.
16. Structure, mechanism of action and uses of HMGCoA reductase inhibitors.
17. SAR of H1-antihistamines.
