

2012 scheme

QP CODE:411006

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
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. a) What are anti-histamine drugs. Classify them with structural examples.
b) Explain the mechanism of action of proton pump inhibitors and list their therapeutic uses.
2. a) What are antibacterial sulphonamides. Classify them with structural examples.
b) Describe the Structural Activity Relationship (SAR) of quinolone class of antimalarial drugs.
3. a) Explain the importance of protein binding in drug action.
b) Describe the importance of hydrogen bonding and redox potential in the biological activity of drugs.

Short Notes:

(14x5=70)

4. Describe the structural activity relationship (SAR) of cephalosporin class of antibiotics.
5. What are prodrugs. Enlist the pharmaceutical applications of prodrugs.
6. Classify diuretic drugs with structural examples.
7. Explain the structural activity relationship (SAR) of antidepressants.
8. Outline the synthesis and mechanism of action of dapsone.
9. Explain the concept of computer-aided drug design.
10. What are cholinergic drugs. Explain their important structural activity relationship.
11. Outline the chemical synthesis of
 - a) Piroxicam
 - b) Diazepam
12. Give a note on fluoroquinolones.
13. Give the chemical structure and uses of
 - a) Metformin
 - b) Chlorpromazine
 - c) Lignocaine
 - d) Mebendazole
 - e) Dicyclomine
14. Explain the chemistry and mechanism of action of tetracycline class antibiotics.
15. Outline the chemical synthesis and mechanism of action of chloramphenicol.
16. Give a note on narcotic analgesics.
17. Explain the chemical synthesis and mechanism of action of salbutamol.
