

2012 scheme

QP CODE:411006

Reg. No:

Final Year B.Pharm Degree Supplementary Examinations April 2024 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) Describe the structural activity relationship (SAR) of antibacterial sulphonamides.
b) Outline the synthesis and mechanism of action of carbachol and dicyclomine.
2. a) What are adrenergic drugs. Classify them with structural examples.
b) Describe the structural-activity relationship of penicillin class of antibiotics.
3. Explain the role of ionization and hydrogen bonding in drug action.

Short Notes:

(14x5=70)

4. Explain the chemistry and mechanism of action of tetracyclines.
5. Classify antimalarial drugs with structural examples.
6. Outline the chemical synthesis and mechanism of action of mebendazole.
7. Define and classify antiviral drugs.
8. Give the synthesis, mechanism of action and uses of paracetamol.
9. Outline the chemical synthesis of a) Diazepam b) Furosemide.
10. Explain the concept of quantitative structure-activity relationship (QSAR) used in drug design.
11. Oral hypoglycemic drugs.
12. Define sedative and hypnotics. Classify them with structural examples.
13. Explain the chemical synthesis, mechanism of action and uses of salbutamol.
14. What are prodrugs. Highlight their pharmaceutical applications.
15. Highlight the important structural requirements for cholinergic drugs.
16. Give the structure and uses of following.
 - a) Acyclovir
 - b) Chlorhexidine
 - c) Diphenhydramine
 - d) Ibuprofen
 - e) Methotrexate
17. Describe the structural-activity relationships of antipsychotics.
