

2012 scheme

QP CODE:411006

Reg. No:

Final Year B.Pharm Degree Supplementary Examinations December 2021

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. What are sulphonamides. Classify with examples. Describe the mechanism and synthesis of sulphacetamide.
2. Define protein binding and hydrogen bonding and explain how they influence the biological activity of drugs.
3. Define and classify anti-neoplastic agents with examples. Outline the synthesis of methotrexate and 5-fluorouracil.

Short Notes:

(14x5=70)

4. Explain on potassium sparing diuretics with suitable examples.
5. Write the mechanism of action of isoniazid along with its synthesis.
6. Write the structure and uses of dapsone and ciprofloxacin.
7. Classify adrenergic antagonists and write the synthesis of propranolol.
8. Explain the structure activity relationship of phenothiazine.
9. What are anti-histamines. Classify them and draw the structure of one compound from each class.
10. Explain Quantitative Structure-Activity Relationship (QSAR).
11. Define and classify hypoglycemic agents outline the synthesis of tolbutamide.
12. Explain the chemistry of penicillin.
13. Classify NSAIDs with examples. Outline the synthesis of ibuprofen.
14. Explain on proton pump inhibitors.
15. What are local anaesthetics. Write the structure of lignocaine and dibucaine.
16. Explain on prodrug concept in drug discovery.
17. Write the mechanism of action and synthesis of carbachol.
