

2010 scheme

QP CODE: 401006

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. Classify the antineoplastic agents. Give examples. Discuss the mechanism of actions of any four different agents.
2. Outline the synthesis of the following drugs – diazepam and carbachol.
3. Describe in detail Lipinsky's rule of five and prediction of binding of a ligand with a receptor.

Short notes

(14x5=70)

4. Explain steric effect in relation to biological activity.
5. Discuss the applications of quantum mechanics to drug design.
6. The structure, mechanism of action and uses of HMG CoA reductase inhibitors.
7. Discuss the structure activity relationship of the tetracyclines.
8. The structure, mechanism of action and use of carbonic anhydrase inhibitors.
9. Classification and mechanism of action of antimalarial drugs.
10. Prodrugs
11. Outline the synthesis of 5-fluorouracil.
12. Discuss the SAR of fluoroquinolones.
13. Classify sulfonamides
14. Discuss the SAR and uses of cyclizine
15. Chemistry of beta lactam antibiotics
16. Classify NSAIDS (Non-Steroidal Anti-Inflammatory Drugs)
17. Chemical classification of anticonvulsants. Synthesis of phenytoin sodium.
