

Final Year B.Pharm Degree Supplementary Examinations
November 2018
Pharmaceutical Chemistry - V
(Medicinal Chemistry)
(2010 scheme)

Time: 3 Hours**Total Marks: 100**

- Answer all Questions.
- Draw chemical structure wherever necessary.

Essays**(3x10=30)**

1. Explain in detail about β -adrenergic blockers. Describe the SAR and synthesis of any one.
2. Define hydrogen bonding. Explain with suitable examples how pK_a and hydrogen bonding influences the biological activity of drugs.
3. Classify anti-histaminic agents. Outline the synthesis of promethazine and diphenhydramine.

Short notes**(14x5=70)**

4. Potassium sparing diuretics. Outline the synthesis of frusemide.
5. The mechanism of action of methyl dopa along with its synthesis.
6. The structure and uses of mebendazole and naproxen.
7. Classify cholinergic blocking agents and describe the synthesis of dicyclomine.
8. The mechanism of action of sulphonamides along with its structural activity relationship.
9. What are narcotic analgesics. Classify them and draw the structure of one compound from each class.
10. What is quantitative structure-activity relationship (QSAR). Mention about the important parameters for drug designing.
11. What are anti-protozoal agents. Outline the synthesis of metronidazole.
12. The chemistry of penicillin.
13. Define anti-viral drugs. Classify them.
14. Classify anti-fungal agents. Describe the synthesis of tolnaftate.
15. Outline the synthesis of sodium valproate and phenytoin.
16. What are sedatives. Describe the structure and synthesis of diazepam.
17. The structure, mechanism of action and uses of metformin.