

Final Year B.Pharm Degree Examinations - July 2015

PHARMACEUTICAL CHEMISTRY - V
(Medicinal Chemistry)**Time: 3 Hours****Total Marks: 100**

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

Essay**(3x10=30)**

1. Discuss the SAR and mode of action of following class of diuretics - Thiazide and anthranilic acids. Mention the synthesis of one drug belonging to each class.
2. Describe the synthesis and uses of the following
 - Chloramphenicol • PAS • Methyl DOPA
3. Explain the synthesis of the following:
 - Tobutamide • Salbutamol • Methotrexate

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

4. Outline the synthesis and uses of adrenaline
5. Mechanism of action of sulfonamides and enalapril
6. Explain the SAR of phenothiazine class of antipsychotics
7. Chemistry of diazepam and mention its uses.
8. Classify cholinergic blockers giving structure of one drug belonging to each class
9. Synthesis of Ampicillin and Imipramine
10. Classify antihistaminic agents giving one example for each class. Give the synthesis of any one of them.
11. Draw the structure of the following molecules
 - 2-bromo-2-chloro-1,1,1-tri fluoroethane
 - 2-(diethylamino) ethyl-4-amino benzoate
 - 1-(p-chlorobenzoyl)-5-methoxy-2-methyl indole-3-acetic acid
 - 2-((2,6-dichlorophenyl)- amino)- phenyl acetic acid
12. Explain the SAR of hydantoin as antiepileptic agents
13. Classify beta adrenergic blockers and list out its therapeutic uses
14. Explain the SAR of fluoroquinolone antibacterials
15. Explain the mode of action and use of acyclovir & morphine
16. Discuss Computer Aided Drug Design
17. Importance of optical and geometrical isomerism.
