

[LC 4262]

FEBRUARY 2013

Sub. Code: 4262

THIRD YEAR B.PHARM. EXAM

Paper II – MEDICINAL CHEMISTRY - I

Q.P. Code: 564262

Time : Three hours

Maximum: 100 Marks

(180 Min)

I. Elaborate on:

(2x20=40)

1. a) Classify NSAIDs with examples. Write the synthesis for Ibuprofen and Indomethacin **(6+6)**
b) Explain the structure activity relationship of Morphine **(8)**
2. How the following physiochemical properties influences the drug's biological action
a) Ionization b) Protein Binding c) Stereoisomerism d) Steric effect **(4X5=20)**

II. SHORT NOTES

(8X5=40)

1. Write a note on Loop Diuretics.
2. Enumerate the factors affecting drug metabolism with examples
3. Write the synthetic route for Procaine and Dibucaine
4. Explain the applications of prodrugs.
5. Write the structures for a) Pheniramine maleate b) Meclizine c) Promethazine d) Ranitidine e) Omeprazole
6. Write the synthesis for Dicyclomine and Tropicamide
7. Explain the structure activity relationship of Barbiturates
8. What are Anticonvulsants? Classify them with examples

III. SHORT ANSWERS

(10X2=20)

1. Dissociative anaesthesia
2. Mechanism of action of Diazepam
3. Define receptor and give examples
4. Structure and uses of Neostigmine and Bethanechol
5. Two prostaglandins approved for human clinical use.
6. Synthesis of Imipramine HCl
7. Irreversible anticholinesterase agents
8. Mechanism of action of Local Anaesthetics.
9. β -2 stimulants
10. Write the structure for Triflupromazine and Haloperidol
