

(LL 4262)

AUGUST 2017

Sub. Code: 4262

**B.PHARM. DEGREE EXAMINATION
THIRD YEAR
PAPER II – MEDICINAL CHEMISTRY – I**

Q.P. Code: 564262

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define Receptor and discuss the theories involved in Drug Receptor complex.
b) Explain the different types of reaction in phase I metabolic pathways.
2. a) Discuss the classification, mode of action and SAR of NSAIDs.
b) Give the synthesis for Indomethacin, Ibuprofen and Phenylbutazone.

II. Write notes on:

(8 x 5 = 40)

1. Write about applications of prodrug design.
2. Classify sedative and hypnotics with examples and give the synthesis of diazepam.
3. Write a note on: i) Isosterism ii) Hydrogen bonding.
4. Define CNS stimulants and give the synthesis for:
i) Nikethamide ii) Imipramine HCL.
5. Discuss Sympathomimetic agents and give the synthesis of salbutamol.
6. Explain in detail about antihistaminic agents.
7. Discuss SAR of barbiturates.
8. Define and classify diuretics with suitable examples.

III. Short answers on:

(10 x 2 = 20)

1. Define the term Tranquilliser.
2. Structure and uses of methohexital sodium.
3. Synthesis of Mephentoin.
4. Write the structures of Homatropine HBr and Tropicamide.
5. Note on Neuromuscular blockers.
6. Define Anti-tussive agents.
7. Mode of action of Halothane.
8. Structure and use of Naproxen.
9. Note on Prostaglandins.
10. H₂ receptor antagonists.
