

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)

THIRD YEAR (Regulation 2009-2010)

PAPER II – MEDICINAL CHEMISTRY - I

Q.P. Code: 564262

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Outline the Biosynthesis and also explain the functions of neurotransmitters with example.(10)
- b) Discuss the stereochemistry of Cholinergics with examples.(5)
- c) Write the synthesis of Salbutamol and Propranolol.(5)
2. a) Explain the various types of Phase II Biotransformation pathways with suitable examples.(12)
- b) Discuss the factors affecting Drug Metabolism.(8)

II. Write notes on:

(8 x 5 = 40)

1. Discuss the Structure activity relationship of Morphine.
2. Define and classify Tranquillisers with suitable examples.
3. Write the synthesis of Imipramine and Dextroamphetamine.
4. Elucidate the Prostaglandins from Arachidonic acid.
5. Describe the basic concepts of Prodrug and its applications.
6. Give the structure and medicinal uses of the following.
 i) Carbamazepine ii) Haloperidol iii) Halothane
7. What are Carbonic anhydrase inhibitors and write the synthesis of Acetazolamide.
8. Explain the chemistry of Histamine and its receptors.

III. Short answers on:

(10 x 2 = 20)

1. MAO Inhibitors.
2. Structure and use of Nalorphine Hcl and Fentanyl citrate.
3. Adrenergic Receptor hypothesis.
4. Define Local anaesthetics with examples.
5. Proton pump inhibitors.
6. SAR of Phenothiazines.
7. Synthesis of Cyclizine Hcl.
8. Define Antitussives with examples.
9. Opioid antagonist.
10. Synthesis of Meperidine Hcl.
