

[BPHARM 0522]

MAY 2022  
(FEBRUARY 2022 EXAM SESSION)

Sub. Code: 4262

**B. PHARMACY DEGREE EXAMINATION  
THIRD YEAR – (NON-SEMESTER)  
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) Discuss the classification mode of action of CNS Stimulants.  
b) Write a note on MAO inhibitors with suitable examples.  
c) Write the synthesis of Doxapram and Imipramine.
2. a) Explain the structural Activity relationship for the Mercurial Diuretics.  
b) Derive the synthesis for a) Acetazolamide b) Furosemide.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Discuss the Synthesis and SAR of Barbitol.
2. Define and classify Tranquillisers with suitable examples.
3. Write the synthesis of Chlorcyclizine 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. Summarize the different types of Phase metabolic reactions.
8. Explain the chemistry of Histamine and its receptors.

**III. Short answers on:**

**(10 x 2 = 20)**

1. MAO of NSAIDs.
2. Structure and use of Fentanyl citrate.
3. Adrenergic Receptor hypothesis.
4. Define Local anesthetics.
5. Proton pump inhibitors.
6. Drug Latentiation.
7. Synthesis of Cyclizine Hcl.
8. Define Anti-asthmatic drugs.
9. Morphine analogues.
10. Synthesis of Sodium valproate.