

**Fifth Semester Examination for the Degree
of Bachelor of Pharmacy**

PHARMACEUTICAL MEDICINAL CHEMISTRY – I

5 T 2

Time : Three Hours]

[Max. Marks : 80

- N. B. : (1) Question No. 1 is compulsory.
(2) Solve any **four** questions from the remaining.
(3) Draw neat labelled diagram wherever necessary.

1. Solve any **five** of the following :—

- (A) Draw structure, IUPAC Name, uses and synthesis of Phenytoin.
(B) Justify, why Carbidopa is given in combination with Levodopa.
(C) Discuss role of phosphodiesterase inhibitors.
(D) Justify 5, S – disubstituted barbiturates shows sedative and hypnotic activity.
(E) How solubility affects absorption and distribution of drugs ?
(F). Draw structure, IUPAC name, uses and synthesis of Aspirin.
(G) What are Autocoids ? Explain in brief.

5 × 4 = 20

2. Describe phase I and Phase II reactions with examples.

15

3. (A) Define and classify Sedative and Hypnotics. Write mode of action and synthesis of one drug from Benzodiazepine class. 10
(B) Write note on antiepileptic agents. 5
4. What are Narcotic analgerics and classify them ? Explain SAR of any one class of opioid Analgesics. Write synthesis of any one drug. 15
5. Classify Local anesthetics ? Discuss SAR, metabolism and synthesis of Lidocaine. 15
6. (A) Define and classify Antipsychotics. 7
(B) Write structure, IUPAC names synthesis and uses of any two H – 1 antagonists. 8
7. Write notes on (any **three**) of the following :—
(a) Receptor site theory
(b) Hypoglycaemic agents
(c) Alzheimer's disease
(d) Thyroid and anti – thyroid Harmones
(e) Bronchodilators. 5×3=15