

University/College Name

B.Pharm Semester IV

Subject: Pharmacology-I

Unit-I: General Pharmacology

Time: 1 Hour

Maximum Marks: 15

(Note: This is a sample sessional question paper based on the PCI syllabus for BP404T.

Answer all questions. Figures in brackets indicate marks.)

Section A: Short Answer Questions (Attempt any 3 out of 4)

 $(3 \times 3 = 9 \text{ Marks})$

1. Define pharmacology and explain its scope in relation to other biomedical sciences.

Mention any two historical landmarks in the development of pharmacology. (3)

- 2. Describe the various routes of drug administration with their advantages and disadvantages. Give examples for each. (3)
- 3. Explain the concepts of agonists and antagonists. Differentiate between competitive and non-competitive antagonists with examples. (3)
- 4. What is pharmacokinetics? Briefly discuss the processes of absorption and distribution of drugs across biological membranes. (3)

Section B: Long Answer Question (Attempt any 1 out of 2)

 $(1 \times 6 = 6 \text{ Marks})$

- 1. Discuss in detail the factors influencing drug metabolism and excretion. Explain enzyme induction and enzyme inhibition with suitable examples. Also, describe the kinetics of elimination. (6)
- Define the following terms with examples: tolerance, dependence, tachyphylaxis, idiosyncrasy, and allergy. Explain the concepts of spare receptors and essential drugs.
 (6)

End of Question Paper