

B.Pharm Third Semester (C.B.S.) Examination**PHARMACOLOGY—I****Paper—4**

Time : Three Hours]

[Maximum Marks : 80

- Note :—** (1) Question No. 1 is compulsory.
(2) Attempt any four questions out of remaining.
(3) Draw neat labeled diagram wherever necessary.

1. Solve any **FIVE** :— 5×4=20
 - (a) Define Bioassay. Explain its principles.
 - (b) Explain concept of antagonism with example.
 - (c) Define agonist, inverse agonist, competitive and non-competitive antagonist with example.
 - (d) Write note on cholinergic receptors.
 - (e) Explain Bioavailability and give its significance.
 - (f) Write short note on Potentiation of drug effects.
 - (g) Justify the use of adrenergic agonists in bronchial asthma.
2. Define Biotransformation of drug. Write phases of biotransformation in detail. 15
3. (a) Explain signal transducer mechanism of G Protein Coupled Receptor (GPCR). 10
(b) Write note on Myasthenia gravis. 5
4. (a) Explain steps of neurohumoral transmission. 10
(b) Classify anticholinesterase agents. Write mechanism of action of Physostigmine. 5
5. (a) Write Pharmacological profile of adrenaline. 10
(b) Classify β -blockers and give its therapeutic uses. 5
6. Explain different routes of drug administration with their merits and demerits. 15
7. Write short notes on (any **THREE**) :—
 - (a) Microsomal and non microsomal enzyme.
 - (b) Design of insulin bioassay.
 - (c) Factor affecting drug absorption.
 - (d) Plasma protein binding. 3×5=15