

NRT/KS/19/3158

B.Pharm. (Third Semester) (C.B.S.) Examination

PHARMACOLOGY—I

Paper—4

Time : Three Hours]

[Maximum Marks : 80

- N.B. :—** (1) Question No. **1** is compulsory.
(2) Attempt any **FOUR** questions out of remaining.
(3) All questions carry marks as indicated.
(4) Draw neat labelled diagrams wherever necessary.

1. Solve any **FIVE** of the following :
 - (a) Explain plasma protein binding.
 - (b) How does bioavailability affect pharmacokinetics ?
 - (c) Explain Dale vasomotor reversal phenomenon.
 - (d) Define bioassay and discuss its principles.
 - (e) Mention location and functions mediated through muscarinic receptors.
 - (f) Justify the use of adrenaline along with local anaesthetics.
 - (g) Differentiate between partial agonist and inverse agonist with suitable examples. 20
2. Discuss various transducer mechanisms for drug action through receptors. Comment on secondary messenger system of G-protein coupled receptors. 15
3. Explain absorption of drugs and various factors affecting absorption. Add a note on transport mechanism across the cell membrane. 15
4. (a) Explain the mechanism of different allergic reactions. Discuss idiosyncrasy with examples. 8
(b) Discuss blood brain barriers. 7
5. (a) Describe different types of adrenergic receptors along with its location and physiological significance. 8
(b) Add a note on various adrenergic antagonists used clinically. 7
6. (a) Discuss in detail mechanism of action of acetylcholinesterase inhibitors. Add a note on use of pralidoxime in organophosphate poisoning. 8
(b) Explain in detail pharmacology of atropine. 7
7. Write short notes on the following :
 - (a) Biotransformation of drug
 - (b) Types of bioassay
 - (c) Neuromuscular blocking agents
 - (d) Ganglionic Blockers. 3×5=15