

**B.Pharm. Semester—III (C.B.S.) Examination**

**PHARMACOLOGY-I**

**Paper—4**

Time : Three Hours]

[Maximum Marks : 80

**Note :—** (1) Question No. **1** is compulsory.

(2) Solve any **four** questions from the remaining.

(3) Draw neat labelled diagrams wherever necessary.

1. Solve any **five** :

- (a) Compare the pharmacological profile of neostigmine and physostigmine.
- (b) Explain the significance of plasma protein binding with suitable examples.
- (c) Write principle and methodology of insulin bioassay.
- (d) Describe the symptoms and treatment of myastonia gravis.
- (e) Justify the use of adrenergic agonists in the treatment of bronchial asthma.
- (f) What is log-dose response curve ? Explain its significance.
- (g) Write a brief note on nuclear receptors. 5×4=20

- 2. Give classification of anti-cholinergic agents. Explain pharmacological profile, clinical indication and adverse effect of anti-muscarinic agents. 15
- 3. Explain mechanism of action, pharmacokinetic adverse effects, contraindication and therapeutic uses of propranolol. 15
- 4. Explain different routes of drug administration along with advantages and drawbacks. Add a note on Enema. 15
- 5. What is first pass metabolism ? Explain in detail various phases of drug metabolism. Add a note on microsomal enzyme induction and inhibition. 15
- 6. Give classification and explain mechanism of action, pharmacokinetic, adverse effects and clinical indications of Anti-cholinesterases agents. 15

7. Write short notes on the following (any **three**) :

(a) Neuromuscular stimulant drugs

(b) Excretion of drugs

(c) Factors affecting drug absorption

(d) Principle and design of digitalis bio-assay.

3×5=15