

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

**PHARMACOLOGY – I**

**3-T-4**

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 labeled diagram wherever necessary.

1. Solve any **Five**.

- (a) Explain neurohumoral transmission.
- (b) Explain clinical significance of  $\alpha$ -adrenergic blocker.
- (c) Justify the combination of adrenaline and lidocaine.
- (d) Explain Dale vasomotor reversal phenomenon.
- (e) Describe the phenomenon of synergism and potentiation with suitable examples.
- (f) Write a brief note on orphan receptors.
- (g) Give clinical significance of Antimuscarinic agents.

5×4=20

2. Explain different phases of bio-transformation along with suitable examples. 15

3. Explain different types of receptors in detail. Describe difficult factors affecting drug receptor interaction. 15

4. Give classification of Anti-cholinesterase's. Describe their mechanism of action, adverse effect and clinical indications. 15

5. Give classification and describe detail pharmacological profile of  $\beta$ -blockers with their specific clinical indication. 15

6. Give classification and explain mechanism of action, Adverse effect and therapeutic uses of ganglionic blockers and neuromuscular blocking agents. 15

7. Solve any **Three** of the following :—

- (a) Explain the phenomenon of competitive antagonism with suitable examples.
- (b) Describe symptoms and treatment of organo-phosphate poisoning.
- (c) Give detail guidelines for therapeutic intervention of Myastania Gravis.
- (d) Describe various factors affecting drug distribution and explain its clinical significance.

3 × 5 = 15