

B. PHARM
(SEM-IV) THEORY EXAMINATION, 2019-20
PHARMACOLOGY-I

Time: 3 Hours

Total Marks: 75

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

- 1. Attempt *all* questions in brief. **10 x 2 = 20****
- a. Define Tachyphylaxis with example.
 - b. What do you mean by Plateau principle in Pharmacokinetics?
 - c. Write the significance of STAT in JAK-STAT signaling.
 - d. What is Phase 0 clinical trial?
 - e. What do you mean by Cotransmission?
 - f. Write the clinical uses of Ritodrine and Salbutamol.
 - g. Write the mechanism of action of Vigabatrin.
 - h. What is diffusion hypoxia?
 - i. Write the mechanism of action of Tolcapone and Rasagiline.
 - j. What do you mean by drug dependence?

SECTION B

- 2. Attempt any *two* parts of the following: **2 x 10 = 20****
- a. What is Pharmacovigilance? Explain different phases of clinical trials in detail.
 - b. Discuss different pharmacological actions of acetylcholine in detail.
 - c. Classify peripherally-acting skeletal muscle relaxants. Write a note on pharmacology of Lidocaine.

SECTION C

- 3. Attempt any *five* parts of the following: **7 x 5 = 35****
- a. Explain various routes of drug administration in detail.
 - b. What is biotransformation? Describe the significance of plasma protein binding.
 - c. Explain signal transduction mechanisms in G-protein-coupled receptor signaling.
 - d. Discuss the mechanism of action, uses and side effects of Propranolol.
 - e. Classify Sedatives. Write down the differences between benzodiazepines and barbiturates.
 - f. Write a short note on Nootropics.
 - g. Write down the classification of antidepressants and anti-anxiety agents.