

Total No. of Questions : 6]

SEAT No. :

P3153

[Total No. of Pages : 2

[5245]-305

S.Y. B. Pharmacy (Semester - III)

PHARMACOLOGY - I

(2013 Pattern)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right side indicate full marks.*
- 3) *Write answers for section - I and section - II in separate answer sheets.*

SECTION - I

Q1) Enlist and explain factors affecting drug distribution. **[10]**

OR

Enlist various routes of drug administration. Explain advantages and disadvantages of various routes of drug administration. **[10]**

Q2) Solve any five

- a) Define absorption and explain factors affecting absorption of drug. **[3]**
- b) What are different sources of drugs? **[3]**
- c) Define drug distribution, metabolism and excretion. **[3]**
- d) Define half-life of drug? Give its importance. **[3]**
- e) Discuss structure and functions of plasma membrane. **[3]**
- f) Define clinical trials? Enlist phases of clinical trials. **[3]**
- g) What are the organs and enzymes involved in drug metabolism? **[3]**

Q3) Solve any two

- a) What do you mean by therapeutic drug monitoring? Give its importance. **[5]**
- b) Write a note on transportation of drug across plasma membrane. **[5]**
- c) Discuss factors affecting drug excretion. **[5]**
- d) Discuss new approaches in new drug discovery and development process. **[5]**

P.T.O.

SECTION - II

Q4) Write in detail drug receptor interaction and signal transduction mechanism in different type of receptor. **[10]**

OR

Discuss synthesis, storage, release and pharmacological actions of prostaglandins. **[10]**

Q5) Answer the following (Any five)

- a) Write in detail factors modifying drug action. **[3]**
- b) Explain in detail dose response curve. **[3]**
- c) Define pharmacodynamics and add a note on therapeutic Index. **[3]**
- d) Discuss in detail drug treatment in geriatric patients. **[3]**
- e) Define adverse drug reactions with their type. **[3]**
- f) Write in details different type and pathophysiological role of leukotrienes. **[3]**
- g) Explain in detail structure activity relationship and its effect on drug action. **[3]**

Q6) Solve any two **[10]**

- a) Explain in detail drug synergism and drug antagonism and its types.
- b) Define drug interaction and classify them with example.
- c) Classify 5-HT receptor and write about its antagonist.
- d) Discuss transduction mechanism of G protein coupled receptor.

