SEAT No. :[	
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[5049]-305 S.Y.B.Pharmacy PHARMACOLOGY - I

(2013 Pattern) (Semester - III)

Time: 3 Hours] [Max. Marks: 70

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Answers to the two sections should be written in separate books.
- 3) Neat diagrams must be drawn wherver necessary.
- 4) Figures to the right indicate full marks.

## **SECTION - I**

Q1) Write in detail the process of drug distribution. Describe role of plasma proteins in drug distribution.[10]

OR

Explain in detail various routes of administration with their advantages and disadvantages. [10]

- **Q2)** Answer the following (Any five)
  - a) Explain in detail bioavailability and bioequivalence. [3]
  - b) Explain in detail phases of drug metabolism. [3]
  - c) Write in detail sources and active ingredient of drugs. [3]
  - d) Explain the process of drug transportation across cell membrane. [3]
  - e) Explain the term volume of distribution. [3]
  - f) Explain clinical significance of half life of drug. [3]
  - g) Explain Therapeutic drug monitoring. [3]

## *Q3)* Solve any two:

- a) Explain in detail Factors affecting excretion of drugs. [5]
- b) Write about process of development of new drug. [5]
- c) Explain in detail process of drug absorption and factors affecting drug absorption. [5]
- d) Explain mechanism of drug action through enzyme activation and inhibition. [5]

## **SECTION - II**

Q4) Classify antihistaminics with examples. Discuss in detail pharmacology of H<sub>1</sub>
receptor antagonist. [10]

OR

Discuss in detail factors affecting drug action.

[10]

- **Q5)** Answer the following (Any five)
  - a) Discuss transduction mechanism of kinase linked receptor. [3]
  - b) What are different types of dose response curves? Give its characteristics, limitations & importance. [3]
  - c) Discuss pharmacological actions of 5 HT. [3]
  - d) What do you mean by drug synergism & drug antagonism? Explain with examples. [3]
  - e) Define drug toxicity & give its types. [3]
  - f) Define pharmacodynamics & explain different sites of drug action. [3]
  - g) Define drug interactions & classify them with example. [3]
- **Q6)** Write short notes on (Any Two)

[10]

- a) Adverse drug reactions.
- b) Drug therapy in geriatric patients.
- c) G-protein coupled receptor.
- d) Prostaglandins.

