

Total No. of Questions : 6]

SEAT No. :

**P1442**

**[5049]-305**

[Total No. of Pages : 2

**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 wherever 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]**

*P.T.O.*

**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.

