

Total No. of Questions : 6]

SEAT No. :

P1981

[5145]-305

[Total No. of Pages :2

**Second Year B.Pharmacy
235:PHARMACOLOGY - I
(2013 Pattern) (Semester - III)**

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

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

SECTION - I

Q1) Explain various phases of drug metabolism with examples. **[10]**

OR

Enlist various routes of drug administration. Write advantages and disadvantages of oral, sublingual, intravenous, and intramuscular route. **[10]**

Q2) Solve any five: **[15]**

- a) What are advantages and disadvantages of topical route of drug administration?
- b) Explain enzyme induction and inhibition with example.
- c) Enlist factors affecting drug metabolism.
- d) Define absorption, distribution and elimination.
- e) Enlist and elaborate routes of drug elimination.
- f) What are the factors affecting drug distribution.
- g) Define volume of distribution and half-life of drug? What is their significance?

Q3) Solve any two: **[10]**

- a) Discuss different transport mechanisms of drugs across plasma membrane.
- b) Write a brief note on nature and sources of drugs.
- c) Explain factors affecting drug bioavailability.
- d) What are the different phases of clinical trials? Explain in detail.

P.T.O.

SECTION - II

Q4) Explain in detail principles of drug action and write in detail factors modifying drug action. **[10]**

OR

Classify receptor and explain in details with example structure and function of G protein coupled receptor.

Q5) Answer the following (Any five): **[15]**

- a) Define adverse drug reactions with their type.
- b) Explain in detail dose response curve.
- c) Define pharmacodynamics and add a note on therapeutic Index.
- d) Define drug interaction and classify them with example.
- e) Explain in detail drug synergism and drug antagonism phenomenon.
- f) Write in details different type and pathophysiological role of prostaglandins.
- g) Explain in detail structure activity relationship and its effect on drug action.

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

- a) What is drug toxicity and write in detail types of drug toxicity.
- b) Discuss in detail drug treatment in geriatric patients.
- c) Write in details pathophysiological role of histamine and write about antihistaminics.
- d) Discuss transduction mechanism of kinase linked receptor

