Total No. of Questions : 6]

SEAT No. :

P1981

[Total No. of Pages :2

[5145]-305
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