



D-1582

**M. Sc. (Sem. IV) (Pharmaceutical Chemistry)  
Examination**

April / May - 2016

**Paper - III : Drug Metabolism, Pharmacokinetics  
& Pharmacognosy**

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

(1)

नीचे दशांशव  निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of  signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
M. SC. (SEM. IV) (PHARMACEUTICAL CHEMISTRY)	<input type="text"/>
Name of the Subject :	<input type="text"/>
P. - 3 : DRUG META., PHAR. & PHARM.	<input type="text"/>
Subject Code No. : <input type="text" value="1"/> <input type="text" value="5"/> <input type="text" value="8"/> <input type="text" value="2"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

(2) Figures to the right indicate full marks of the questions.

- 1 Explain any three of the following : 18
- (a) What is molecular modelling method ? Based on molecular mechanics approach, discuss their stick and space fill models with applications.
  - (b) Explain tagging method for structural determination of the active compounds.
  - (c) Giving example discuss solid phase technique used in combinatorial system.
  - (d) What is molecular mechanics ? Give an account on the relation between bioinformatics and computer aided drug design.
- 2 Answer any three of the following : 18
- (a) What is pharmacokinetics ? Giving schematic diagram explain the therapeutic value of the drug.
  - (b) What is clearance (CL) ? Discuss its application for studying the pharmacokinetic behaviour in drug design.
  - (c) What is bioavailability ? Discuss relationship between relative and absolute availability in pharmacokinetic behaviour of drug.

- (d) Explain in brief : Intravascular and extravascular administration in context to pharmacokinetics.
- 3 Answer any three of the following : 18
- (a) Giving examples classify and discuss various system of drug of their origin in nature.
  - (b) Give an account on the important constituents present in Pterocarpus and Gymnema sylvestiris as antidiabetic agent.
  - (c) Write a note on Rauwolfia as antihypertensive drug.
  - (d) Discuss therapeutic efficacy of Cardamom, Ginger and Black pepper as carminatives and GI regulators.
- 4 Answer any three of the following : 16
- (a) Explain giving diagram parallel method for screening of active member of library.
  - (b) What is ADMET ? Giving example discuss its significance in drug design.
  - (c) Explain in short : Computer Graphics and parallel synthesis.
  - (d) Give a brief account on Aswagandha and Opium used on nervous system.
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