Code : 091601

B.Pharm 6th Semester Exam., 2018

PHARMACEUTICS—VII

Time : 3 hours *Full Marks* : 70

Instructions :

(i) The marks are indicated in the right-hand margin.

(ii) There are ***NINE*** *questions in this paper.*

(iii) Attempt ***FIVE*** *questions in all.*

(iv) Question No. ***1*** *is compulsory.*

1. Answer the following (any *seven*) : 2×7=14

(a) Define biopharmaceutics.

(b) Define pharmacokinetics.

(c) Define hepatic clearance.

(d) Write Michaelis-Menten equation.

(e) Define two-compartment modeling.

(f) Define first-order of reaction.

(g) Define pinocytosis.

(h) Define absorption.

(i) Define half-life of elimination.

(j) Define passive diffusion.

2. Describe in detail about physiochemical factor influencing the absorption of drug from GI tract with examples. 14

3. What are the assumptions made in development compartment models? Discuss the advantage and disadvantage of such compartment model approach. 14

4. Explain the role of pharmacokinetics in formulation development and clinical setting. 14

5. Discuss the pharmacokinetic drug interactions and their significances in combination therapy. 14

6. Describe drug distribution in body and drug-protein binding. 14

7. Explain the terms 'bioavailability' and 'bioequivalence'. How do we measure bioavailability, C-max, T-max and area under the curve (AUC) in a pharmacokinetic modeling? 14

8. Explain Wagner-Nelson and Loo-Riegelman methods. 14

9. Discuss the pharmacokinetics of one compartment open model intravenous administration. 14