

PY - 702
B.Pharmacy VII Semester
Examination, December 2014
Pharmaceutics - IX
(Biopharmaceutics & Pharmacokinetics)
Time: Three Hours
Maximum Marks : 70

Note: 1. Attempt any five questions.

2. All questions carry equal marks.

1. Discuss various Physico-chemical properties of drug substance affecting gastrointestinal absorption. Explain P_H partition Hypothesis.
2. Explain the principle mechanism for transport of drug molecules across cell membrane.
3. a) Explain Blood brain barrier and Blood cerebrospinal fluid barrier, with diagram.
b) Write a note on biliary excretion or enterohepatic cycling.
4. Discuss the one compartment open model applicable in case of I.V. Bolus injection. Explain various pharmacokinetic parameters and their calculations using that model.
5. Discuss study design and assessment methods for bioavailability and bioequivalence
6. a) What is biotransformation? Describe, in detail various enzymes involved in biotransformation of the drug.
b) Explain the Clinical Significance of protein/tissue binding of drugs.
7. Write notes on - Any three
 - a) Pharmacokinetic drug interaction and their significance in combination therapy.
 - b) Wagner-Nelson method for estimation of absorption constants.
 - c) Absolute and relative bioavailability.
 - d) Renal clearance.