

QP Code: 106327

Reg No:

First Year M.Pharm Degree Examinations August 2016

(Pharmaceutics)

Paper II – Biopharmaceutics and Pharmacokinetics

Time: 3 hrs

Maximum Marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays:

(2x20 =40)

1. Explain how method of residuals for estimation of K_a differs from Wagner-Nelson method. Discuss its merits and demerits.
2. Describe the influence of various rate-determining parameters on controlled release of drugs.

Short Essays:

(6x10=60)

3. Classify compartment models. Explain with concepts and schematic representation. Add a note on the advantages.
4. Explain the steps involved in the individualization of dosage regimen with suitable examples.
5. Explain oxidative decomposition in pharmaceuticals and describe how oxidative instability can be overcome in pre formulation stage
6. Explain the clinical situation when loading and maintenance dose is used. Discuss the pharmacokinetic parameters required for its calculation.
7. Describe the solubility and permeability aspects as per the biopharmaceutical classification system (BCS). Explain the reason for separate bioavailability studies needed for single and multiple dosing.
8. Explain the method of assessment of bioavailability from urinary excretion data.
