

First Year M.Pharm Degree Supplementary Examinations– March 2014
(2011 Scheme)
(Pharmaceutics)

Paper II – Biopharmaceutics and Pharmacokinetics

Time: 3 hrs

Maximum Marks: 100

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

Essays:

(2x20 =40)

1. Explain the significance of pre-formulation studies with special emphasis on stability of drugs
2. Explain the relevance of drug distribution in the body with the extent and duration of action of drug. Describe the phenomenon of protein binding and kinetics involved in it.

Short Essays:

(6x10=60)

3. Explain the concept of renal and hepatic clearance, highlighting the significance of enterohepatic cycling.
4. Explain in detail protocol for bioavailability study of drugs.
5. Explain the various in-vivo and ex-vivo methods in gene therapy
6. What do you mean by non-linear pharmacokinetics. Explain the methods to identify non-linearity in biological process.
7. Describe the role of drug **pKa** and urine **pH** in the re-absorption of drugs.
8. Mention the various approaches for improvement of dissolution of poorly soluble drugs.
