

QP CODE: 314006 (new scheme)

Reg. No:

**Third Year B.Pharm Degree Supplementary Examinations
January 2018****PHARMACEUTICS - IV
(Biopharmaceutics and Pharmacokinetics)
(2012 Scheme)****Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

Essay**(3x10=30)**

1. Describe the single dose bioequivalence study with proper study design
2. Explain the phase II reaction in biotransformation
3. Explain the one compartment open model IV bolus administration and describe the determination of pharmacokinetic parameters from urinary data

Short notes**(14x5=70)**

4. Explain the factors affecting renal clearance of drugs
5. Enlist the drug absorption mechanism and explain active transport
6. Explain the physiological barriers for drug distribution
7. Explain the importance of biopharmaceutical classification system
8. Define bioequivalence and explain the measurement of bioavailability
9. Determination of renal clearance
10. Define non linear pharmacokinetics and add a note on Michaelis- Menten equation
11. The clinical significances of plasma protein binding
12. Explain the biliary excretion
13. In vitro in vivo correlations (IVIVC)
14. Explain one compartment open model extra vascular administration
15. Explain the method for determining C_{max} and T_{max}
16. Define biotransformation. Mention two example under phase I reactions
17. Name the various dissolution testing apparatus and explain the official dissolution apparatus.
