

Third Year B.Pharm Degree Supplementary Examinations - August 2014

**PHARMACEUTICS - V**  
**(Biopharmaceutics and Pharmacokinetics)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay**

**(3x10=30)**

1. Discuss the various dosage form characteristics influencing gastro intestinal drug absorption
2. Describe any one method for determination of first order absorption rate constant in one compartment kinetics and list the advantages and disadvantages
3. Explain renal drug excretion in detail

**Short notes**

**(14x5=70)**

4. Disintegration testing
5. Dose adjustments in renal failure
6. Compartment models
7. Criteria for obtaining valid urinary excretion data
8. Determination of renal excretion rate constant by rate of excretion method
9. Reasons for non linearity in pharmacokinetics
10. Derive the Lineweaver Burk and Hanes Woolf plot equations from Michaelis Menton equation for the determination of Michaelis Menton constant
11. Designing of single dose bio equivalence studies
12. Different methods for determination of bioavailability
13. Biopharmaceutical classification of drugs
14. Enterohepatic circulation
15. List different drug absorption mechanisms
16. Blood cerebrospinal fluid barrier
17. Phase I oxidative reactions

\*\*\*\*\*