QP CODE: 314006 (new scheme) Reg. No: ......

## Third Year B.Pharm Degree Examinations June 2017

## **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 physicochemical factors affecting the drug absorption in GIT
- 2. Define bioavailability and explain the method to measure bioavailability
- 3. Explain the one compartment open model for intravenous injection (Bolus)

Short notes (14x5=70)

- 4. Explain the factors affecting protein-drug binding
- 5. Explain Biliary Excretion of Drugs
- 6. Explain Mechanism of Renal Excretion
- 7. The kinetics of protein-drug binding
- 8. Define biopharmaceutics classification systems and its importance
- 9. Define absorption and brief note on transport of drug across biological barrier
- 10. Define disposition. Write the concept of clearance
- 11. Apparent volume of distribution and its clinical significances
- 12. Enlist and explain the specialized barriers to distribution of drugs
- 13. Name the various Dissolution Apparatus and give a brief note on USP Type I Apparatus
- 14. The factors affecting the elimination
- 15. Explain the method of residual for determining absorption rate constant
- 16. Define pharmacokinetics. Write the various pharmacokinetic parameters
- 17. In vitro in vivo correlations (IVIVC)

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