# 2010 Scheme

QP CODE: 304006 (Old Scheme)

Third Year B.Pharm Degree Supplementary Examinations November 2019

## Pharmaceutics - V

### (Biopharmaceutics and Pharmacokinetics)

#### Time: 3 Hours

- Answer all Questions.
- Write equations wherever necessary.

#### Essays

- 1. Describe the principal processes in urinary excretion of drugs. Explain how dose adjustment is done in patients with renal failure.
- 2. Explain various mechanisms of gastrointestinal drug absorption
- 3. Describe the kinetics of one compartment open model I.V. bolus drug administration.

#### Short notes

- 4. In vitro-in vivo correlation
- 5. Pharmacokinetics methods for measurement of bioavailability
- 6. Loading dose
- 7. Entero-hepatic circulation
- 8. Glucuronidation conjugation
- 9. Extraction ratio
- 10. Binding of drugs to human serum albumin
- 11. Significance of volume of distribution
- 12. Blood-brain barrier
- 13. Reasons for nonlinearity in pharmacokinetics
- 14. Significance of displacement interaction in plasma protein binding with suitable examples
- 15. Various pharmacokinetic parameters
- 16. Determination of first order absorption rate constant by the method of residuals in one compartment model
- 17. Biopharmaceutical classification system.

Total Marks: 100

(14x5=70)

(3x10=30)

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Reg. No: .....