

# **2010 Scheme**

**QP CODE: 304006**

**Reg. No: .....**

**Third Year B.Pharm Degree Supplementary Examinations June 2022**

## **Pharmaceutics - V (Biopharmaceutics and Pharmacokinetics)**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

### **Essays**

**(3x10=30)**

1. Define Bio-transformation and discuss the Phase I reaction with suitable examples
2. Define clearance and explain the mechanism and concept of clearance
3. Describe the Kinetics of two compartment I.V. bolus administration

### **Short notes**

**(14x5=70)**

4. Passage of drugs across biological barriers
5. Factors affecting drug distribution
6. Explain any one compendial dissolution and disintegration testing apparatus each
7. Non-linear Pharmacokinetics
8. Application of pharmacokinetic parameters
9. Glucuronidation conjugation reactions.
10. Theories of drug dissolution
11. In vitro-in vivo correlation
12. Dose adjustment in patient with renal failure
13. Compartment Models
14. Method used to measure bioavailability
15. Kinetics of protein binding
16. Explain Enterohepatic circulation with diagram.
17. Extraction ratio

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