

# **2010 Scheme**

**QP CODE: 304006**

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

**Third Year B.Pharm Degree Supplementary Examinations August 2021**

## **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 distribution and discuss the factors influencing drug distribution in the biological system
2. Discuss the phase I reactions with the suitable examples and their significance.
3. Explain the kinetics of two compartment open model IV bolus administration.

### **Short notes**

**(14x5=70)**

4. Dose adjustment in patient with renal failure
5. Applications of Pharmacokinetics
6. Biopharmaceutical classification system
7. In vitro-in vivo correlation
8. First order absorption rate constants
9. Theories of drug dissolution
10. Mechanisms of drug absorption
11. Entero - hepatic cycling
12. Factors causing non linearity
13. Plasma protein binding
14. AUC and its measurements
15. Concept of clearance
16. Design of single dose Bio-equivalence study
17. Hepatic clearance

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