Q.P. Code: 405326   **Reg. no.: …………………**

Fourth Year Pharm D Degree Regular/Supplementary Examinations November 2021

Biopharmaceutics & Pharmacokinetics

Time: 3 Hours   **Total Marks: 70**

- *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. Explain one compartment open model for repetitive IV bolus administration.

2. Explain pharmacokinetic methods of assessment of bioavailability.

3. Explain patient related factors affecting drug absorption

Short notes: **(8x5=40)**

4. Describe the one compartment open model pharmacokinetics for oral administration

5. Explain Michalis-Menten equation for non-linear kinetics.

6. Describe the role of glomerular filtration in drug elimination.

7. What is gastric emptying. Explain the factors affecting gastric emptying.

8. Explain the concept of non-compartment model.

9. Explain the different factors effecting the process of drug metabolism.

10. Explain the volume of distribution with its significance

11. Explain reasons why non-linear kinetics is also known as mixed order kinetics

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