### THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

# [BPHARM 0122] JANUARY 2022 Sub. Code: 2065 (MARCH 2021 EXAM SESSION)

# B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS) PCI Regulation 2017 – SEMESTER VI PAPER IV – BIOPHARMACEUTICS AND PHARMACOKINETICS O.P. Code: 562065

Time: Three hours Maximum: 75 Marks

# I. Elaborate on: Answer any TWO questions.

 $(2 \times 10 = 20)$ 

- 1. Discuss the mechanism of drug absorption through Gastro Intestinal Tract (GIT).
- 2. Give brief summary on kinetics of multiple dosing.
- 3. Discuss about factors affecting drug metabolism.

# II. Write notes on: Answer any SEVEN questions.

 $(7 \times 5 = 35)$ 

- 1. Explain apparent volume of drug distribution.
- 2. Write about kinetic of protein binding.
- 3. Method enhances the dissolution rate.
- 4. Plasma and tissue protein binding drug.
- 5. Non compartment model.
- 6. *Invitro* and *Invivo* correlation.
- 7. Factors causing non linearity.
- 8. Steady state drug level.
- 9. One compartment open model for intravenous infusion.

### III. Short answers on: Answer ALL questions.

 $(10 \times 2 = 20)$ 

- 1. Mention the pharmaceutical formulation factors.
- 2. Factors affecting protein drug binding.
- 3. Testing of kidney function.
- 4. Bioequivalence.
- 5. Bioavailability.
- 6. Application of pharmacokinetics.
- 7. Difference between linear and non linear.
- 8. Elimination.
- 9. Two compartment model.
- 10. Total body clearance.

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