

M.Pharm. First Year (Pharmaceutics) CBCS Pattern Semester-II  
**MPH202T - Advanced Biopharmaceutics and Pharmacokinetics**

P. Pages : 1

Time : Three Hours



**GUG/W/23/14179**

Max. Marks : 75

- 
- Notes :
1. All questions carry equal marks.
  2. Illustrate your answers wherever necessary with the help of neat sketches.
  3. All question are compulsory.

- 1. Solve any ten. 20**
- i) What is tight junction complex.
  - ii) Define pharmacodynamic.
  - iii) What do you mean by permeability.
  - iv) Define elixir.
  - v) What do you mean by drug absorption.
  - vi) What is one compartment model.
  - vii) Give application of pharmacokinetic.
  - viii) What do you mean by drug interaction.
  - ix) Define vaccines.
  - x) What do you mean by K max.
  - xi) Define Vmax.
  - xii) Give note on drug release.
- 2. Solve any two. 20**
- i) Explain in details about two compartment model of IV bolus? And derive suitable equation to assess pharmacokinetic parameter?
  - ii) Explain in detail Biopharmaceutical consideration in drug product design?
  - iii) Explain various dissolution methods?
- 3. Solve any five. 35**
- i) Explain various types of pharmacokinetic model.
  - ii) pH partition hypothesis and its limitation.
  - iii) Write note on Biosimilar drug (genetic biologics) products and their applications.
  - iv) Explain pharmacokinetics model and their significance.
  - v) Method for assessing the bio-availability of a drug.
  - vi) Explain mechanism of absorption.
  - vii) Explain Michaelis Menten equation.

\*\*\*\*\*