BRAINWARE UNIVERSITY

Term End Examination 2023-2024
Programme – M.Pharm(Pharmaceutics)-2023
Course Name – Advanced Biopharmaceutics & Pharmacokinetics
Course Code - MPH202T
(Semester II)

Full Marks : 75 **Time : 3:0 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A
(Short Answer Type Questions) 5 x 5=25

1. Define polymorphism and amorphism. (5)
2. Analyze how the basic study design for bioequivalence study is considered. (5)
3. Apply the concept of compartment modelling. (5)
4. Explain how drug interaction can inhibit the function of P-glycoprotein in the transport of drugs. (5)
5. Explain the pharmacokinetics of modified-release drug products. (5)

OR

Explain the mechanism of action of targeted drug delivery systems. (5)

Group-B
(Long Answer Type Questions) 10 x 5=50

6. How do the physicochemical properties of drug formulations influence drug product performance? (10)
7. Explain the effects of tissue protein binding. (10)
8. Explain the significance of biopharmaceutic factors affecting drug bioavailability. (10)
9. Explain the importance of conducting bioequivalence studies in different formulations. (10)

OR

Explain the factors that need to be considered in the assessment of generic biologics, as per FDA. (10)

10. Deduce Michaelis-Menten equation for describing the non-linear pharmacokinetics. (10)

OR

Explain the causes of non-linearity in pharmacokinetics. (10)