

International Islamic University Chittagong

Department of Pharmacy

Mid Term Examination Spring 2024

Course Code: Pharm. 3603

Course Title: Biopharmaceutics & Pharmacokinetics-II

Total marks: 30

Time: 1 hour and 30 minutes

Answer any three Questions from the followings

Questions	Marks
1.a) Establish a dynamic relationship between the drug, drug product and the pharmacologic effect.	5
b) Diagrammatically represent a plasma level time curve after oral administration of a 500 mg paracetamol tablet.	5
2. a) Why two compartment open model is so called?	2
b) Classify compartment with suitable examples.	3
c) "Elimination is a first order process" – Justify the statement.	5
3. a) What is hybrid constant? How can you get the value of A and B from a biexponential curve?	5
b) If the amount of drug in the body declines from 100 % to 25 % of the dose in 8 hours. What is the elimination half-life for this drug assuming first order elimination kinetics?	5
4.a) How can you establish an equation for calculation of apparent volume of distribution at steady state level?	5
b) A drug is following two compartment open model. Explain the method of residual.	5