

Name. _____		Printed Pages:01		
Student Admn. No.: _____				
School of _____ Semester End Examination (SEE), Summer Term, August 2023 [Programme:] [Semester: 2022-23 – Sem I & II, 2021-23 – Sem IV] (For UG Courses only) [Batch:]				
Course Title: Biopharmaceutics and Pharmacokinetics Course Code: BPHT6004		Max Marks: 100 Time: 3 Hrs.		
Instructions:	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
		K Level	COs	Marks
SECTION-A (15 Marks)		5 Marks each		
1.	Illustrate the one-compartment open model for a drug administered as IV infusion.	K2	3	5
2.	Summarize the two-compartment open model for a drug administered as IV infusion.	K2	4	5
3.	Outline the causes of non-linearity.	K2	6	5
SECTION-B (40 Marks)		10 Marks each		
4.	Explain the differences between Facilitated diffusion, ion-pair transport and carrier-mediated transport.	K2	1	10
5.	Model the factors influencing GI absorption of drug from its dosage form.	K3	1	10
6.	Model the various methods for measurement of bioavailability	K3	2	10
7.	Identify the various in-vitro drug dissolution models.	K3	2	10
SECTION-C (45 Marks)		15 Marks each		
8.	Simplify the one-compartment open model for a drug administered as IV bolus.	K4	3	15
9.	Explain the two-compartment open model for a drug administered as IV bolus.	K5	4	15
10	Conclude the Michaelis-menten method of estimating parameters.	K5	5	15