

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm SEMESTER-VIII• EXAMINATION – SUMMER -2021

Subject Code:280001**Date:03/08/2021****Subject Name: Dosage Form Design - II****Time:10:30AM TO 01:30PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1	(a)	Explain lag time, burst effect and reservoir systems w.r.t. control release formulations	06
	(b)	What are loading and maintenance dose? How are they calculated?	05
	(c)	Describe the ideal requirements for sustained release formulations	05
Q.2	(a)	Write a note on implantable osmotic drug delivery system	06
	(b)	Explain targeted drug delivery systems giving examples	05
	(c)	Discuss the evaluation methods for transdermal drug delivery systems	05
Q.3	(a)	Enlist various approaches employed for ocular controlled drug delivery and explain any two	06
	(b)	Write a note on matrix based controlled drug delivery system	05
	(c)	Define liposomes and niosomes. Describe their evaluation	05
Q.4	(a)	Enlist different methods for determination of pharmacokinetics parameters from urinary excretion data and explain any one method in detail	06
	(b)	Define and explain extraction ratio and discuss hepatic clearance in detail	05
	(c)	Write a note on Wagner Nelson method	05
Q.5	(a)	What is one compartment open model extra vascular administration and explain method of residual method in detail	06
	(b)	Explain Michaelis Menten equation for capacity limited process	05
	(c)	Write Note on Non compartmental Analysis	05
Q. 6	(a)	Define clearance & explain total body clearance	06
	(b)	What are pharmacokinetic models? Explain in detail compartment models	05
	(c)	Define clinical pharmacokinetics. Explain dosage adjustment in patients with renal failure	05
Q.7	(a)	Write a note on parenteral suspensions	06
	(b)	Enlist various approaches for floating drug delivery system and explain any two of them	05
	(c)	Write a note on pharmacokinetic drug interactions	05
