

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER-VI • EXAMINATION – SUMMER -2023

Subject Code: 2260003**Date: 22/06/2023****Subject Name: Pharmaceutical Analysis IV****Time: 10:30 am to 01:30 pm****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 ELISA in detail.	06
	(b)	Write a note on Applications of X ray diffraction spectroscopy.	05
	(c)	Explain methods use for measurement of radioactivity.	05
Q.2	(a)	Enumerate detectors of HPLC and Explain any two detectors in detail.	06
	(b)	Draw Schematic diagram of HPTLC. Give its applications.	05
	(c)	Describe derivatization in GC.	05
Q.3	(a)	Enlist various analytical validation parameters as per ICH guideline and explain any two.	06
	(b)	Explain Bragg's law. Explain different method for x-ray diffraction study.	05
	(c)	Write a note on GATT & TRIPS.	05
Q.4	(a)	Write a note on supercritical fluid chromatography.	06
	(b)	Differentiate HPLC and GC. Discuss applications of HPLC.	05
	(c)	Explain in brief about GC-MS.	05
Q.5	(a)	Differentiate Raman spectroscopy and IR spectroscopy. Write a note on Raman spectroscopy.	06
	(b)	Explain the steps involved in filing patent.	05
	(c)	Write a note on Ion exchange chromatography.	05
Q.6	(a)	Discuss about GLP.	06
	(b)	Explain working of PID and ECD.	05
	(c)	Write a note on ISO.	05
Q.7	(a)	Write a note on RIA.	06
	(b)	Write a brief note on nephelometry.	05
	(c)	Write a short note on Affinity chromatography.	05
