Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM - SEMESTER–VI • EXAMINATION – SUMMER-2016

Subject Code: 2260003 **Date:05/05/2016**

Subject Name: Pharmaceutical Analysis IV

Time: 10:30 AM to 1:30 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)**	Write a short note on Affinity chromatography.	**06**
	(b)	Explain principle, procedure and application of HPTLC.	**05**
	(c)	Write a short note on supercritical fluid chromatography.	**05**
Q.2	**(a)**	Explain instrumentation and application of Gas chromatography.	**06**
	(b)	Give a brief note on GC-MS.	**05**
	(c)	Differentiate between HPLC & GC.	**05**
Q.3	**(a)**	Explain Bragg's law. Explain different method for x-ray diffraction study.	**06**
	(b)	Explain application of x-ray diffraction study.	**05**
	(c)	Write a short note on GLP.	**05**
Q.4	**(a)**	Explain principle and application of HPLC.	**06**
	(b)	Give brief account on HPLC instrumentation.	**05**
	(c)	Write a note on GATT & TRIPS.	**05**
Q.5	**(a)**	Differentiate Raman spectroscopy and IR spectroscopy. Write a note on Raman spectroscopy.	**06**
	(b)	Write a note on Ion exchange chromatography.	**05**
	(c)	Write note on Gel permeation chromatography.	**05**
Q. 6	**(a)**	Write a note on ISO.	**06**
	(b)	Explain the steps involved in filing patent.	**05**
	(c)	Explain principle, methodology and application of ELISA.	**05**
Q.7	**(a)**	Write a note on RIA.	**06**
	(b)	Discuss various parameters of analytical method validation.	**05**
	(c)	Write a brief note on nephelometry.	**05**

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