Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

B. Pharm. - SEMESTER - VIII • EXAMINATION - SUMMER 2013

•		de: 280004 Date: 20-05-2013	
Time	e: 10.30	me: Pharmaceutical Analysis -IV ) am - 01.30 pm  Total Marks: 80	
Instru	ictions: 1. At	tempt any five questions.	
	2. Ma	ake suitable assumptions wherever necessary. gures to the right indicate full marks.	
Q.1	(a)	Describe applications of X-ray diffraction.	06
	(b)	Write a brief note Raman spectroscopy.	05
	(c)	Give a brief account on ELISA technique.	05
Q.2	(a)	Explain the principle of Gas chromatography. Give overview of GC-MS.	06
	(b)	Write a note on stationary phases in normal and reversed phase HPLC	05
	(c)	Give brief account on GATT and TRIPS	05
Q.3	(a)	Explain the principle of affinity chromatography and Super critical fluid chromatography.	06
	(b)	Give advantage and limitation of HPTLC.	05
	(c)	Write in short about ISO 9001:2000.	05
Q.4	(a)	Write in detail about any three validation parameters as per ICH guideline.	06
	(b)	Explain the units for measurement of radio activity	05
	(c)	Explain the terms (i) Size exclusion chromatography (ii) Bragg's Law	05
Q.5	(a)	Describe applications of HPLC	06
<b>C</b> **	(b)	Give brief introduction to GLP	05
	(c)	Explain the principle and applications of Nephelometry	05
Q. 6	(a)	Describe Radio immuno assay.	06
	(b)	Write a brief note on Liquid scintillation systems.	05
	(c)	What are the applications of radionuclides?	05
Q.7	(a)	Write in detail on detectors of HPLC.	06

Write a short note on Ion Exchange chromatography.

\*\*\*\*\*\*

Explain the terms (i) GSC (ii) GLC.

**05** 

05

(b)

(c)