Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY B. PHARM (SEMESTER-8) SUMMER-2015

Subject code: 280004 Subject Name Pharmaceutical Analysis IV Time: 10:30 am to 1:30 pm Instructions:			Date: 04/05/2015	
		0 am to 1:30 pm Total Marks: 80		
2.	Mal	empt any five questions. ke suitable assumptions wherever necessary. ares to the right indicate full marks.		
Q.1	(a) (b) (c)	Discuss Detectors used in gas chromatography Write a note on Stationary Phases for GSC and GLC Give application of GC in Pharmacy	06 05 05	
Q.2	(a) (b) (c)	Explain the principle, instrumentation and applications of super critical fluid Chromatography. Give overview of LC-MS and LC-MS/MS Write a note on Size exclusion chromatography	06 05 05	
Q.3	(a) (b) (c)	Describe the principle, technique and application of radio immuno assay (RIA). Write a note on ELISA. How is ELISA better than RIA? Give applications of radio nuclides	06 05 05	
Q.4	(a) (b) (c)	What is intellectual property right (IPR)? Write a note of TRIPS and GATT. Write short note on Good Laboratory Practice. Explain advantages and limitation of HPTLC.	06 05 05	
Q.5	(a) (b) (c)	Enlist factors affecting scattering of light in suspension? Differentiate Nephelometry and Turbidimetry. Discuss validation parameters as per ICH guidelines. Discuss ISO 9001:2000 and Quality Management System.	06 05 05	
Q. 6	(a) (b) (c)	What is the basic difference between X-ray absorption, X-ray fluorescence and X-ray diffraction method? Describe instrumentation for X-ray diffraction. Define and explain Bragg's law. Discuss pharmaceutical application X-ray diffraction technique.	06 05 05	
Q.7	(a) (b) (c)	Describe the principle, technique and applications of affinity chromatography. Write a note on ion-exchange chromatography. Explain: Guard columns, C ₁₈ column, WCOT and PLOT.	06 05 05	
