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## GUJARAT TECHNOLOGICAL UNIVERSITY B.PHARM - SEMESTER- 8 EXAMINATION - SUMMER -2019

Subject Code: 280004  Subject Name: Pharmaceutical Analysis-IV  Time: 10:30 AM TO 01:30 PM  Instructions:  1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.				
Q.1	(a) (b) (c)	Explain Bragg's law. Explain different method for x-ray diffraction Explain application of x-ray diffraction study. Write a short note on GLP.	ion study.	06 05 05
Q.2	(a) (b) (c)	Write a short note on Raman spectroscopy.  Differentiate Nephelometer and Turbidometer. Explain Nephelometer a short note on ISO.	meter.	06 05 05
Q.3	(a) (b) (c)	Explain theories of Chromatography. Explain instrumentation and application of HPLC. Write a note on steps involved in patent filing.		06 05 05
Q.4	(a) (b) (c)	Explain Affinity Chromatography in detail. Write a note on Size Exclusion Chromatography Explain different types of resins in Ion-Exchange Chromatography instrumentation and applications ion exchange chromatography.	hy. Explain	06 05 05
Q.5	(a) (b) (c)	Explain different types of RIA in detail. Write short note on HPTLC. Discuss various parameters of analytical method validation.		06 05 05
Q. 6	(a) (b) (c)	Explain principle and application of Gas chromatography. Explain different detectors used in Gas chromatography. Differentiate HPLC and GC.		06 05 05
Q.7	(a) (b) (c)	Write a short note on supercritical fluid chromatography. Give a brief note on GC-MS. Write a short note on ELISA.		06 05 05