Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.PHARM- SEM-II–EXAMINATION – JULY 2012

Subject code: 2920107 Date: 06/07/2012

Subject Name: Pharmaceutical Analysis II

Time: 10:30 am – 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)	Discuss the principle, instrumentation and application of the GC-MS method used in pharmaceutical analysis.	**06**
	(b)	Describe and discuss: counter current chromatography	**05**
	(c)	Describe and discuss: Size exclusion chromatography	**05**
Q.2	(a)	Discuss principle and application of supercritical fluid chromatographic technique for analysis and isolation.	**06**
	(b)	Discuss the principle and applications of electrophoretic techniques	**05**
	(c)	Write a short note on the methods of automated analysis.	**05**
Q.3	(a)	Describe and discuss with respect to analysis of analysis of protein: isoelectric focusing and tryptic mapping.	**06**
	(b)	Write a short note on amino acid sequence analysis.	**05**
	(c)	Discuss methods of assay for anti hypertensive drugs and drugs acting on CV system.	**05**
Q.4	(a)	Discuss methods of solid state analysis of drugs.	**06**
	(b)	Discuss principles and procedures involved in the analysis of sedatives and tranquilizers.	**05**
	(c)	Discuss principle and applications of electrophoretic techniques.	**05**
Q.5	(a)	Discuss importance of Reporting threshold, Identification threshold and qualification threshold as discussed in the ICH Q3 guidelines.	**06**
	(b)	Discuss methods of determination of total solids in asava/aristha.	**05**
	(c)	Describe methods for the determination of iodine value in herbal formulations.	**05**
Q. 6	(a)	Discuss specific sample preparation techniques from biological matrices.	**06**
	(b)	Discuss UV and fluorescent analysis of powdered crude drugs and their applications	**05**
	(c)	Write a note on proximate analysis of crude drugs	**05**
Q.7	(a)	Enlist and discuss different techniques and methods applied in the extraction and identification of phytochemicals.	**06**
	(b)	Write a short note on pharmaceutical sample preparation.	**05**
	(c)	Discuss WHO guideline about coarseness of powder material and the sieves to be used.	**05**

****