.Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY M. Pharm – SEMESTER II–• EXAMINATION – SUMMER 2017

Subject Code: 2920107 Date: 29/05/2017 Subject Name: Pharmaceutical Analysis II

Time: 10:30 AM to 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)	What is impurity? Give types of impurity. Describe the analytical methods used for analysis of impurities.	08
	(b)	Describe amino acid sequence analysis and its importance.	08
Q.2	(a)	Explain principle, instrumentation and application of LC-MS in study of drug metabolism.	08
	(b)	Explain exclusion limit. Describe principle, applications and stationary phases used in size exclusion chromatography.	08
Q.3	(a)	Describe WHO guidelines for quality control of raw materials used in the herbal formulations.	08
	(b)	What is Isoelectric Focusing (IEF)? Explain its principle and working. Describe gels used in the IEF.	08
Q.4	(a) (b)	Explain flow injection analysis. Discuss theoretical consideration used in FIA. Describe physicochemical evaluation of crude drugs.	08 08
Q.5	(a)	Explain principle and procedure for quantitive analysis of anthistaminics and antihypertensive dosage form.	08
	(b)	Discuss the principle and role of ion exchange chromatography in amino acid analysis.	08
Q. 6	(a)	Discuss the applications of chromatographic techniques used in identification of plant constituents with example.	06
	(b)	Describe analysis of pesticide residue in plant material.	05
	(c)	Discuss various impurity threshold as per ICH Q3 guide lines.	05
Q.7		Write a short notes on following	16
	(a)	Tryptic mapping	
	(b)	Counter current chromatography	
	(c)	Sample preparation techniques	
	(d)	Fluorescence analysis of powder drug	
