Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER - IV • EXAMINATION - WINTER • 2016

Subject Code: 240004 Date: 22-10		2016	
Time		me: Pharmaceutical Analysis - II) am - 01:30 pm	80
	 Att Ma 	tempt any five questions. ake suitable assumptions wherever necessary. gures to the right indicate full marks.	
Q.1	(a)	Define chromatography. And give suitable classification of various chromatographic techniques.	06
	(b)	Write short note on column chromatography.	05
	(c)	Discuss the various development techniques of paper chromatography	05
Q.2	(a)	Define conductance. Describe the applications of conductometry.	06
	(b)	Enlist the types of conductometric titrations. And explain conductometric titration curve for weak acid against strong base with suitable example.	05
	(c)	Describe factors affecting conductance.	05
Q.3	(a)	Describe the working of DME. And discuss the advantages and disadvantages of DME.	06
	(b)	Define: 1. Polarography. 2. Limiting current. 3. Diffusion current. 4. Migration current. 5. Residual current.	05
	(c)	Discuss the applications of polarography.	05
Q.4	(a)	Discuss the various types of potentiometric titrations. And discuss any one in detail.	06
	(b)	Write working principle of glass electrode. Write the disadvantage of use of glass electrode.	05
	(c)	Enlist characteristics of an ideal reference electrode used in potentiometry. And discuss various reference electrodes.	05
Q.5	(a)	Define thermogravimetry and classify them, discuss factors affecting thermogravimetric curve.	06
	(b)	Write short note on TGA	05
	(c)	What is difference between DSC and DTA? Write applications of both.	05

Q. 6	(a)	Define polarimetry. Explain working principle of polarimeter.	06
	(b)	Distinguish the following pairs:	05
		1. Stationary phase and mobile phase.	
		2. Diffusion current and residual current.	
	(c)	Write short note on amperometric titrations	05
Q.7	(a)	Describe the principle of paper chromatography and discuss its applications.	06
	(b)	What is S/N ratio? explain sources of noise in instrumental analysis	05
	(c)	Describe the validation of instrumental analytical methods.	05
