Seat No.: Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER II • EXAMINATION – WINTER 2015

Subject Code: 2220003 Date: 10/12/2			
Subject Name: Pharmaceutical Analysis-II Time: 2.30 pm to 5.30 pm Instructions: 1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.			
Q.1	(a)	Define validation. Enlist parameters of analytical method validation and	06
	(b)	explain the source of noise in instrumental analysis. Discuss the advantages, disadvantages and limitation of instrumental method of analysis.	05
	(c)	Explain the terms: i. Signal ii. Elution iii. Raffinate iv Accuracy v. Molar conductivity	05
Q.2	(a)	Define and classify chromatography. Explain the plate theory of chromatographic separation.	06
	(b) (c)	Write a note on column chromatography. Justify the followings: i. Zinc silicate is used in the preparation of silica gel GF ii. Assay of dextrose injection is done by polarimetry.	05 05
Q.3	(a) (b) (c)	Discuss the principle, methodology and applications of TLC. Discuss the different development techniques of paper chromatography Describe the principle and application of polarimetry.	06 05 05
Q.4	(a) (b) (c)	What is emf. Classify electrode and what are the ideal characteristics of indicator electrode. Discuss the principle of pH metry Describe the construction, reaction, advantages and disadvantages of standard hydrogen electrode.	06 05 05
Q.5	(a) (b) (c)	Describe the principle of polarography. Derive ilkovic equation. Describe the oxygen combustion flask method.	06 05 05
Q. 6	(a) (b) (c)	Define conductance and Explain kohlrausch law. What is DSC? Write the application of DSC Discuss half wave potential and its applications.	06 05 05
Q.7	(a) (b) (c)	What is the difference between biamperometric and amperometric titrations? Discuss the advantages and applications of amperometric titration. Write a note on differential thermal analysis Write a note on single extraction technique	06 05 05
