Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BPHARM – SEMESTER II • EXAMINATION – SUMMER • 2015

Subject code: 2220003 **Date: 02-06-2015**

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)**	i)	Comment "potassium chloride is preferred in salt bridge".	**06**
		ii)	Comment "Conductance of HCL in non-polar solvent is higher than Conductance of HCL in polar solvent".	
		iii)	Comment "Separation efficiency is independent of number of plates".	
	(b)		Write a short note on Thin Layer chromatography.	**05**
	(c)		Explain Rate theory of chromatography.	**05**
Q.2	**(a)**		Write a detail note on Conductometric titrations.	**06**
	(b)		Write a note on DTA.	**05**
	(c)		Explain the principle, application and types of paper chromatography.	**05**
Q.3	**(a)**		Explain the need to perform analytical method validation. Enumerate validation parameters. Explain Accuracy and Precision.	**06**
	(b)		Discuss at length about dropping mercury electrode.	**05**
	(c)		Briefly explain Retention mechanisms involved in chromatography.	**05**
Q.4	**(a)**		Explain the principle, working and limitations of Glass electrode	**06**
	(b)		Write short note on factors affecting diffusion current.	**05**
	(c)		What is Electro analytical method? Write note on classification of electro analytical method.	**05**
Q.5	**(a)**		Describe principle, working and applications of Polarimetry.	**06**
	(b)		Discuss multiple extraction of drugs at length.	**05**
	(c)		Write a short note on Biamperometric titration.	**05**
Q. 6	**(a)**		Define Reference electrode. Enlist the types of it and write note on standard calomel.	**06**
	(b)		Write note on Oxygen combustion flask method.	**05**
	(c)		Briefly explain the applications of conductometry.	**05**
Q.7	**(a)**		Write a short note on Amperometric titration and write its application.	**06**
	(b)		Write detail account on DSC.	**05**
	(c)		Discuss the applications of potentiometry.	**05**

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