Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm. - SEMESTER–II - EXAMINATION – SUMMER-2017

Subject Code: 2220003 Date: 05/06/2017

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)**	Explain the following terminology (Any three) (i) Chromatography (ii) Resolution (iii) Capacity factor (iv) Dead time	**06**
	(b)	Describe classification of chromatography.	**05**
	(c)	Explain in detail van Deemeter equation.	**05**
Q.2	**(a)**	Describe the oxygen combustion flask method.	**06**
	(b)	Describe advantages and limitation of instrumental method of analysis.	**05**
	(c)	What are electroanalytical methods? Explain classification of electroanalytical methods.	**05**
Q.3	**(a)**	Explain the following terminology (Any three) (i) Validation (ii) Equivalent conductance (iii) Conductivity cell (iv) Gasometric method.	**06**
	(b)	Discuss factors affecting conductance.	**05**
	(c)	Explain different types of conductometric titration.	**05**
Q.4	**(a)**	Write the principle, working and limitations of Glass electrode.	**06**
	(b)	Discuss method of detecting end point by potentiometry titration.	**05**
	(c)	Enlist different reference electrode used in potentiometer and explain any one in detail.	**05**
Q.5	**(a)**	Explain the following terminology (Any three) (i) Signal to noise ratio (ii) Limiting current (iii) Residual current (iv) Specific rotation	**06**
	(b)	Discuss Biamperometric titration.	**05**
	(c)	Describe normal pulse polarography and differential pulse polarography.	**05**
Q. 6	**(a)**	Define Extraction. Write a note on continuous extraction.	**06**
	(b)	What is calorimetry? Describe principle and instrumentation of TG method.	**05**
	(c)	Write a note on DSC.	**05**
Q.7	**(a)**	Write a note on paper chromatography.	**06**
	(b)	Write a note on Dropping mercury electrode.	**05**
	(c)	Explain principle and instrumentation of polarimetry.	**05**

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