Seat No.: _____   Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER– 2 EXAMINATION – WINTER -2019

Subject Code: 2220003   **Date: 17-12-2019**
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)**	Describe in detail van Deemeter equation and terms in it.	**06**
	(b)	Give statement of kohlrausch's law and its application.	**05**
	(c)	Define and classify chromatography. Enlist the theories of chromatography. Describe any one in detail	**05**
Q.2	**(a)**	Describe multiple extraction technique. How pH affects extractability of the drugs.	**06**
	(b)	What is DSC? Write the application of DSC.	**05**
	(c)	Describe the construction, reaction, advantages and disadvantages of standard hydrogen electrode.	**05**
Q.3	**(a)**	Write in detail about dropping mercury electrode.	**06**
	(b)	Classify electro-analytical methods. Discuss about advantages and limitation of instrumental method of analysis.	**05**
	(c)	Discuss principle, methodology and applications of TLC.	**05**
Q.4	**(a)**	What is S/N ratio? Explain the source of noise in instrumental analysis.	**06**
	(b)	Give difference between optically active and optically inactive compound	**05**
	(c)	What is the difference between DSC and DTA?	**05**
Q.5	**(a)**	Describe the oxygen combustion flask method.	**06**
	(b)	Explain following term in detail a. Migration current b. Diffusion current	**05**
	(c)	Describe factor affecting conductance.	**05**
Q. 6	**(a)**	Discuss the principle of pH metry.	**06**
	(b)	Enlist various electrodes used in potentiometry. Explain any two in detail.	**05**
	(c)	Discuss the different development techniques of paper chromatograph	**05**
Q.7	**(a)**	Discuss method of detecting end point by potentiometer titration.	**06**
	(b)	What is stripping voltammetry? Explain in detail any two techniques.	**05**
	(c)	Write note on gasometric method.	**05**

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