

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm - SEMESTER- IV - EXAMINATION – SUMMER-2017

Subject Code: 240004

Date: 02/05/2017

Subject Name: Pharmaceutical Analysis-II

Time: 02:30 PM to 05:30 PM

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|-------------|--|-----------|
| Q.1 | (a) Define S/N ratio. Explain source of noise in instrumental analysis. | 06 |
| | (b) Enlist advantage and limitation of instrumental analytical method. | 05 |
| | (c) Define following term: Robustness, Retention time, Equivalent conductance, Standard electrode potential, Validation. | 05 |
| Q.2 | (a) Discuss the factor which influences efficiency of column in chromatography. | 06 |
| | (b) Write a note on theory of chromatographic separation. | 05 |
| | (c) Describe various development technique of paper chromatography. | 05 |
| Q.3 | (a) Explain Kohlrausch's law. Give application of Kohlrausch's law. | 06 |
| | (b) 1. Classify electroanalytical method. | 05 |
| | 2. Explain factor affecting conductance on effect of dilution. | |
| | (c) Write a note on Ilkovic equation. | 05 |
| Q.4 | (a) Explain in detail SHE with merits and demerits. | 06 |
| | (b) Write note on method of detecting end point of potentiometric titration in detail. | 05 |
| | (c) Discuss the principle of pH metry. | 05 |
| Q.5 | (a) Write in detail about dropping mercury electrode. | 06 |
| | (b) Write short note on stripping voltammetry. | 05 |
| | (c) Enumerate various pulse polarography techniques. Explain in detail about DPP. | 05 |
| Q. 6 | (a) Define calorimetry. Differentiate between DSC and DTA. | 06 |
| | (b) Discuss in detail principle of TGA with application. | 05 |
| | (c) Write short note on biamperometric titration. | 05 |
| Q.7 | (a) Explain difference between optically active and optically inactive compound. | 06 |
| | (b) Describe note on polarimeter. | 05 |
| | (c) Explain any one retention mechanism of chromatography in detail. | 05 |
