

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – IV • EXAMINATION – WINTER 2013

Subject Code: 240004

Date: 03-12-2013

Subject Name: Pharmaceutical Analysis - II

Time: 02.30 pm - 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) Write a note on plate and rate theory of chromatographic separation. | 06 |
| | (b) Define chromatography and classify them. | 05 |
| | (c) Write a note on paper chromatography. | 05 |
| Q.2 | (a) Write a note on Ilkovic equation. | 06 |
| | (b) Write a note on TLC. | 05 |
| | (c) Describe pharmacopoeial applications of column chromatography and TLC. | 05 |
| Q.3 | (a) Explain validation, signal to noise ratio. Write advantages and disadvantages of instrumental methods of analysis. | 06 |
| | (b) Describe factors affecting on conductance. | 05 |
| | (c) Write note on conductometric titrations. | 05 |
| Q.4 | (a) Write a note on differential pulse polarography (DPP). | 06 |
| | (b) Discuss amperometric titration. | 05 |
| | (c) Write a note on dropping mercury electrode (DME). | 05 |
| Q.5 | (a) Discuss detail note on polarogram. | 06 |
| | (b) Write a note on thermogravimetric analysis. | 05 |
| | (c) Write a note on differential scanning calorimetry. | 05 |
| Q. 6 | (a) Describe a note on polarimeter. | 06 |
| | (b) Describe characteristic of an ideal reference electrode used in potentiometry. Write note on glass electrode. | 05 |
| | (c) Discuss note on pHmetry. | 05 |
| Q.7 | (a) | 06 |
| | Write the factors which affects efficiency of column in chromatography. | |
| | (b) Discuss potentiometric titration with suitable example. | 05 |
| | (c) | 05 |
| | Enlist various electrochemical methods. Explain equivalent conductance, molar conductance. Write note on conductivity cell. | |
