

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER-IV • EXAMINATION – SUMMER - 2018

Subject Code:240004**Date: 18/05/2018****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) Write down classification of instrumental methods of analysis with its advantages and limitations. **06**
(b) Discuss signal to noise ratio. Enlist different validation parameters **05**
(c) Explain the following. **05**
1. Kohlrausch's law 2. Retention time 3. Racemic mixture
4. Diffusion current 5. Validation
- Q.2** (a) What is chromatography? Discuss theories of chromatography. **06**
(b) Explain different development techniques in paper chromatography. **05**
(c) Discuss factors affecting conductance. **05**
- Q.3** (a) Discuss ideal characteristic of reference electrode. Describe any one in detail. **06**
(b) Explain different types of conductometric titrations. **05**
(c) Write a short note on TLC. **05**
- Q.4** (a) Enlist different indicator electrodes. Describe glass electrode in detail. **06**
(b) Discuss stripping voltammetry with any two stripping techniques. **05**
(c) Write down applications of potentiometry. **05**
- Q.5** (a) Explain current -voltage curve in detail. **06**
(b) Write a brief note on amperometric titrations. **05**
(c) Describe dropping mercury electrode at length. **05**
- Q.6** (a) Discuss factors affecting TG curve. **06**
(b) Explain the following. **05**
1. Optical activity 2. Dead stop end point method
(c) Write in detail about principle and applications of DSC **05**
- Q.7** (a) What is zone broadening? Explain the sources of zone broadening. **06**
(b) How will you improve column efficiency? Explain in detail. **05**
(c) What is specific conductance. Write a short note on conductivity cell. **05**
