

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm. - SEMESTER- II • EXAMINATION – WINTER -2018**Subject Code: 2220003****Date: 11/12/2018****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.

- Q.1** (a) Explain the principle, application and types of paper chromatography. **06**
(b) Write a short note on Thin Layer chromatography. **05**
(c) Briefly explain Retention mechanisms involved in chromatography. **05**
- Q.2** (a) Comment on the following statements: **06**
i) Potassium chloride is preferred in salt bridge.
ii) Conductance of HCl in non-polar solvent is higher than conductance of HCl in polar solvent.
iii) Separation efficiency is independent of number of plates.
(b) Write a detailed note on Conductometric titrations. **05**
(c) Describe factor affecting conductance. **05**
- Q.3** (a) What is emf. Classify electrode and what are the ideal characteristics of indicator electrode. **06**
(b) Discuss the applications of potentiometry. **05**
(c) Define Reference electrode. Enlist the types of it and write note on standard calomel. **05**
- Q.4** (a) Describe principle, working and applications of Polarimetry. **06**
(b) Write a short note on Biamperometric titration. **05**
(c) Give difference between optically active and optically inactive compound. **05**
- Q.5** (a) Describe instrumentation of TGA. **06**
(b) Discuss the advantages, disadvantages and limitation of instrumental method of analysis. **05**
(c) Explain the application of DSC in detail. **05**
- Q.6** (a) Define validation. Enlist parameters of analytical method validation and explain the source of noise in instrumental analysis. **06**
(b) Describe multiple extraction technique. How pH affect extractability of the drugs. **05**
(c) Discuss the theory of extraction. **05**
- Q.7** (a) Write note on NPP and DPP. **06**
(b) What is stripping voltammetry? Explain in detail any two techniques. **05**
(c) Describe the oxygen combustion flask method. **05**
