

GUJARAT TECHNOLOGICAL UNIVERSITY**BP Pharm – SEMESTER II • EXAMINATION – SUMMER • 2015****Subject code: 2220003****Date: 02-06-2015****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) i) Comment “potassium chloride is preferred in salt bridge”. **06**
ii) Comment “Conductance of HCL in non-polar solvent is higher than Conductance of HCL in polar solvent”.
iii) Comment “Separation efficiency is independent of number of plates”.
- (b) Write a short note on Thin Layer chromatography. **05**
(c) Explain Rate theory of chromatography. **05**
- Q.2** (a) Write a detail note on Conductometric titrations. **06**
(b) Write a note on DTA. **05**
(c) Explain the principle, application and types of paper chromatography. **05**
- Q.3** (a) Explain the need to perform analytical method validation. Enumerate validation parameters. Explain Accuracy and Precision. **06**
(b) Discuss at length about dropping mercury electrode. **05**
(c) Briefly explain Retention mechanisms involved in chromatography. **05**
- Q.4** (a) Explain the principle, working and limitations of Glass electrode **06**
(b) Write short note on factors affecting diffusion current. **05**
(c) What is Electro analytical method? Write note on classification of electro analytical method. **05**
- Q.5** (a) Describe principle, working and applications of Polarimetry. **06**
(b) Discuss multiple extraction of drugs at length. **05**
(c) Write a short note on Biamperometric titration. **05**
- Q. 6** (a) Define Reference electrode. Enlist the types of it and write note on standard calomel. **06**
(b) Write note on Oxygen combustion flask method. **05**
(c) Briefly explain the applications of conductometry. **05**
- Q.7** (a) Write a short note on Amperometric titration and write its application. **06**
(b) Write detail account on DSC. **05**
(c) Discuss the applications of potentiometry. **05**
