

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

Subject Code: 230004**Date: 07/06/2017****Subject Name: Pharmaceutical Analysis-I****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 following term- Validation, Calibration, Precision, Accuracy, LOQ, Robustness **06**
(b) Discuss how to minimize sampling error. **05**
(c) Explain classification of pharmaceutical analysis in briefly. **05**
- Q.2** (a) What is hydrolysis? Derive equation for finding pH of aqueous solution of salt of weak acid and weak base. **06**
(b) Write short note on pharmaceutical buffer. **05**
(c) Discuss merits and demerits of non-aqueous titration over aqueous titration. **05**
- Q.3** (a) Explain factor affecting precipitation titration briefly. **06**
(b) Write short note on volhard's method. **05**
(c) Justify comment: **05**
1. Mohr's titration is carried out in acidic media.
2. Starch indicator should be added near the end point in iodine titration.
3. KI is added in the preparation of iodine solution.
- Q.4** (a) Write short note on iodometry and iodimetry titration. **06**
(b) Discuss replacement titration of complexometric titration. **05**
(c) Describe law of mass action in detail. **05**
- Q.5** (a) Explain theory of von weirmann's ratio for relative supersaturation and their importance. **06**
(b) Explain following term: Masking agent and Demasking agent **05**
(c) Write note about Diazotization titration. **05**
- Q. 6** (a) Write note on Kjeldhal method. **06**
(b) Describe pM indicator in detail. **05**
(c) Write short note on continuous extraction. **05**
- Q.7** (a) Explain leveling and differentiating effect of solvent in non-aqueous titration. **06**
(b) Explain gasometric method. **05**
(c) Write short note on counter current distribution. **05**
