Seat No.:	Enrolment No.
Scat 110	Lindingit 110.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharmacy - SEMESTER I - EXAMINATION - WINTER-2016

Subject Code: 2210003 Date:01/02/2017 **Subject Name: PHARMACEUTICAL ANALYSIS-I** 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) Comments on following. 06 1) Starch indicator should be added near the end point. 2) Nitrobenzene is used in Volhard's method. 3) Water is levelling solvent while acetic acid is differentiating solvent. What is validation? Enumerate the method validation parameters and explain 05 **(b)** any two in detail. (c) Explain Quality Assurance and Quality control. 05 **Q.2** Define error. Classify error and how will you minimize the error? 06 (a) **(b)** Discuss theory of Acid-Base indicator. 05 What is hydrolysis? Derive the equation for finding pH of aqueous solution of (c) 05 salt of weak acid and strong base. 0.3 Enlist different types of redox titration? Describe nitrite titration. (a) 06 Explain Iodometry titration. 05 **(b)** Derive Henderson-Hasselbach equaction. (c) 05 What is complexometric titration? Give different types of complexometric **Q.4** (a) 06 titration. **(b)** Write a note on pM indicator. 05 Discuss Mohr's method. (c) 05 0.5 Discuss Karl-Fischer titration. 06 (a) **(b)** Explain Kjeldahl method. 05 Explain masking and demasking of complexometric titration. (c) 05 0.6 Discuss levelling and differentiating effect of solvent in non-aqueous titration. 06 (a) Explain merits and demerits of non-aqueous titration. 05 **(b)** Write a note on Fajan method. 05 (c) **Q.7** (a) Explain importance of von-weimar ratio, co-precipitation and post precipitation 06 in gravimetric method of estimation. Define following terms. 05 **(b)** 1) Stoichiometric point 2) Primary standard 3) Common ion effect 4) Buffer 5) Calibration

05

Describe different sampling techniques in formulation analysis.

(c)