

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER-3 • EXAMINATION – SUMMER -2018

Subject Code: 230004**Date: 07/05/2018****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) Enlist the different type of complexometric titration. **06**
Explain replacement type of complexometric titration in detail with suitable examples.
- (b) What is analytical method validation? Enlist validation parameter. Discuss any two parameters in detail. **05**
- (c) Explain masking and demasking in complexometry. **05**
- Q.2** (a) Enumerate areas of application of acid-base buffers. **06**
Derive Henderson-Hasselbach equation for finding pH of buffer solution
- (b) Discuss Merits and Demerits of non aqueous titration over aqueous titration **05**
- (c) Explain indicators in complexometric titration? **05**
- Q.3** (a) Describe in detail about gravimetric method of Analysis **06**
- (b) Define redox titration. Write a note on potassium permanganate titration **05**
- (c) Write note on theory of acid base indicators **05**
- Q.4** (a) What is error? **06**
Classify the error and how will you minimize the error?
- (b) Briefly explain the redox indicators. **05**
- (c) Give preparation and standardization of KMnO_4 **05**
- Q.5** (a) Enlist the end point detection methods in precipitation titration. **06**
Explain fajan's method in detail.
- (b) Explain in detail about Mohr's method. **05**
- (c) Differentiate Iodometric and Iodimetric titrations. **05**
- Q.6** (a) Give the importance of quality control and quality assurance in formulation analysis. **06**
- (b) Give a detailed account of calibration and cleaning of glass wares **05**
- (c) Write a note on common ion effect. **05**
- Q.7** (a) Write note on cerimetry **06**
- (b) Explain about sampling techniques. **05**
- (c) Write a brief note on neutralization curve. **05**
