

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

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

**Subject Code:BP102TP****Date: 03/05/2018****Subject Name: Pharmaceutical Analysis - I****Time:02:30 PM – 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 different methods of expressing concentration. **06**  
(b) Explain different types of error. How will you minimize the errors? **05**  
(c) Explain in detail Volhard's method of precipitation. **05**
- Q.2** (a) Discuss briefly various sources of impurities in medicinal agents. **06**  
(b) Describe preparation and standardization of 0.1M sodium thiosulphate solution. **05**  
(c) What is primary standard compound? Explain ideal requirements of primary standard compound. **05**
- Q.3** (a) Explain co-precipitation and post-precipitation. **06**  
(b) What is gravimetric analysis? Discuss steps involved in gravimetric analysis. **05**  
(c) Explain basic principle of non-aqueous titration. Write the name of titrants and indicators used in non-aqueous titration. **05**
- Q.4** (a) Explain Diazotization titration in detail. **06**  
(b) Enlist different types of redox titrations. Describe iodine methods in detail. **05**  
(c) Enlist different end point detection method used in redox titration. Discuss them. **05**
- Q.5** (a) Discuss applications of acid base titration. **06**  
(b) Explain theories of acid base indicator. **05**  
(c) Explain titration curve for the salt of weak base & strong acid. **05**
- Q.6** (a) Write a note on conductometric titrations. **06**  
(b) Enlist different reference electrode used in potentiometry. Explain Saturated Calomel Electrode. **05**  
(c) Explain methods to determine end point in potentiometric titrations. **05**
- Q.7** (a) Explain masking and demasking in complexometry. **06**  
(b) Describe Dropping Mercury Electrode. **05**  
(c) Explain different types of EDTA titrations. What are the ideal requirements of metal ion indicators? **05**

\*\*\*\*\*