

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.

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|-------------|-----|--|-----------|
| 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 |
