

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER-I • EXAMINATION – SUMMER-2016

Subject Code: 2210003

Date: 27/5/2016

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) | Define following terms –
1) Accuracy, 2) Precision, 3) Validation, 4) Quality Assurance
5) Quality Control, 6) LOQ and LOD | 06 |
| | (b) | What is sampling? Explain Sampling techniques and hazards during sampling of drugs? | 05 |
| | (c) | Define Errors and explain classification of errors and minimization of errors. | 05 |
| Q.2 | (a) | Explain Kjeldahl Method. | 06 |
| | (b) | Define standardization and explain primary and secondary standards. | 05 |
| | (c) | Give the reasons
1) Use of pyridine in karl fischer reagent.
2) Why methanol is added in Karl Fischer reagent. | 05 |
| Q.3 | (a) | 1) Law of mass action, 2) Ionization of water | 06 |
| | (b) | Explain the hydrolysis of salts obtained from WA and SB. | 05 |
| | (c) | Define Indicators and explain theories of indicators. | 05 |
| Q.4 | (a) | What is redox titration? Explain redox indicators. | 06 |
| | (b) | Differentiate iodometry and iodimetry. | 05 |
| | (c) | Explain sodium nitrite titration. | 05 |
| Q.5 | (a) | Define precipitation titration. Explain the Fajan's method used for detection of end point in precipitation titration. | 06 |
| | (b) | Solvents used in non-aqueous titration. | 05 |
| | (c) | Write the application of non-aqueous and complexometric titration. | 05 |
| Q. 6 | (a) | 1) Masking and demasking agent
2) Write the principle behind the assay of Mg stearate | 06 |
| | (b) | Write the principle used behind complexometric titration? Define Ligands and classify it. | 05 |
| | (c) | pM Indicators | 05 |
| Q.7 | (a) | What is gravimetric analysis? Explain advantage, disadvantage and application of gravimetric analysis. | 06 |
| | (b) | Explain – Co-precipitation | 05 |
| | (c) | Define following terms
1) Normality, 2) Molarity, 3) Titration, 4) Thermogravimetry
5) Equivalent Point | 05 |
