Seat No: _____ Enrollment No: _____

PARUL UNIVERSITY

FACULTY OF PHARMACY

B.Pharm. Summer 2018-19 Examination

Semester: 3 **Date: 06/05/2019**
Subject Code: 08101202 **Time: 10:00am To 01:00pm**
Subject Name: Pharmaceutical Analysis-I **Total Marks: 75**

Instructions:
1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each) **(20)**

1. What is Neutralization curve? Explain the neutralization curve for the following titrations:
   a) Strong Acid v/s Strong Base b) Weak Acid v/s Weak Base
2. Define Redox Titration. Enlist different types of Redox titration. Discuss in detail about the Diazotization titration.
3. Write a detailed note on Kjeldahl's method.

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each) **(35)**

1. What are the different types of the Error? Describe any three methods of Error minimization.
2. Explain theory of Acid-Base indicator.
3. Write a note on types of Complexometric titration.
4. What is Non-aqueous titration? Discuss leveling Effect and differentiating effect of solvent with example in Non-aqueous titration.
5. Explain Mohr's method for precipitation.
6. Write a note on Oxygen Combustion flask method.
7. Discuss the functions and responsibility of QA and QC.
8. Write a note on Permanganometric titration.
9. Write a note on common ion effect.

Q.3 Answer in short. (2 marks each) **(20)**

1. What is law of mass action?
2. Derive Henderson- Hesselbach equation for finding pH of buffer solution.
3. Why EDTA is used as chelating agent in Complexometric titration?
4. What is Karl Fischer Titration? Give the composition of Karl Fischer Reagent.
5. Differentiate Masking and Demasking agents with suitable example.
6. Comment: Starch Paste indicator should be freshly prepared.
7. Differentiate: Protogenic solvents and Protophilic solvents.
8. Differentiate: Iodimetry titration and Iodometry titration.
9. Explain the types of chemicals.
10. Define Ligands with example.