

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm. Winter 2019-20 Examination

Semester: 3**Subject Code: 08101202****Subject Name: Pharmaceutical Analysis-I****Date: 21/11/2019****Time: 02:00pm to 05:00pm****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. Define buffers. Derive Henderson-hasselbach equation & write about acid base indicators.
2. Enlist types of redox titrations. Write in detail about principles of mercury metry and iodometry.
3. Give the types of neutralization curve and explain in detail with diagram.

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

1. Write about theory of complexometric titrations.
2. Write about kjeldahl method.
3. Write the principle of 2,6-dichlorophenol indophenol titrations.
4. Explain the principle of cerrimetry.
5. What is errors. Explain errors minimization.
6. Write a short note on non aqueous titrants and indicators.
7. Write about biphasic titrations in neutralization titrations.
8. Write a short note on non aqueous solvents.
9. Enlist precipitation titrations and explain any one in detail.

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

1. Explain ionic products of water in neutralization titrations.
2. Write the difference between quality assurance and quality control.
3. Explain law of mass action in neutralization titrations.
4. Give the examples of redox and acid base indicators
5. Write about sampling techniques for solids.
6. Write about calibration of volumetric flasks.
7. Write the principle of volhard's method in precipitation titrations.
8. Write the pharmacopoeial applications of complexometric titrations.
9. Give the examples of complexometric indicators and titrants.
10. Write in brief about gasometric method.