

Code No. 6040 / S

**FACULTY****B. Pharmacy II Year I – Semester (Suppl.) Examination, April 2016****Subject: Pharmaceutical Analysis – I  
(Chemical Analysis)****Time: 3 Hrs****Max.Marks: 70****Note: Answer all questions. All questions carry equal marks.**

- 1 a) Explain abt the calibration and its importance in analysis. 8  
b) Write a note on rejection of doubtful value. 6  
**OR**  
c) Write a note on significant figures and rules for computation. 8  
d) Describe different methods of expressing concentration of standard solution. 6
- 2 a) Define the term pH. Explain abt the hydrolysis of salts. 8  
b) Explain law of mass action and its significance. 6  
**OR**  
c) Explain the neutralization curves for a titration between strong acid and strong base. Comment upon the indicators used. 10  
d) Describe the principle and procedure involved in standardization of 0.1 N HCl. 4
- 3 a) Discuss the general principles of gravimetric analysis. 8  
b) Write an account on the Oxidation – Reduction titrations and their applications in analysis. 6  
**OR**  
c) Discuss about various types of redox indicators with examples. 8  
d) Write a note on organic precipitants used in gravimetry. 6
- 4 a) Discuss the principles of volumetric analysis. 6  
b) Write the principle of complexometric titration. Describe the principle and procedure involved in assay of magnesium sulphate. 8  
**OR**  
c) Explain the preparation and standardization of 0.1 M EDTA solution. 6  
d) Write the principle involved in non-aqueous titration. Explain with examples, what type of pharmaceutical compounds are assayed by non-aqueous titration. 8
- 5 a) What is Avogadro's number and write an account of measurement of moles of elements and compounds. 5  
b) Explain the terms theoretical yield, percentage yield and limiting reactant. 9  
**OR**  
c) Define the terms empirical formula, molecular formula and percentage composition. 8  
d) Find the pH of a solution in which  $[H^+] = 4.0 \times 10^{-5} \text{ mol / dm}^3$ . 6

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