



- Notes :
1. All questions carry equal marks.
 2. Assume suitable data wherever necessary.
 3. Diagrams and Chemical equation should be given wherever necessary.
 4. Discuss the reaction, mechanism wherever necessary.
 5. Que. No. **1** is compulsory and solve **any four** questions from remaining.

1. Solve **any four** questions. **16**
 - a) Why addition of Magnesium is necessary in the calcium determination.
 - b) Explain the primary and secondary standards along with their uses.
 - c) Write the scope and applications of the Pharmaceutical Analysis.
 - d) Give the method for the assay of cearic ammonium sulphate.
 - e) Write a note on conditions of Precipitation.
2. Explain the detection of end point by using visual indicator and instrumental methods in complexometric titrations. **16**
3. Solve the following.
 - a) Discuss in detail about filtration of precipitate in gravimetric analysis. **8**
 - b) Write a note on post precipitation and explain how can we minimize the contamination of precipitate. **8**
4. Give in detail account on solvents properties of solvent and leveling, differentiating affect with examples. **16**
5. Solve the following.
 - a) Explain the theory of oxidation Reduction reaction and give the principle and procedure for potassium permanganate titration. **8**
 - b) Write a note on redox indicators. **8**
6. Discuss in detail the steps involved in gravimetric analysis and Add note on its Applications. **16**
7.
 - a) What is buffer solution. Write its Application in Titrimetric Analysis. **12**
 - b) Write in detail about pH. **4**
