NTK/KW/15/6978

B.Pharm. (Second Semester) (C.B.S.) Examination

PHARMACEUTICAL ANALYSIS—I

Paper—IV

Time—Three Hours] [Full Marks—80

N.B. :— (1) Question No. **1** is compulsory.
(2) Solve any **FOUR** questions from the remaining.
(3) Draw neat labeled diagrams wherever necessary.
(4) Use of electronic calculator is permitted.

1. Solve any **FIVE** of the following :— 20 (4 Marks each)
   (a) Define Normality and Molarity with suitable examples.
   (b) Classify non aqueous solvents with suitable example.
   (c) Define ligands. Classify them with example.
   (d) Give preparation and standardization of EDTA solution.
   (e) Write in short about iodimetry and idometry.
   (f) Write short notes on Redox Indicators with example.
   (g) Write a note on post precipitation.

2. (a) What is gravimetric analysis. Outline various techniques involved in gravimetric analysis. 10
   (b) Discuss Precipitation and Co-precipitation. 5

3. (a) Classify with example types of complexometric titration explain procedures to increase selectivity of complexometric titration. 10
   (b) Enlist factors affecting stability of complexes. Discuss in detail effect of pH. on stability of complexes. 5

4. (a) What is redox equilibrium constant ? Explain redox titration curve. 10
   (b) Write a note on Redox indicators with example. 5

5. (a) What is the theory of Acid-Base titration ? What is common ion effect ? 10
   (b) Write principle and procedure of assay for Boric Acid. 5

6. (a) What are the properties considered during selection of solvent and write in short about different solvents used in non-aqueous titration ? 10
   (b) Write advantages and limitation of Non-aqueous titration. 5

7. (a) Write theory of precipitation titration and explain in brief Volhard method. 10
   (b) Write a note on Errors in analysis. 5