

TKN/KS/16/6978

B. Pharm. Semester-II (C.B.S.) Examination
PHARMACEUTICAL ANALYSIS-I
Paper-IV : 2T4

Time—Three Hours]

[Maximum Marks—80

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

1. Answer any **FIVE** of the following :

- (a) Explain why chloride estimation by Mohr's method need to be performed in neutral media.
- (b) Comment on the use of acetic anhydride in preparation of 0.1 M acetous perchloric acid.
- (c) Explain why aqueous solution of sodium chloride is neutral whereas solution of sodium acetate is basic.

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| <p>(d) Give advantages of ceric ammonium sulphate over other oxidising agent in redox titrations.</p> <p>(e) Explain how aging and digestion helps in obtaining better quality precipitate in gravimetry.</p> <p>(f) Explain the concept of molarity and normality with their relative merits and demerits. 4×5</p> <p>2. What are neutralization indicators ? Give theory of their action and explain theoretical basis for selection of suitable indicators for acid-base titrations. 15</p> <p>3. (a) Give advantages and limitations of non-aqueous titrations and explain alkalimetry in non-aqueous media. 10</p> <p>(b) Define accuracy, precision and error. Give classification of errors with suitable examples. 5</p> <p>4. Classify the redox indicators with suitable examples and explain theory of internal redox indicators. Give the method for preparation, standardization and storage of 0.02 M solution of potassium permanganate. 15</p> | <p>5. What are complexes and chelates ? Describe EDTA as a titrant in complexometry. Elaborate the ways and means of improving selectivity of complexometric titrations and explain how will you determine aluminium and magnesium present in admixture. 15</p> <p>6. What is gravimetry ? Give its merits and demerits. Explain co-precipitation and post-precipitation of impurities and their minimisation in gravimetric analysis. Add a note on gravimetric assay of piperazine salts. 15</p> <p>7. Explain the theory of adsorption indicators and give their examples with conditions of their use. Add a note on preparation and standardisation of 0.1 M silver nitrate solution. 15</p> |
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