Total No. of Questions :5] *[Total No. of Printed Pages :2*

Roll No.....

PY-403

B.Pharmacy IV Semester

Examination, December 2016

Pharmaceutical Analysis - I

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each question are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) What is Ohm's law?
   b) What is Nernst equation?
   c) What is the difference between reference and indicator electrode?
   d) Explain the design and working of calomel electrode.

   OR

   Explain the design and working of hydrogen electrode.

2. a) What is half wave potential?
   b) What is diffusion current?
   c) What are the advantages of dropping mercury electrode?
   d) Discuss the principle of polarography with description of dropping mercury electrode assembly.

   OR

   Discuss the principle and applications of conductometric titration.

3. a) Explain the equivalence point of a acid base titration.
   b) Why Phenolpthalein changes its colour with change of pH?
   c) Enlist three acid base indictors with their pH range.
   d) Describe pM indicators.

   OR

   Write a short note on Volhard's method.

4. a) What is the principle of Mohr's method?
   b) Enlist the solvents used in non-aqueous titration.
   c) Describe three redox indictors.
   d) Discuss the preparation and standardization of 0.1M Potassium Permanganate solution.

   OR

   Discuss diazotization titration.

5. a) Compare Iodometry with Iodimetry.
   b) Enumerate various factors affecting Complexometric titration.
   c) Discuss the principle of gravimetric titration.
   d) Discuss the neutralization curve of titration between 0.1 M HCL with 0.1 M NaOH solution.

   OR

   Discuss the scope and limitations of Non-aqueous titration.

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