

SUBJECT : PHARMACEUTICAL ANALYSIS - II

Day : Thursday  
Date : 02/05/2019

S-201 9-4390

Time : 02.00 PM TO 05.00 PM  
Max. Marks : 60

**N. B. :**

- 1) Question No – 1 and 5 are **COMPULSORY**. Out of remaining questions attempt **any Two** from section - I and **any Two** questions from section - II
- 2) Answers to both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

**SECTION - I**

- Q.1** Attempt **ANY FIVE** of the following: (10)
- a) Write Ilkovic equation and enlist factors affecting it
  - b) Give advantages of use of mercury in DME
  - c) How is calibration of potentiometer done?
  - d) Enlist applications of Amperometry
  - e) Why are residual currents produced in polarography?
  - f) Explain the significance of decomposition potential
- Q.2** a) Explain in detail various types of Coulometry with instrumentation and applications (10)
- Q.3** a) Classify electrodes in Potentiometry and give detailed account of pH glass electrode (7)
- b) Enlist applications of pHmetry (3)
- Q.4** Write short notes on **ANY TWO** of the following: (10)
- a) Principle involved in Amperometric titration
  - b) Pulse Polarography
  - c) Gas sensing probes in Potentiometry

**SECTION - II**

- Q.5** Attempt **ANY FIVE** of the following: (10)
- a) Write applications of Polarimetry
  - b) What is plane polarized light? What are its types?
  - c) With what and how is calibration of refractometer performed?
  - d) Explain the term optical activity and factors affecting it
  - e) What are various types of contaminants in gravimetric analysis
  - f) Explain the term half shade effect in polarimetry
- Q.6** a) Write in detail applications of Conductometry (7)
- b) Give various types of conductivity cells (3)
- Q.7** a) Explain all the operations in gravimetry (10)
- Q.8** Write short notes on **ANY TWO** of the following: (10)
- a) CD and ORD
  - b) Types of refractometers
  - c) Gasometry