

S.Y.B.PHARM. SEMESTER-IV (CBCS - 2015 COURSE) :

WINTER - 2017

SUBJECT : PHARMACEUTICAL ANALYSIS-II

Day : **Tuesday**
Date : **14/11/2017**

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

W-2017-3796

N.B.:

- 1) Q. No. 1 and Q. No. 5 are **COMPULSORY**, out of remaining attempt any **TWO** questions from Section-I and any **TWO** questions from Section-II.
- 2) 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 role of supporting electrolyte in Polarography.
 - b) Write about coulometric cell.
 - c) Write the composition of buffers used in calibration of potentiometer.
 - d) How to detect end point in potentiometry?
 - e) How end point is detected by coulometric analysis.
 - f) State Ilkovic equation.
- Q.2** a) Write principle involved in amperometry. Discuss about amperometric titrations. (07)
- b) Write merit and demerits of instrumental methods of analysis. (03)
- Q.3** a) Draw a neat diagram of DME and explain its functioning. Discuss advantages and disadvantages of DME. (07)
- b) Classify electrodes used in potentiometry. (03)
- Q.4** Write short note on any **TWO** of the following: (10)
- a) Constant potential coulometry
 - b) Calomel electrode
 - c) Potentiometric titrations.

SECTION-II

- Q.5** Attempt any **FIVE** of the following: (10)
- a) What is cell constant? State its significance.
 - b) State factors affecting R.I.
 - c) Write about solvents used in washing of precipitate.
 - d) Difference between high frequency titrimetry and conductometry.
 - e) Define Molar and Specific refraction.
 - f) Write about principle involved in gasometric assay of CO₂.
- Q.6** a) Discuss the theory and application of conductometry. (07)
- b) Write applications of polarimetry. (03)
- Q.7** a) Classify types of refractometers. Explain working of Abbe's refractometer. (07)
- b) How ORD and CD are the useful parameters for structural determination of compounds. (03)
- Q.8** Write short note on any **TWO** of the following: (10)
- a) Conductometric Titrations
 - b) Oxygen Combustion flask
 - c) Unit operations in Gravimetry.

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