

www.FirstRanker.com

www.FirstRanker.com

## TKN/KS/16/6989

B.Pharm. Semester–IV (C.B.S.) Examination PHARMACEUTICAL ANALYSIS–II (Electro–Analytical and Physical Methods) Paper—3 (4T3)

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 diagram wherever necessary.
  - (4) Use of electronic calculator is permitted.
  - (5) Assume suitable data wherever necessary.
- 1. Solve any **FIVE** of the following :
  - (a) What are the advantages of conductometric titration over normal titration method ?
  - (b) Draw neat and well labelled diagram of Abbe's refractometer.
  - (c) What do you mean by dead stop titration ?

MXP—N—3717 1

Contd.



FirstRanker.com

## www.FirstRanker.com

## www.FirstRanker.com

- (d) State applications of DSC.
- (e) How will you determine the end point of zero order potentiometric titration curve ?
- (f) Define specific conductance, equivalent conductance, molecular conductance and cell constant.
- (g) What is half wave potential ? Write significance of it. 20
- What do you mean by thermal methods of analysis ? Explain types, instrumentation, factors affecting and applications of Thermogravimetry.
- (a) Draw neat and well labelled diagram of Dropping Mercury Electrode. Write pharmaceutical applications of polarography.
  - (b) Explain various types of amperometric titrations with suitable examples. 7
- 4. (a) Write in short about various factors affecting angle of rotation. 7
  - (b) Explain instrumentation, working and pharmaceutical applications of polarimetry. 8
- (a) What is reference and indicator electrode ? Explain with suitable diagram any two reference electrode.
  - (b) Add note on Ion Selective Electrode.
- MXP—N—3717 2

- 6. (a) Write principle, instrumentation and pharmaceutical applications of DTA. 7
  - (b) What is Coulometry ? What are its various types ? Describe its principle and instrumentation. 8
- 7. Write short notes on any THREE of the following :
  - (a) Electrogravimetry
  - (b) Pulse polarography
  - (c) High frequency titration
  - (d) Conductometer
  - (e) Optical rotatory dispersion. 15

3

www.FirstRanker.com

MXP-N-3717

7

Contd.