



**M-1612040701040400** Seat No. \_\_\_\_\_

**M. P. M. (Sem. IV) (CBCS) Examination**

**May / June - 2018**

**Pharmaceutical Analysis - II**

Time : 3 Hours]

[Total Marks : 80

- Instructions :** (1) Figure to the right indicate marks.  
(2) Answers any three questions from each section question one and question five are compulsory.  
(3) Draw neat and clean diagram when required.

**SECTION - I**

- 1** Answer the following questions : (Any **Seven**) **14**
- (a) What is Signal to noise ratio?
  - (b) Define: HETP
  - (c) Classify Thermo analytical methods
  - (d) Write Ilkovic Equation.
  - (e) What is the validation?
  - (f) Define: Standard reduction potentials.
  - (g) What is half wave potential?
  - (h) Define : Retention time
  - (i) Enumerate the type of Chromatography.
  - (j) Define  $R_f$  and  $R_x$  value. Explain its significance.
- 2** Answer the following questions :
- (A) Discuss : Glass electrode **7**
  - (B) Discuss: Types of Amperometric titration. **6**
- 3** Answer the following question :
- (A) Explain : Polarimeter **7**
  - (B) Write a note on DME **6**

- 4 Answer the following questions :
- (A) Discuss Differential scanning calorimetry in detail. 7
- (B) Write a short note on Paper chromatography with application. 6

## SECTION - II

- 5 Answer any two out of three : 14
- (A) Give advantage and disadvantage of Instrumental method.
- (B) Explain method for the separation of drugs in multicomponent system.
- (C) Explain methods of detecting end point in potentiometric titration.
- 6 Answer the following questions :
- (A) Explain: Reference electrodes for Potentiometric titration. 7
- (B) Explain : Dip type and Jar type conductivity cell 6
- 7 Answer the following questions :
- (A) Discuss the Rate and Plate theory in chromatography. 7
- (B) Write about Oxygen combustion flask method. 6
- 8 Answer the following questions :
- (A) Explain differential pulse polarography and stripping voltametry. 7
- (B) What is the conductance? Explain factor affecting the conductance. 6