



PBA-1612040701040400 Seat No. _____

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

November / December - 2018

Pharmaceutical Analysis - II

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Answer and tie up both the sections separately.
 - (2) Figures to the right indicate marks.
 - (3) Answer the three (03) questions from each section.
 - (4) Question one (01) and question five (05) are compulsory.
 - (5) Draw neat and clean diagrams as required.

SECTION - I

- 1** Answer the following question : (any **seven**) **14**
- (a) How simple analysis is different from instrumental analysis ?
 - (b) What is the need of validation ?
 - (c) What do you mean by s/n ratio ? What is its important ?
 - (d) Which are the different types of glassware used for analysis ?
 - (e) Retention time is indicative of which parameter ?
 - (f) What is the main application of chromatography ?
 - (g) What is the difference between HPLC and Rp-HPLC ?
 - (h) What is the use and full form of DME ?
 - (i) Conductance and resistance measured in which unit ?
 - (j) Why in many analysis, extraction is performed ?
- 2** Answer the following questions :
- (a) How validation is important for any pharmaceutical instrument or processes ? Discuss with their advantages. **7**
 - (b) What are the advantages of instrumental method of analysis over conventional method of analysis ? Discuss. **6**

- 3 Answer the following questions :
- (a) Define and classify chromatography. Discuss the mechanism of separation for each chromatographic technique. 7
- (b) Write a note on Polarimetry. 6
- 4 Answer the following questions :
- (a) How electro analytical technique is different from chromatographic method ? Discuss advantages and disadvantages of electro analytical technique. 7
- (b) Discuss various current of polarography. 6

SECTION - II

- 5 Answer the following questions : (any two) 14
- (a) Differentiate : Column and thin layer chromatography.
- (b) Discuss the theories of chromatography.
- (c) Write an informative note : Oxygen flask combustion method.
- 6 Answer the following questions :
- (a) Define conductance and specific conductance. Draw a labelled diagram of conductivity cell. 7
- (b) Discuss : Amperometric titrations. 6
- 7 Answer the following questions :
- (a) What is the difference between pH and potential ? Enlist primary and secondary electrode and give advantages of primary electrodes. 7
- (b) Discuss the electrode used in pH meter with their advantages and disadvantages. 6
- 8 Answer the following questions :
- (a) Discuss the principle of polarography. Enlist its advantages and disadvantages. 7
- (b) Discuss various extraction techniques with their applications. 6