



MV-014-003105

Seat No. _____

M. P. M. (Sem. I) (CBCS) Examination

January - 2018

Pharmaceutical Analysis - I (BP - 103)

Faculty Code : 014

Subject Code : 003105

Time : **3** Hours]

[Total Marks : **80**

- Instructions :**
- (1) Figures 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) Comment: Solution of Salt (derived from strong base and weak acid) will be basic.
 - b) Comment : Phenolphthalein remains colourless at acidic pH and gives pink colour at basic pH.
 - c) Explain : Oxidising and reducing agent with example.
 - d) Define Accuracy and Precision.
 - e) What is pM indicator ?
 - f) Comment : Acetic acid is a amphiprotic solvent.
 - g) Composition of Karl Fischer reagent
 - h) Classify ligand with example.
- 2** Answer the following questions :
- a) Discuss types of solvent in Non aqueous titration. **7**
 - b) List out indicators used in redox titration. **6**
What is self indicator ? Discuss KMnO_4 as a self indicator in redox titration.

- 3** Answer the following question :
- a) Explain: Neutralization curve of Strong acid with strong base titration. **7**
 - b) Describe diazotization nitrite titration. **6**
- 4** Answer the following questions :
- a) Discuss Karl Fischer Titration. **7**
 - b) What do you mean by differentiating and levelling solvents ? Explain with example. **6**

SECTION - II

- 5** Answer any two out of three : **14**
- a) Short note on Complexometric titration
 - b) Discuss : Principle with reaction involved in Mohr's method.
 - c) Discuss Kjeldahl method.
- 6** Answer the following questions :
- a) Define pH and Derive Henderson - Hasselbach equation for acid and base. **7**
 - b) Discuss: Theory of acid - base indicators. **6**
- 7** Answer the following questions :
- a) Discuss Theories of Acid - Base. **7**
 - b) Discuss importance of quality assurance and quality control in formulation analysis. **6**
- 8** Answer the following questions :
- a) Write a note on Gravimetric Analysis. **7**
 - b) What is pharmaceutical analysis? Give its application. **6**