P-014-1041003 Seat No. _____

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

July – 2018

BP-102 : Pharmaceutical Analysis - I

Faculty Code : 014
Subject Code : 1041003

Time : **3** Hours] [Total Marks : **75**

Instruction :

(1) Figure to the right indicates marks.

(2) Draw neat and clean diagrams as required.

1 Answer the following questions : **10×2=20**

(a) What is qualitative and quantitative analysis ?

(b) What is the difference between normality and molality ?

(c) How primary standard substances are differ from secondary standard substance ?

(d) What do you mean by titer and titrant ?

(e) How aqueous and non aqueous titrations are different from each other ?

(f) Which indicators are used in precipitation titration and why ?

(g) Mordant black II and Eriochrome indicators are used in which type of titrations ?

(h) What do you understand by co-precipitation ?

(i) What is the common principle of polarography ?

(j) Briefly discuss electrode used in DME.

2 Answer any two out of the following questions : **2×10=20**

(a) Which types of substances are needed to be standardized? Discuss the importance of standaization in volumetric titration. Give the standardization procedure for 0.1 N NaOH solution.

(b) Discuss the principle of complexometric titration and their pharmaceutical applications. Briefly discuss about metal ion indicators.

(c) Explain the principle and analytical steps involved in gravimetric analysis.

3 Answer any seven out the following questions. **7×5=35**

(a) What is the difference between back and blank determination? Give any four examples of secondary standard substances and enlist the characteristics of secondary standard substances.

(b) Explain the principle of redox titration. Discuss briefly about titration involving potassium iodate and Cerimetry method of titration.

(c) Classify electro analytical technique. Discuss construction and working of glass electrode.

(d) What is precipitation titration? Discuss its principle and pharmaceutical applications.

(e) How error affecting the pharmaceutical analysis? Discuss with suitable example.

(f) Discuss theories of acid base indicators.

(g) Discuss the principle, construction and working of dropping mercury electrode.

(h) Enlist primary and secondary electrodes and explain the role of primary and secondary electrode in electro analytical technique.

(i) Write an informative note on methods of expressing concentration.

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