Code No. 4215

FACULTY

B. Pharmacy 2/4 I Semester (Suppl.) Examination, April 2017

Subject : Pharmaceutical Analysis – I (Chemical Analysis)

Time : 3 Hrs **Max. Marks: 70**

Note: Answer all questions. All questions carry equal marks.

1 (a) Define primary and secondary standards with suitable examples. (2)
(b) Discuss the ideal requirements of primary standard substances. (6)
(c) Explain the terms specificity, sensitivity and standard deviation. (6)

OR

(d) Define Normality and molarity. (2)
(e) Explain the calibration of analytical equipment and its importance in pharmaceutical analysis. (12)

2 (a) What is Acidimetry and Alkalimetry? (2)
(b) Explain the neutralization curve for a titration between weak and stron base. (8)
(c) Define the followin terms:
(i) pH (ii) Buffer solution (iii) Buffer action (iv) Buffer capacity (4)

OR

(d) Discuss the theory of indicators. (6)
(e) Explain the hydrolysis of salts and write the equations used to calculate the pH of different salt solutions. (8)

3 (a) Describe the procedure for preparation and standardization of 0.02 M potassium permananate. (8)
(b) What are oranic precipitants ? Explain the use of oranic precipitation in ravimetric analysis. (6)

OR

(c) Describe varis types of indicators used in redox titrations. (6)
(d) Discuss the principle and different steps involved in ravimetry. (8)

4 (a) Explain the principle involved in non aques titrations and discuss varis types of solvents used in non aques titrations. (7)
(b) Discuss the principle and procedure involved in estimation of calcium luconate by complexometry. (7)

OR

(c) Discuss the principles of as analysis. (8)
(d) Write a note on complexometric indicators. (6)

5 (a) Describe the mole concept and avoadro's number. (6)
(b) Explain the stoichiometry of ionic equations with suitable examples. (4)
(c) How do y calculate theoretical yield and percentae yield ? Explain with an example. (4)

OR

(d) Balance the followin chemical equations: (8)
(i) $NaOH + H_2SO_4 \rightarrow Na_2SO_4 + H_2O$
(ii) $BaCl_2 + NaOH \rightarrow Ba(OH)_2 + NaCl$
(iii) $_{H2SO4} + FeCl_3 \rightarrow Fe(SO_4)_3 + HCl$
(iv) $Na_2SO_3 + HCl \rightarrow NaCl + H_2SO_3$
(e) Define the terms empirical formula, molecular formula and percentae composition. (6)

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