QUESTION BANK OF PHARMACEUTICAL ANALYSIS-I (RPH104)

UNIT-I

SHORT QUESTION

Q1) Define Normality.

Q2) Define Molarity

Q3) Define quantitative and qualitative analysis

LONG QUESTION

Q1) Explain the term precision and accuracy with suitable example >.

Q2) What are errors encountered in titrimetric analysis ? How will you minimize them ?

Q3) What is the aim of quantitative analysis ? Discuss the significance of quantitative analysis ?

UNIT –II

SHORT QUESTIONS

Q1) Give Bronsted and Lewis concept of acid and base

Q2) What is pH ?

Q3) What is pOH ?

Q4) What is Common ion effect ?

Q5) Define Buffer .

Q6) Define ionic product of water.

Q7)What is indicator?

LONG QUESTIONS

Q1) Derive the equation used for the calculation of pH of buffer solution

Q2) What is an indicator ? Discuss the theories of indicator of indicator action with example .

Q3) What is titration curve ? Construct a typical such curve for the titration of strong acid and strong base.

Q4) Derive the equation used for the calculation of pH of Buffer Solution

Q5) What is buffer and Buffer capacity ? Mention the mechanism of acidic buffer ?

Q6) What is law of mass action and chemical equilibrium ?

UNIT –IV

SHORT ANSWER

Q1) Discuss concept of oxidation and reduction ?

Q2) Give example of redox indicator

Q3) What is Nernst equation ?

Q4) What is oxidation number of Mn in KMnO4

LONG ANSWER

Q1) Explain oxidation reduction curve ?

Q2) Write a note on redox indicator .

Q3) How will you prepare and standardize 0.01 M iodine solution ?

Q4) Discuss the redox theory of titration with example .

Q5) Write a short note on iodometry and iodimetry.

Unit –II

SHORT QUESTION

Q1) Explain the term precipitation .

Q2) Name two adsorption indicator.

Q3) What are the types of precipitation titration ?

Q4) "In Modified Volhard method Nitrobenzene is used ". Explain

Q5) What is self indicator?

LONG QUESTION

Q1) Define precipitation . Enlist different methods or precipitation titration and explain Mohr's method in detail

Q2) Give the theoretical and practical details for the estimation of halides by Volhard's method

Q3) Discuss the Fajan's method used for precipitation titration

Q4) How will you estimate halides by direct Argentometric titration . Discuss theoretical and practical details.

COMPLEXOMETRIC TITRATION

SHORT ANSWERS

Q1) What is complexing agent ?

Q2) What is Ligand ?

Q3) What is Werners co-ordination number ? What is its significance ?

Q4) What is EDTA ?

Q5) What is pMindicator ?

Q6) What is the relationship between pM and pH ?

Q7) What is masking agent ?

Q8) What is masking agent ?

Q9) What is the need of maintaining pH in complexometric titration ?

Q10) What is complexometric titration ?

LONG ANSWERS

Q1) Write down the detailed note on indicators used in complexometric titaration ?

Q2) Explain in detail the stability and factors affecting the stability of complexes ?

Q3) What are the types of complexometric titration with suitable example ?

Q4) How will you prepare and standardize 0.05M disodium edetate ?

Q5) Write down the pricnciple involved and pharmaceutical applications of complexometric titration?

UNIT-V

DIAZOTISATION TITRATION

SHORT QUESTIONS

Q1) What is diazotization titration ?

Q2) Which class of drugs can be titrated by diazotization titration ?

Q3) What are the method of determining end point in diazotization titration ?

Q4) How does a starch iodide paper work as an indicator ?

LONG QUESTIONS

Q1) Write down the principle and application of diazotization titration ?

Q2) How will you prepare and standardize 0.5 M sodium nitrite ?

KJELDAHL METHOD

SHORT QUESTION

Q1) What are the methods of estimation of nitrogen in the given sample ?

LONG QUESTION

Q1) Give the basic principle and procedure involved in the estimation of nitrogen ?

KARL FISCHER TITRATION / RADIOIMMUNOASSAY

SHORT QUESTION

Q1) What are the method used in Karl Fischer titration ?

Q2) Which method is used for the estimation of moisture content in the given sample ?

Q3) What is radiolabelledantigen ?

LONG QUESTIONS

Q1) What is the principle and metod for dterming the moisture content in the given sample?

Q2) Write a detailed note on Radioimmunoassay ?

Q3) Write a detailed note on ELISA?