

Q.1. In Potentiometric titrations, reference electrode used is

- a) Noble metal electrode                      b) Dropping mercury electrode  
c) Saturated calomel electrode              d) platinum electrode

Q.2. Ag/AgCl electrode used in potentiometric titrations consists of

- a) Silver wire coated with AgCl    b) Ag wire coated with KCl  
c) Ag wire coated with AgCl & dipped into solution of KCl              d) All of the these

Q.3. Unit of specific conductance is

- a)  $Ohms^{-1}$               b)  $Ohms/ Cm$               c)  $mhos$               d)  $mhos. cm$

Q.4. As the degree of dilution increases, the specific conductance

- a) Decreases                      b) Increases                      c) remains unaffected                      d) None of these

Q.5. Polarographic technique is based on measurement of

- a) Potential difference    b) resistance                      c) Temperature change                      d) Conductivity

Q.6. Most widely used indicator electrode in polarography is

- a) Saturated Calomel electrode    b) Dropping mercury electrode  
c) Pool of mercury    d) None of these

Q.7. Different kinds of current that contributes to polarographic waves are

- a) Residual current                      b) Migration current                      c) Diffusion current                      d) All of these

Q.8. Which of the following drug is assayed by complexometric titration

- a) Acetazolamide                      b) Amantadine                      c) Aspirin                      d) Calcium gluconate

Q.9. All the following drugs are assayed by non aqueous titrations except

- a) Chlordiazepoxide    b) Chlorpheniramine maleate    c) Codeine phosphate    d) Calcium levulinate

Q.10. The titrant used for complexometric titration of Magnesium trisilicate is

- a) 0.05M  $Na_2EDTA$     b) 0.1M  $Na_2EDTA$     c) 0.1M NaOH                      d) 0.1M  $HClO_4$

Q.11. Aromatic amines can be estimated by

- a) Karl fisher titration                      b) Diazotization                      c) Both a& b                      d) None of these

Q.12. Thioglycerol is used to mask \_\_\_\_\_ by precipitation in assay of lotions containing Cu & Zn.



- c) 150°C to 600°C      d) 600°C to 2000°C
33. Which conc. of  $K_2CrO_4$  sol. is used as indicator in Mohr's method      a) 0.003-0.005 M      b) 0.03-0.05
- c) 0.0003-0.0005      d) Any of these
34. In iodometry, standard iodine solution is used.      T/F
35. Hydrolysis of salt of strong acid and strong base results into neutral solution.      T/F
36. . Process of dispersing an insoluble material into a liquid as a colloid is called peptization T/F
37. Colloidal particles are assumed to be composed of electrical double layer. T/F
38. dilute  $NH_4NO_3$  solution is used for washing of  $Fe(OH)_3$  T/F
39. Calculate the Gravimetric factor of P in  $Ag_3PO_4$  atomic wt. of P= 30.97,      FW of  $Ag_3PO_4$  : 711.22
40. Chloral hydrate is used as demasking agent to damask Zn & Cd.
41. Permanent deflection in galvanometer due to flow of current is called as dead stop end point.
42. Ring size of chelates does not have any influence on stability of complex.
43. 5-6 membered ringed complexes are not stable.
44. Diazotization titrations are also called as sodium nitrite titrations.
45. Primary aromatic amines can be assayed by sodium nitrite titrations.
46. Barbiturate is an example of too weakly acidic drug.
47. Too weakly acidic or too weakly basic drugs give sharp end points.
48. Acetone is an example of Protogenic solvent.
49. Acetic acid is an example of amphiprotic solvent.
50. Non-aqueous solvents have greater coefficient of expansion than water.
51. Weakly acidic drugs can be estimated by Non aqueous titrations using sodium methoxide as titrant.

Q.1. Write a note on Non-aqueous Solvents.

Q.2. Write the procedure and principle involved the standardization of perchloric acid by non-aqueous titration.

Q.3. What are Complexometric titrations? Explain Masking and demasking agents.

Q.4. Classify various complexometric methods of estimation. Explain them with examples.

1. Explain theories of acid-base indicator.
2. Classify errors. Enlist methods to minimize the errors.
3. Derive the equation for Handerson-Hasselbach for weak acid & its salt.
4. Discuss the salt hydrolysis of a) strong acid & strong base      b) Weak acid & strong base.
5. Write a note on primary and secondary standards.

