

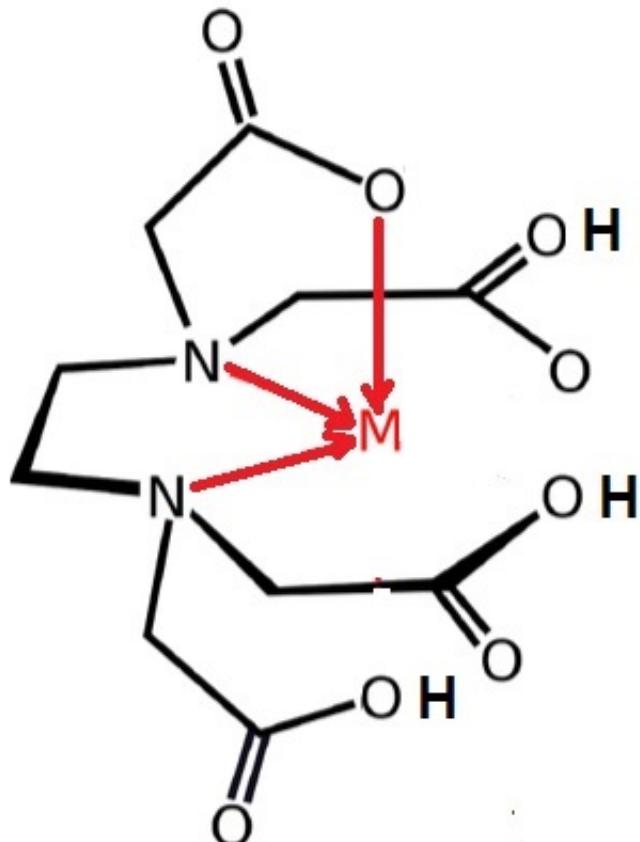
قائمة الأسئلة

الكيمياء التحليلية الصيدلانية 1-مستوى ثانى علوم صيدلانية-درجة الامتحان 75 درجة

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- 1) Complexometric formation titration involves:
- 1) - (a) Acid base substances.
 - 2) - (b) Precipitating agent.
 - 3) + (c) Complexing agent.
 - 4) - (d) All the mentioned.
- 2) In complexometry:
- 1) - (a) Double bonds are formed only.
 - 2) - (b) Hydrogen bonds only.
 - 3) + (c) Coordinated bonds are formed.
 - 4) - (d) All the mentioned.
- 3) Administration of tetracycline and milk leading to:
- 1) - (a) Acid base reaction.
 - 2) - (b) Precipitation reaction.
 - 3) + (c) Complexation reaction.
 - 4) - (d) All the mentioned.
- 4) The complex in the figure , according to the complexing agent can be called

Q4.



- 1) - (a) Monodentate.





- 2) + (b) Tri-dentate complex.
3) - (c) Tri-nuclear complex.
4) - (d) All the mentioned.
- 5) One of the following types of indicators used in detection of the end point in complexometry
1) - (a) Coloring indicators.
2) - (b) Adsorptive indicators.
3) + (c) Metallochromic indicators.
4) - (d) All the mentioned.
- 6) When EDTA used in complexometry:
1) - (a) The end point depends on pH.
2) - (b) The end point depends on EDTA volume.
3) - (c) The titration curve between EDTA volume and the p Metal.
4) + (d) All the mentioned.
- 7) EDTA is
1) - (a) Selective complexing agent.
2) + (b) Non-selective complexing agent.
3) - (c) (a&b).
4) - (d) None of the mentioned.
- 8) During analysis of water hardness due to Ca+2 and Mg +2, total hardness at pH
1) + (a) 10.
2) - (b) 12.
3) - (c) Neutral.
4) - (d) All the mentioned.
- 9) During analysis of water hardness due to (Ca+2 and Mg +2), Ca +2 hardness is determined at pH
1) - (a) 10.
2) + (b) 12.
3) - (c) Neutral.
4) - (d) All the mentioned.
- 10) To improve selectivity of EDTA during complexometry ,we can
1) - (a) Adjust the pH.
2) - (b) Add masking agent.
3) + (c) (a&b).
4) - (d) None of the mentioned.
- 11) Calcium gluconate and magnesium salt can be analyzed and determined using
1) - (a) Acid- base titration.
2) - (b) Precipitation titration.
3) + (c) Complex formation titration.
4) - (d) All the mentioned.
- 12) One of the following types of indicators used in detection of the end point in precipitation titration
1) - (a) Coloring indicators.
2) - (b) Metallochromic indicators.
3) - (c) Complex formation indicators..
4) + (d) (a&c).
- 13) Precipitation of a precipitate is formed when the concentration product of the reactants of the precipitate is
1) + (a) $\geq K_{sp}$ ppt value.
2) - (b) $\leq K_{sp}$ ppt value.
3) - (c) $> K_{sp}$ ppt value.
4) - (d) All the mentioned.
- 14) In precipitation titration , we use





- 1) - (a) Acid - base.
2) - (b) Complexing agents.
3) + (c) Precipitating agent.
4) - (d) All the mentioned.
- 15) When we use Ag as precipitating agent , this method is called
1) - (a) Complexometry.
2) + (b) Argentometry.
3) - (c) Iodometry.
4) - (d) All the mentioned.
- 16) The titration curve of precipitation titration is a plot between
1) - (a) pH and the titrant volume.
2) + (b) p sample and titrant volume.
3) - (c) p metal and EDTA volume.
4) - (d) All the mentioned.
- 17) In Mohr's method, one of the following indicators is used:
1) - (a) Adsorptive indicators as Eosin.
2) - (b) Complex formation indicator as ferric ammonium sulphate.
3) + (c) Coloring indicator as KMnO₄.
4) - (d) All the mentioned.
- 18) In Volhard's method , one of the following indicators is used:
1) - (a) Adsorptive indicators as Eosin.
2) + (b) Complex formation indicator as ferric ammonium sulphate.
3) - (c) Coloring indicator as KMnO₄.
4) - (d) All the mentioned.
- 19) In Fajan's method, one of the following indicators is used:
1) + (a) Adsorptive indicators as Eosin.
2) - (b) Complex formation indicator as ferric ammonium sulphate.
3) - (c) Coloring indicator as KMnO₄.
4) - (d) All the mentioned.
- 20) One of the following methods is a non-direct (back or indirect) titration method:
1) - (a) Mohr's method.
2) + (b) Volhard's method.
3) - (c) Fajan's method.
4) - (d) All the mentioned.
- 21) When you have (Cl⁻ , Br⁻ and I⁻) sample mixture , you will have:
1) - (a) One end point.
2) - (b) Two end points.
3) + (c) Three end points.
4) - (d) None of the mentioned.
- 22) If you know that $K_{sp} \text{AgCl} = 1 \times 10^{-6} \text{ M}$, $K_{sp} \text{AgBr} = 1 \times 10^{-3} \text{ M}$ and $K_{sp} \text{AgI} = 1 \times 10^{-8} \text{ M}$, the precipitation order as follow
1) + (a) I⁻ then Cl⁻ and finally Br⁻.
2) - (b) Cl⁻ then I⁻ and finally Br⁻.
3) - (c) Br⁻ then Cl⁻ and finally I⁻.
4) - (d) All the mentioned.
- 23) If you know that $K_{sp} \text{AgCl} = 1 \times 10^{-6} \text{ M}$, $[\text{Cl}^-] = 1 \times 10^{-2} \text{ M}$ and $[\text{Ag}^+] = 1 \times 10^{-3} \text{ M}$,so
1) - (a) AgCl is precipitated .
2) + (b) AgCl is not precipitated.
3) - (c) (a&b).





- 4) - (d) None of the mentioned.
- 24) Adsorption process meaning:
1) + (a) Adhesion of a substance molecules on the surfaces of another substance.
2) - (b) A penetration of a substance molecules into another substance molecules.
3) - (c) (a&b).
4) - (d) None of the mentioned.
- 25) The most accurate and recent precipitation method is:
1) - (a) Mohr's method.
2) - (b) Volhard's method.
3) + (c) Fajan's method.
4) - (d) All the mentioned.
- 26) Thiamine chloride can be determined using:
1) - (a) Acid base titration.
2) + (b) Precipitation titration.
3) - (c) Complex formation titration.
4) - (d) All the mentioned.
- 27) Silver nitrate (external antiseptic) can be analysed using
1) - (a) Acid base titration.
2) + (b) Precipitation titration.
3) - (c) Complex formation titration.
4) - (d) All the mentioned.
- 28) From applications of precipitation titration:
1) - (a) Determination of HCl.
2) - (b) Determination of Calcium.
3) + (c) Determination of Normal saline solutions.
4) - (d) All the mentioned.
- 29) The indicators always play important role in detection of the end point :
1) - (a) Before end point.
2) + (b) At the end point.
3) - (c) After end point.
4) - (d) None of the mentioned.
- 30) An example of metallochromic indicator:
1) - (a) Methyl orange.
2) - (b) Eosine.
3) - (c) Phenolphthalein.
4) + (d) Eriochrome black T.
- 31) In pharmaceutical analysis we carry out standard test in order to:
1) - (a) Reduce errors.
2) - (b) To calculate sample concentration.
3) - (c) To compare between standard and sample result.
4) + (d) (b&c).
- 32) Residual back titration can be done when , the sample acidity and alkalinity is weak:
1) + (a) True.
2) - (b) False.
- 33) In Residual back titration :
1) - (a) One standard solution used only.
2) + (b) Two standard solutions can be used.
3) - (c) Three standard solutions can be used.
4) - (d) None of the mentioned.





- 34) In Residual back titration of NH₄Cl , we use:
1) - (a) The first standard solution is HCl and in burette we use the second standard solution of NaOH.
2) + (b) The first standard solution is NaOH and in burette we use the second standard solution of HCl.
3) - (c) (a&b).
4) - (d) None of the mentioned.
- 35) We can use non-aqueous acid base titration , when:
1) - (a) The sample soluble in water.
2) - (b) The sample insoluble in water.
3) - (c) The ionization constant of the sample in water 1×10^{-8} .
4) + (d) (b&c).
- 36) One of the following can be determined using non-aqueous acid base titration:
1) - (a) HCl.
2) - (b) NaOH.
3) + (c) Phenobarbitone.
4) - (d) None of the mentioned.
- 37) In determination of aniline ,we can use:
1) - (a) Precipitation titration.
2) - (b) Complexometry.
3) - (c) Argentometry.
4) + (d) Non-aqueous acid base titration.
- 38) Protophilic solvents are:
1) - (a) Acidic in nature.
2) - (b) Basic in nature.
3) - (c) Have tendency to accept proton.
4) + (d) (b&c).
- 39) Aprotic solvents are:
1) - (a) Have not H⁺.
2) - (b) As CCl₄.
3) - (c) Non-aqueous solvents.
4) + (d) All the mentioned.
- 40) The solvents in non-aqueous titrations used as media only and not enter in the reaction:
1) + (a) True.
2) - (b) False.
- 41) Acid base titration curve is a plot between:
1) + (a) pH and titrant volume.
2) - (b) p sample and titrant volume.
3) - (c) p metal and EDTA volume.
4) - (d) All the mentioned.
- 42) One of the following indicators used in acid-base titration:
1) - (a) Adsorptive indicators as Eosin.
2) - (b) Complex formation indicator as ferric ammonium sulphate.
3) + (c) Coloring indicator as methyl orange.
4) - (d) All the mentioned.
- 43) Acetyl salicylic acid can be determined by:
1) - (a) Precipitation titration.
2) - (b) Complexometry.
3) + (c) Acid base titration.
4) - (d) All the mentioned.
- 44) When you titrate H₂SO₄ with NaOH , you have





- 1) - (a) One end point.
2) + (b) Two end points.
3) - (c) Three end points.
4) - (d) None of the mentioned.
- 45) When acetyl salicylic acid is used with vitamin C (Ascorbic acid) ,this leading to:
1) + (a) Increased drug absorption and decreased drug excretion.
2) - (b) Decreased drug absorption and increased drug excretion.
3) - (c) The ionized form is more than the unionized form of the drug.
4) - (d) All the mentioned.
- 46) Most of basic drugs absorbed highly from:
1) - (a) The stomach.
2) + (b) The intestine.
3) - (c) Blood brain barrier.
4) - (d) All the mentioned.
- 47) Most of acidic drugs absorbed highly from:
1) + (a) The stomach.
2) - (b) The intestine.
3) - (c) Blood brain barrier.
4) - (d) All the mentioned.
- 48) pH of a sample meaning $-\log[H^+]$:
1) + (a) True.
2) - (b) False.
- 49) When the $[H^+] = 1 \times 10^{-6} M$, this meaning that :
1) + (a) pH =6.
2) - (b) pH =-6.
3) - (c) pH=0.
4) - (d) None of the mentioned.
- 50) Controlling pH value constant by:
1) + (a) Buffer solution.
2) - (b) Serial dilution.
3) - (c) Concentrated solution.
4) - (d) None of the mentioned.

