



قائمة الاسئلة

اختبار النهائي للعام الجامعي 2025/2024 -كلية الطب - شعبة .الطب البشري :: كيمياء تحليلية مختبرات طبية
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- 1) Oxidation is
 - 1) a. The process of loosing electrons.
 - 2) b. The process of gain electrons.
 - 3) c. The process of reaction with H₂.
 - 4) d. None of the above
- 2) Reduction is
 - 1) a. The process of loosing electrons.
 - 2) b. The process of gain electrons.
 - 3) c. The process of reaction with O₂.
 - 4) d. None of the above
- 3) The electrons transfer from reductant to the oxidant in redox reactions?
 - 1) a. True.
 - 2) b. False.
- 4) One of the following indicators used in Redox titration:
 - 1) a. Methyl orange.
 - 2) b. Self indicator as KMnO₄.
 - 3) c. Adsorptive indicator.
 - 4) d. None of the above
- 5) One of the following indicators is specific indicator used in Redox titration:
 - 1) a. KMnO₄.
 - 2) b. External indicators.
 - 3) c. Internal indicators.
 - 4) d. Starch.
- 6) From applications of redox titration is :
 - 1) a. Determination of oxalate.
 - 2) b. Determination of HCl.
 - 3) c. Determination of AgCl.
 - 4) d. None of the above
- 7) Complex formation titration is:
 - 1) a. A titration in which neutralization takes place.
 - 2) b. A precipitate is formed.
 - 3) c. Reduction oxidation takes place.
 - 4) d. A complex is formed.
- 8) One type of the following is very important in formation of a complex:
 - 1) a. Hydrogen bonds.
 - 2) b. Coordinated bonds.
 - 3) c. Covalent bond.
 - 4) d. None of the above
- 9) The electrons transfer from the complexing agent to the central atom in complex formation?
 - 1) a. True.
 - 2) b. False.
- 10) A complex is:
 - 1) a. Neutral compound.
 - 2) b. A compound carries +ve or -ve charge.
 - 3) c. A stable compound.
 - 4) d. None of the above





- 11) Br⁻ is called:
- 1) a. Mono dentate ligand.
 - 2) b. Mono nuclear complex.
 - 3) c. Bidentate complexing agent.
 - 4) d. All the mentioned.
- 12) E.D.T.A is :
- 1) a. A complexing agent.
 - 2) b. Anticoagulent.
 - 3) c. Cheap in price.
 - 4) d. All the mentioned
- 13) EDTA is non selective complexing agent?
- 1) a. True.
 - 2) b. False.
- 14) [Zn₂Cl₆]²⁻ is called:
- 1) a. Mononuclear complex.
 - 2) b. Dinuclear complex.
 - 3) c. Tridentate complex.
 - 4) d. None of the above
- 15) Complex titration curve is :
- 1) a. A plot between p[sample] and the volume of titrant.
 - 2) b. A plot between the pH and the volume of titrant.
 - 3) c. A plot between the potential and the volume titrant.
 - 4) d. All the mentioned
- 16) To improve the selectivity of EDTA ,we can change the pH and a masking / precipitating agent can be added in the titration?
- 1) a. True.
 - 2) b. False.
- 17) One of the following indicators is used in complex formation titration:
- 1) a. Methyl orange.
 - 2) b. Adsorptive indicator.
 - 3) c. Metallochromic indicator as meruxide.
 - 4) d. None of the mentioned.
- 18) Complex formation titration is used for determination and analysis of:
- 1) a. Di-valent and tri-valent metals.
 - 2) b. Ca²⁺.
 - 3) c. EDTA.
 - 4) d. All the mentioned
- 19) Instrumental analysis is:
- 1) a. Ascience of analysis using an instrument.
 - 2) b. Analysis by hand.
 - 3) c. Analysis using a burette.
 - 4) d. None of the mentioned.
- 20) Spectrophotometry is
- 1) a. The process of sample analysis using a spectrophotometer.
 - 2) b. The instrument that is used in spectrophotometry.
 - 3) c. The result of spectrophotometry..
 - 4) d. All the mentioned
- 21) Spectrophotometer is
- 1) a. The process of sample analysis using a spectrophotometer.





- 2) b. The instrument that is used in spectrophotometry.
3) c. The result of spectrophotometry..
4) d. All the mentioned
- 22) Spectrum is
1) a. The process of sample analysis using a spectrophotometer.
2) b. The instrument that is used in spectrophotometry.
3) c. The result of spectrophotometry.
4) d. All the mentioned
- 23) Ultraviolet light is in the wavelength range of:
1) a. 200-400nm.
2) b. 400-800nm.
3) c. 100-700nm.
4) d. None of the mentioned.
- 24) Redox reactions takes place at the same time in opposite directions?
1) a. True.
2) b. False.
- 25) The number of lost electrons equals the number of gained electrons in Redox reaction?
1) a. True.
2) b. False.
- 26) EDTA is ethylene diamine tetra acetic acid?
1) a. True.
2) b. False.
- 27) One of the following can be used in doing genetic fingerprint:
1) a. Gel electrophoresis.
2) b. Spectrophotometry.
3) c. ELISA.
4) d. None of the mentioned.
- 28) Slab gel electrophoresis a technique in which:
1) a. Separation of samples takes place horizontal.
2) b. Separation of samples takes place vertical.
3) c. Separation of samples takes place in a capillary.
4) d. All the mentioned
- 29) When analysis of DNA and RNA ,we can use one of the following:
1) a. Poly acryl amide.
2) b. Silica.
3) c. Agarose.
4) d. None of the mentioned.
- 30) PCR is a polymerase chain reaction?
1) a. True.
2) b. False.
- 31) ELISA is enzyme linked immunosorbent assay?
1) a. True.
2) b. False.
- 32) ELISA is:
1) a. Antigen-Antigen interaction technique.
2) b. Antibody-Antibody interaction technique.
3) c. Antigen-Antibody interaction technique.
4) d. None of the mentioned.
- 33) Sandwich ELISA in which





- 1) - a. Antibody-Antigen-Antigen.
2) b. Antibody-Antigen-Antibody.
3) - c. Antigen-Antigen-Antibodies.
4) - d. None of the mentioned.
- 34) ELISA can be used for detection diseases as hepeticis and allergies?
1) a. True.
2) - b. False.
- 35) Complexation takes place bwtween a ligand and central atom?
1) a. True.
2) - b. False.
- 36) To determine water hardness due to Ca and Mg , you can use:
1) - a. Acid-base titration.
2) - b.Precipitation titration.
3) - c. Redox titration.
4) d. Complex formation titration.
- 37) In complex formation titration , the indicator becomes free at the end point to indicate to the end point and its color changes?
1) a. True.
2) - b. False.

