



قائمة الاسئلة

صيدلانيات (1) - (2118.PHCS .PHA) - المستوى الثاني - قسم علوم صيدلانية - الكل - مركز الاختبار الالكتروني - الفترة الخامسة - درجة الامتحان

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- 1) 1- Indicate which of the following statements is true. Oil-soluble surfactants:
 - 1) - A) have high HLB values
 - 2) - B) are hydrophilic
 - 3) + C) can be used as emulsifiers to produce water-in-oil emulsions
 - 4) - D) are efficient solubilizing agents
- 2) 2- Which of the following properties are characteristic of deflocculated suspensions?
 - 1) - A) close packing of the sediment to form a cake
 - 2) + B) slow sedimentation rate
 - 3) - C) formation of flocs
 - 4) - D) rapid clearance of supernatant
- 3) 3- Indicate which of the following molecular characteristics will be expected to increase the solubility of a simple solute in an aqueous solution:
 - 1) + A) the presence of a polar group
 - 2) - B) a high molecular surface area
 - 3) - C) the presence of an ionized group
 - 4) - D) low melting point
- 4) 4- Increasing the surfactant concentration above the critical micellar concentration will result in
 - 1) - A) An increase in surface tension
 - 2) - B) A decrease in surface tension
 - 3) + C) No change in surface tension
 - 4) - D) All of the above
- 5) 5- Indicate which statements is FALSE:
 - 1) - A) Flocculation is desirable for pharmaceutical suspensions.
 - 2) + B) Deflocculation is not desirable for pharmaceutical suspensions.
 - 3) - C) Motion of dispersed particles in a suspension is induced by thermal and gravitational forces.
 - 4) - D) Crystal growth of particles in a suspension is due to temperature fluctuation on storage and due to wider particle size distribution.
- 6) 6- How does the increase in viscosity of the suspending medium affect the rate of sedimentation when assuming the density of the particles is greater than that of the suspending medium?
 - 1) - A) Sedimentation rate will not change.
 - 2) + B) Sedimentation rate will be slower.
 - 3) - C) Sedimentation rate will be faster.
 - 4) - D) No particle sedimentation will take place.
- 7) 7- Which one of the following phenomena is undesirable in pharmaceutical suspensions?
 - 1) - A) Slow settling of particles.
 - 2) + B) Particles agglomerate to dense cake.
 - 3) - C) Particles readily redisperse upon agitation.
 - 4) - D) Suspension pours readily.
- 8) 8- Which of the following parameters control the rate of sedimentation of particles in a suspension?
 - 1) - A) Particle diameter
 - 2) - B) Density of the particles
 - 3) - C) Surface charge on the particles
 - 4) + D) all of the above
- 9) 9- all of the following ingredients in a suspension could help in flocculating the dispersed particles except ?
 - 1) - A) Surfactant





- 2) - B) Hydrophilic polymer
3) - C) Electrolyte
4) + D) Cosolvent
- 10) 10- Drug having solubility less than 0.1mg/ml comes under which category:
1) - A) very soluble
2) - B) slightly soluble
3) + C) partially insoluble
4) - D) freely soluble
- 11) 11- Regarding the rate of sedimentation of pharmaceutical suspension designed for administration, which of the following statement is false ?
1) - A) the rate of sedimentation is increased as the diameter of the dispersed drug particles is increased.
2) + B) the rate of sedimentation is increased as the viscosity of the continuous phase is increased.
3) - C) the rate of sedimentation is affected by the concentration of buffer salts.
4) - D) the rate of sedimentation may be increased by centrifugation.
- 12) 12- regarding the role of surfactants in pharmaceutical suspension for oral administration, which of the following statement is true ?
1) + A) surfactants decrease the water contact angle of dispersed drug particle.
2) - B) surfactants with low HLB are used to stabilize oral suspension designed for oral administration
3) - C) surfactants increase the viscosity of the continuous phase of pharmaceutical suspension.
4) - D) non of the above
- 13) 13- Concerning pharmaceutical suspension for oral administration , which of the following statement is false?
1) - A) suspension for oral administration, may require the addition of sweetening agents.
2) - B) suspension for oral administration may require the addition of flavours.
3) - C) the pH of the continuous phase may affect the stability of aqueous suspension designed for oral administration .
4) + D) the particle size of dispersed drug in pharmaceutical suspension designed for oral adminstartion must be $< 10\mu\text{m}$.
- 14) 14- Which of the following co-solvents are used to increase the solubility of a drug
1) - A) Ethanol
2) - B) Sorbitol
3) - C) Glycerin
4) + D) All the above
- 15) 15- How co-solvents increase increase the solubility of poor soluble drug ?
1) + A) By reducing the interfacial tension between the predominant aqueous solution and hydrophobic solute
2) - B) By reducing the interfacial tension between solute and solvent
3) - C) Both
4) - D) None
- 16) 16- Benzalkonium chloride is categorized as
1) - A) Acidic preservatives
2) - B) Neutral preservatives
3) - C) Mercurial preservatives
4) + D) Quaternary ammonium compounds
- 17) 17- Which of the following sugar has bitter taste
1) - A) Glucose
2) - B) Sucrose
3) + C) Saccharine
4) - D) None
- 18) 18- In the formulation of suspensions , generally which types of drugs are selected?





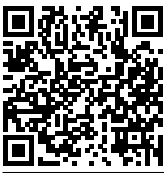
- 1) - A) hydrophilic
2) B) Hydrophobic
3) - C) Both
4) - D) None
- 19) 19- The stability of suspensions can be evaluated by
1) - A) Sedimentation volume
2) - B) Degree of flocculation
3) - C) Re-dispersibility
4) D) All of the above
- 20) 20- The choice of humectants is based on
1) - A) Rate of moisture exchange
2) - B) Viscosity and texture of preparation
3) C) Both
4) - D) None of the above
- 21) 21- Stoke,s equation is expressed as
1) - A) $V=2r^2(d_1-d_2)g/9\eta$
2) B) $V= 2r^2(d_1-d_2)g/18\eta$
3) - C) Both
4) - D) None of the above
- 22) 22- They are intended for massage into the unbroken skin and can contain such ingredients as methy salicylate or camphor as counterirritants
1) - A) Colloidions
2) - B) Elixir
3) C) Liniments
4) - D) Spirits
- 23) 23- Sedimentation in suspension can be decreased by
1) - A) Increase particle size
2) - B) increased viscosity
3) - C) Decrease particle size
4) D) B and C are true
- 24) 24- In deflocculated suspension
1) - A) Sediment more rapidly
2) - B) Easy to re-disperse by shaking
3) - C) Supernatant appears clear
4) D) None of the above
- 25) 25- Which of the following is considered non-aqueous pharmaceutical solution?
1) - A) Gargle
2) - B) Mouthwashes
3) C) Elixer
4) - D) Enema
- 26) 26- which of the following statement about glycerin is False?
1) - A) It is used as cosolvent
2) - B) It is used as thickening agent (increase viscosity)
3) C) Less than 30% used as preservatives
4) - D) It is miscible with water
- 27) 27- Syrups are
1) - A) Sour and more viscous than elixirs
2) - B) Sour and thinner than elixiers
3) C) Sweeter and more viscous than elixrs





- 4) - D) Sweeter and thinner than elixirs
- 28) 28- An emulsion is always between
- 1) - A) two solids
 - 2) - B) A solid and liquid
 - 3) - C) two gases
 - 4) D) two liquids
- 29) 29- Medically used emulsions for intravenous administration are usually..... Type:
- 1) - A) W/O
 - 2) - B) W/O/W
 - 3) C) O/W/O
 - 4) - D) None of the above
- 30) 30- Which of the following statement is False?
- 1) - A) In an O/W emulsion, water is the external phase
 - 2) - B) In W/O emulsion , water is the internal phase
 - 3) C) In an W/O emulsion, oil is the internal phase
 - 4) - D) None of the above is true
- 31) 31- which of the following formulation components antimicrobial preservatives?
- 1) - A) Propylparaben
 - 2) - B) Sod. Benzoate
 - 3) - C) Methyl paraben
 - 4) D) All of the above
- 32) 32- Indicate which statement is False?
- 1) - A) Flocculation is desirable for pharmaceutical suspensions
 - 2) - B) Viscosity of the suspension affects the settling of the particales
 - 3) - C) Motion of the dispersion particles in a suspension is induced by gravitational forced
 - 4) D) Non of the above
- 33) 33- Regarding the stability in pharmaceutical solution, which of the following statement is true ?
- 1) - A) Microbial growth
 - 2) - B) Precipitation
 - 3) - C) Gas formation
 - 4) D) All of the above
- 34) 34- Regarding to the isotonicity modifiers, which of the following widely used ?
- 1) - A) Ethanol
 - 2) - B) Sorbitol
 - 3) C) Sod. Chloride
 - 4) - D) Glycerol
- 35) 35- Regarding to the preservatives in pharmaceutical solution, which of the following concentration is true ?
- 1) - A) Sorbic acid 10%
 - 2) B) Propylene glycol 25%
 - 3) - C) Ethanol 5%
 - 4) - D) Parabens 2%
- 36) 36- Which of the following polyols used as humectants in creams
- 1) - A) Glycerine
 - 2) - B) propylene glycol
 - 3) - C) Sorbitol 70%
 - 4) D) All of the above
- 37) 37- Regarding to the water for injection, which of the following statement is False?
- 1) - A) Purified water USP +USP pyrogen test
 - 2) B) Non-volatile solids less than 10mg/100ml





- 3) - C) Contain no additives
4) - D) Non of the above
- 38) 38- Regarding to sterile water for irrigation, which of the following statement is False?
1) - A) water for injection USP + USP sterility test
2) + B) Packaged in single dose
3) - C) Contain no additives
4) - C) Non of the above
- 39) 39 - Regarding to bacteriostatic water for injection, Which of the following statement is False?
1) - A) water for injection USP + USP sterility test
2) - B) Contain one or more antimicrobial agents
3) - C) Packaged in single dose not greater than 30 ml
4) + D) Non of the above
- 40) 40- Regarding to protect the aromatic water deterioration , Which of the following statement is True?
1) - A) protect from light
2) - B) should be made in small quantities
3) - C) protect from excessive heat
4) + D) All of the above
- 41) 41- All of the following methods in preparation of solutions are true, Except?
1) - A) Extraction
2) + B) Tritutation
3) - C) simple solution
4) - D) Chemical reaction
- 42) 42- All of the following humectants in mouthwashes are used, Except?
1) - A) Sorbitol 15%
2) + B) Alcohols 10%
3) - C) Glycerin 7%
4) - D) Non of the above
- 43) 43- Colloid is disperse system (dispersed phase in dispersion phase) when the particles are in the range
1) - A) < 0.001 nm
2) - B) < 0.01
3) - C) < 0.1 nm
4) + D) Non of the above
- 44) 44- Colloids have net surface electrical charge depend on.....
1) - A) Absorbed light
2) - B) Brownian motion
3) + C) pH of the system
4) - D) All of the above
- 45) 45- Regarding to the methods of preparation of hydrophobic colloids, which of the following statement is False?
1) - A) Supersaturated solution
2) - B) Peptization
3) - C) Irradation
4) + D) Non of the above
- 46) 46- Motion of the particles in dispersion medium depend on
1) - A) gravitationally
2) - B) Thermal induced
3) - C) Viscosity
4) + D) All of the above
- 47) 47- Brownian motion is kinetic properties depend on , Except?





- 1) A) Concentration of particles
2) B) Viscosity
3) C) Particles size
4) D) Temperature
- 48) 48- Regarding to the kinetic properties of colloids, which of the following statement is False?
1) A) Diffusion
2) B) Sedimentation
3) C) Tyndall Effect
4) D) Ion adsorption
- 49) 49- Regarding to the diffusion in kinetic properties of colloids, which of the following statement is False?
1) A) Movement of solute from high concentration to lower concentration
2) B) Movement of solvent from high concentration to low concentration
3) C) Movement of solvent from lower concentration to high concentration
4) D) Non of the above
- 50) 50- Regarding to the osmosis in kinetic properties of colloids, which of the following statement is true?
1) A) Movement of solute from high concentration to lower concentration
2) B) Movement of solvent from high concentration to low concentration
3) C) Movement of solvent from lower concentration to high concentration
4) D) Non of the above
- 51) 51- Regarding to the electrical properties of colloids, which of the following statement is False?
1) A) Zetapotential
2) B) ion dissolution
3) C) Light scattering
4) D) Ion adsorption
- 52) 52- Regarding to zetapotential of colloids, which of the following statement is True?
1) A) If increase pH of colloid , the e particles of suspension have more positive charge
2) B) If decrease pH of colloid , the particles of suspension have more negative charge
3) C) If more acid is added to colloid, the particles of suspension have more positive charge
4) D) If more alkali is added to colloid, the particles of suspension have more positive charge
- 53) 53- In preparation of suspension, minimum amount of wetting agents must be used to avoid all of the following, Except?
1) A) Bad odour
2) B) soapy bad taste
3) C) foaming
4) D) Non of the above
- 54) 54- Syrup consists of sucrose in concentration:
1) A) 76.6%
2) B) 76.7%
3) C) 67.6%
4) D) Non of the above
- 55) 55- Crystallization of sucrose is due to:
1) A) Low concentration
2) B) Saturation
3) C) Supersatuarion
4) D) Unsaturation
- 56) 56- according to specific gravity 100ml of syrup is equal:
1) A) 180 g
2) B) 130 g
3) C) 130.1g





- 4) D) 131.1g
- 57) 57-When we used dextrose substitute for sucrose, added glycerin as preservative in concentration:
- 1) A) 70%
- 2) B) 30% - 45%
- 3) C) 0.6%
- 4) D) non of the above
- 58) 58-In sorbitol solution, which of the following concentration to act as preservative is appropriate:
- 1) A) 85%
- 2) B) 70%
- 3) C) 60%
- 4) D) Non of the above
- 59) 59 -In glycerites non aqueous should be contain weight of glycerin:
- 1) A) more than 50%
- 2) B) less than 50%
- 3) C) not less than 50%
- 4) D) all of the above
- 60) 60- chloroform spirit is used in elixir as:
- 1) A) Vehicle
- 2) B) Colouring agent
- 3) C) Preservative
- 4) D) Flavouring agent
- 61) 61-Solutions are which type of liquids:
- 1) A) Bi-phasic
- 2) B) Monophasic
- 3) C) Suspension
- 4) D) Non of the above
- 62) 62- Regarding the use of antioxidants in pharmaceutical solutions for oral administration, which of the following statements are true?
- 1) A) Antioxidants are required in all solution formulations.
- 2) B) Antioxidants reduce the rate of oxidation of the therapeutic agent.
- 3) C) The efficacy of antioxidants may be improved in the presence of ethylenediaminetetraacetic acid (EDTA).
- 4) D) Non of the above
- 63) 63- Elixir contain
- 1) A) 40% glycerol
- 2) B) 5-40% alcohol
- 3) C) 66.7% sucrose
- 4) D) None of the above
- 64) 64-A solution that has the same salts and sugar concentration as cells and blood:
- 1) A) Isotonicity
- 2) B) Buffer solution
- 3) C) Viscosity
- 4) D) A+B
- 65) 65 -Group of preservative ingredients are prepared from hydroxybenzoic acid:
- 1) A) Benzoic acid
- 2) B) Benzalkonium chloride
- 3) C) Propylene glycol
- 4) D) Non of the above
- 66) 66- The method of purification colloidal is:





- 1) - A) Filtration
2) - B) Peptization
3) + C) Dialysis
4) - B) A & C
- 67) 67-Association colloids are represented by:
1) + A) Surfactant
2) - B) Acacia
3) - C) Gel
4) - D) Methylcellulose
- 68) 68-A..... is a mixture in which one substance of microscopically dispersed insoluble particles is suspended through another substance:
1) - A) solution
2) - B) Colloid
3) - C) Emulsion
4) + D) None of above
- 69) 69- Which of the following is considered non-aqueous pharmaceutical solution?
1) - A) Gargle
2) - B) Mouthwashes
3) + C) Elixer
4) - D) Enema
- 70) 70- A suspension is NOT a suitable dosage form for
1) - A) intra-articular injections
2) - B) intradermal injections
3) - C) intramuscular injections
4) + D) intravenous injections
- 71) 71- A synthetic sweetening agent which is approximately 200 times sweeter than sucrose & has no taste is
1) - A) Saccharin
2) + B) Aspartame
3) - C) cyclamate
4) - D) Sorbitol
- 72) 72- Regarding to deteriorate of the aromatic water, Which of the following statement is False?
1) - A) Mould growth
2) - B) Volatilization
3) - C) Decomposition
4) + D) Non of the above
- 73) 73- Coagulation is
1) - A) Aggregated particle less dense than the medium and irreversible
2) - B) Aggregated particle more dense than the medium and reversible
3) + C) If aggregated change to much denser form and irreversible
4) - D) Non of the above
- 74) 74- In physical properties of suspension, repulsive force between particles and medium due to electrical potential from.....
1) - A) Different in D.E.C. between the two phases
2) - B) Ionization
3) - B) Adsorption of ions
4) + D) All of the above
- 75) 75- Concerning nasal solution, which statements is /are False
1) - A) It should be isotonic
2) + B) Sterile





- 3) - C) Aqueous
- 4) - D) Slightly buffered to maintain a PH of 5.5 to 6.5

