

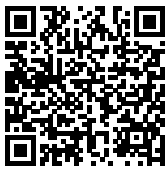


قائمة الاسئلة 2025-04-13 09:03

صيدلانيات (2) - (-) المستوى الثاني - قسم علوم صيدلانية - الكل - كلية الصيدلة - الفترة الثالثة - درجة الامتحان (75)

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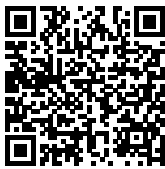
- 1) 1- All of the following are important factors influence by Particle size Except,
 - 1) - A) Penetrability
 - 2) - B) Dissolution
 - 3) - C) Suspendability
 - 4) + D) Non of the above
- 2) 2- Regarding to carre's index, when the % compressibility range (28-35) the flowability is
 - 1) - A) Good
 - 2) + B) Poor
 - 3) - C) Fair to passable
 - 4) - D) Very poor
- 3) 3- All of the following methods used for identification of any substance , except
 - 1) - A) M.P
 - 2) - B) UV
 - 3) - C) IR
 - 4) + D) Solubility
- 4) 4- Regarding to Quality control tests of aerosols all of the following are true , Except
 - 1) - A) Leakage rate
 - 2) - B) Stability
 - 3) - C) Microbial limits degradation products
 - 4) + D) Non of the above
- 5) 5- All of the following are properties of hydrocarbon propellants, Except
 - 1) - A) Low toxicity
 - 2) - B) Inflammable
 - 3) + C) Hydrolysis
 - 4) - D) Inexpensive
- 6) 6- All of the following are compressed gases propellants, Except
 - 1) - A) Nitrous oxide
 - 2) + B) Oxygen
 - 3) - C) Ntrogen
 - 4) - D) Nitrous oxide
- 7) 7- % of propellant in aerated spray is
 - 1) - A) 30- 60%
 - 2) - B) 30- 40%
 - 3) - C) 15-30%
 - 4) + D) 6-10%
- 8) 8- Particle Diameter of space spray
 - 1) + A) < 50 μm
 - 2) - B) < 40 μm
 - 3) - C) < 30 μm
 - 4) - D) < 20 μm
- 9) 9- Regarding to stability of emulsion, which of the following statement are True, Except
 - 1) - A) phase inversion
 - 2) - B) formation of flocculation
 - 3) + C) formation of coagulation
 - 4) - D) all of the above



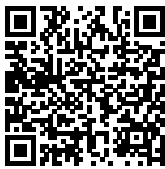
- 10) 10- Flow properties depends upon all of the following Except,
- 1) - A) Cohesion between one particle to another
 - 2) + B) Adhesive between particles
 - 3) - C) Force of friction
 - 4) - D) Non of the above
- 11) 11- Indicate which of the following molecular characteristics will be expected to 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
- 12) 12- Which of the following dosage forms may utilize surface active agents in their formulations?
- 1) - A) Emulsions
 - 2) - B) Suspensions
 - 3) - C) Colloidal dosage forms
 - 4) + D) All of the above
- 13) 13- Which one of the following phenomena is undesirable in pharmaceutical emulsion?
- 1) - A) aggregation
 - 2) + B) Coagulation
 - 3) - C) Creaming
 - 4) - D) Flocculation
- 14) 14- All of the following parameters control the phase inversion in a emulsion, Except
- 1) - A) change the volume
 - 2) + B) Change the density
 - 3) - C) Addition of electrolyte
 - 4) - D) Heating and mixing
- 15) 15 – Regarding to stability of emulsion, which of the following statement is True?
- 1) - A) creaming is opposite to sedimentation
 - 2) - B) Aggregation is reversible
 - 3) - C) change the type of emulsion by addition of electrolyte
 - 4) + D) non of the above
- 16) 16- Regarding the role of surfactants in pharmaceutical emulsion, which of the following statement is true?
- 1) - A) surfactants decrease the water contact angle of dispersed drug particle.
 - 2) - B) surfactants have HLB 7-9
 - 3) - C) surfactants increase the viscosity of emulsion.
 - 4) + D) surfactants prevent the coalescence between droplets .
- 17) 17 – Regarding to formation of emulsion, all of the following statement are True, Except
- 1) - A) Rate 2 = w/o coalescence
 - 2) - B) Rate 2 > rate 1 → o/w emulsion
 - 3) - C) formation of flocculation
 - 4) + D) non of the above
- 18) 18- 3-7 HLB is used as
- 1) - A) Wetting agents
 - 2) - B) O/W emulsifying agents
 - 3) - C) Solubilizing agents
 - 4) + D) non of the above
- 19) 19 – Regarding to Cosolvent used in pharmaceutical dosage form, which of the following statement is True?
- 1) - A) Increasing the interfacial tension between the solute and solvent
 - 2) - B) increase the solubility in preparation of true solution



- 3) ☒ C) Alter the dielectric constant of the medium
4) ☐ D) none of the above
- 20) 20 - Indicate which statement is TRUE
1) ☐ A) solubilizing agents is used in low concentration while the wetting agents is used in high concentration
2) ☐ B) wetting agents have HLB range between 3-7
3) ☐ C) W/ O Emulsifying agents have HLB range between 8-15
4) ☒ D) Non of the above
- 21) 21- Indicate which of the following statements are true, Except
1) ☐ A) Micoemulsion use as I.M
2) ☒ B) Micoemulsion like true solution
3) ☐ C) Micoemulsion contain HLB 15
4) ☐ D) Micoemulsion is thermodynamic stable
- 22) 22- Indicate which of the following statements are true, Except
1) ☐ A) 0/w emulsion is dilute with water
2) ☒ B) Sudden III is soluble in o/w emulsion
3) ☐ C) o/w emulsion positive conductivity test
4) ☐ D) mettyl blue is soluble in o/w emulsion
- 23) 23- Surface active agents' activity depend on
1) ☐ A) polar group
2) ☐ B) non polar group
3) ☐ C) none of the above
4) ☒ D) all of the above
- 24) 24- Which of the following properties are characteristic of coarse dispersion?
1) ☐ A) Detection by ultra-microscope
2) ☐ B) very slow diffusion
3) ☒ C) Diameter large than 500nm
4) ☐ D) glucose is example
- 25) 25- 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
- 26) 26- In the formation of emulsion, with using emulsifying agent.....
1) ☐ A) Fusin of dispersed droplet
2) ☐ B) Globules size increase
3) ☒ C) flocculation droplets are formed
4) ☐ D) coalescence droplets are formed
- 27) 27-Bentonite is used to form a
1) ☐ A) Multimolecular Film
2) ☐ B) Monomolecular Film
3) ☒ C) Solid Particle Film
4) ☐ D) None of the above
- 28) 28- Creaming & Sedimentation of emulsion depend on: -
1) ☐ A) The densities of two phase
2) ☐ B) particle size of the internal phase
3) ☒ C) Stock,s low
4) ☐ D) None of the above
- 29) 29- Which one of the following is not described the microemulsion?



- 1) - A) Oil droplets have small molecular weight.
2) - B) Used as new and acceptable form for forming parenteral and acceptable form for children.
3) + C) droplets size is ranged between 10 to 200 um
4) - D) Seem to be transparent and mono phasic by the naked eye but it is not.
- 30) 30-The purpose of an emulsifier is to ____.
- 1) - A) Decrease surface area in a suspension
2) - B) Increase the interfacial tension between immiscible phase
3) - C) Minimize the size of globules
4) + D) Non of the above
- 31) 31- is a procedure when oil is triturated with the gum before adding in water for preparing Primary Emulsion.
- 1) - A) English method
2) - B) Wet Gum method
3) + C) Dry Gum method
4) - D) Non of the above
- 32) 32- Instability of emulsion?
- 1) - A) Upward movement of dispersed droplets relative to the continuous phase.
2) - B) The down movement of particles.
3) - C) Aggregate the droplets together without fusing.
4) + D) All above
- 33) 33- Hydrophobic solid particles film disperses in the
- 1) + A) Suspension
2) - B) Emulsion
3) - C) solution
4) - D) All of the above
- 34) 34-In Emulsions preparation, the following method is used to prepare emulsion in small scales except?
- 1) - A) Colloidal mill method
2) - B) High speed mixture
3) - C) Homognizer
4) + D) Non of the above
- 35) 35 -Which of the following surfactants is suitable for the formulation of a o/w emulsion?
- 1) - A) Surfactant with an HLB value of 14–18
2) - B) Surfactant with an HLB value of 7–9
3) + C) Surfactant with an HLB value of 9–12
4) - D) None of the above
- 36) 36- Which one of the following is advantage of emulsion, Except
- 1) + A) Cannot be used widely to formulate external used product like, lotion and creams
2) - B) Improve stability of drug that are not stable in aqueous solutions.
3) - C) Improve appearance of certain oleaginous substances intended for topical use
4) - D) None of the above
- 37) 37 - In microemulsion, the size of globules are
- 1) - A) 1um
2) - B) 0.1um
3) - C) 10 um
4) + D) Non of the above
- 38) 38- The particle size of microemulsions rang
- 1) - A) 0.001to 0.01mu
2) - B) 10 to 1000nm
3) - C) 10 to 100um



- 4) ☒ D) None above
- 39) 39- What is the correct definition of solubility?
- 1) ☐ A) The ability of solid particles to disperse throughout a liquid continuous phase
- 2) ☒ B) The ability of a solute to dissolve into a solvent
- 3) ☐ C) The rate at which a solute dissolve into a solvent
- 4) ☐ D) The ability of immiscible liquid droplets to disperse within a second liquid phase
- 40) 40- Preformulation study should be initiated in pH (1-7) when solubility is
- 1) ☐ A) $< 10\text{mg/ml}$
- 2) ☐ B) $< 0.1\text{ mg/ml}$
- 3) ☐ C) $< 5\text{ mg/ml}$
- 4) ☒ D) Non of the above
- 41) 41- Partition co-efficient generally measures
- 1) ☐ A) Drug's lipophilicity
- 2) ☐ B) Ability of drug to cross cell membrane
- 3) ☒ C) Both
- 4) ☐ D) None
- 42) 42- These quantitative methods determine the purity except for
- 1) ☐ A) HPLC
- 2) ☐ B) UV
- 3) ☒ C) IR
- 4) ☐ D) Fluorescences
- 43) 43- the storage condition for accelerated stability study is
- 1) ☐ A) $40^{\circ}\text{C}/60\%$
- 2) ☐ B) $30^{\circ}\text{C}/65\%$
- 3) ☒ C) $40^{\circ}\text{C}/75\%$
- 4) ☐ D) $30^{\circ}\text{C}/75\%$
- 44) 44- X-ray diffraction pattern indicates:
- 1) ☐ A) Solubility
- 2) ☒ B) Crystallinity
- 3) ☐ C) Functional groups
- 4) ☐ D) Permeability
- 45) 45- Which of the following co-solvent can be used to increase the solubility of poor soluble drugs?
- 1) ☐ A) Ethanol
- 2) ☐ B) Propylene glycol
- 3) ☐ C) Glycerin
- 4) ☒ D) All the above
- 46) 46- IR spectroscopy is used for determining:
- 1) ☐ A) Particle size
- 2) ☐ B) Flowability
- 3) ☐ C) Shape
- 4) ☒ D) Functional groups
- 47) 47- Stability testing is done:
- 1) ☐ A) To determine shelf life of product.
- 2) ☐ B) To determine the components used for packaging
- 3) ☐ C) To get information at preformulation stage
- 4) ☒ D) All of the above
- 48) 48- What is the IP specification for solubility of sparingly soluble compounds?
- 1) ☐ A) 1 part in 10–30 parts of solvent
- 2) ☒ B) 1 part in 30–100 parts of solvent



- 3) - C) 1 part in 100–1000 parts of solvent
4) - D) 1 part in 1–10 parts of solvent
- 49) 49- One of the following has the name (Freon 11):
1) - A) Dichlorodifluoroethane
2) - B) Dichlorotrifluoromethane
3) + C) Trichloromonofluoromethane
4) - D) Monochloromonofluoromethane
- 50) 50- Dichlorotetrafluoroethane is known as;
1) - A) Freon
2) - B) Freon 112
3) - C) Freon 14
4) + D) Freon 114
- 51) 51- The more the fluorine attached to carbon in the propellant:
1) - A) The more volatile
2) - B) The less stable in aqueous product
3) + C) The more stable in aqueous product
4) - D) The less efficacy and can exert a corrosive action
- 52) 52- The best propellant used in metered dose inhalers is;
1) - A) Fluorocarbon
2) - B) Hydrocarbon
3) + C) Hydrofluoroalkane
4) - D) Compressed Gas
- 53) 53- % of propellant in surface spray is
1) - A) 85- 90%
2) - B) 70- 75%
3) - C) 80-85%
4) + D) Non of the above
- 54) 54- % of propellant in space spray is
1) - A) 85- 90%
2) - B) 75%
3) - C) 80%
4) + D) Non of the above
- 55) 55- All of the following are hydrocarbon propellants, Except
1) - A) Butane
2) + B) Methane
3) - C) Propane
4) - D) Isobutane
- 56) 56- Particle size of aerosol must be
1) - A) 15 μ m
2) - B) 10 μ m
3) + C) 5 μ m
4) - D) All of the above
- 57) 57- Regarding to physicochemical characteristics evaluation tests of aerosols all of the following are true ,
Except
1) - A) densiity
2) - B) Moisture content
3) + C) Net content
4) - D) Vapour pressure
- 58) 58- These qualitative methods determine the purity except,



- 1) - A) M.P
2) + B) UV
3) - C) IR
4) - D) Non of the above
- 59) 59- Regarding to carre's index, when the % compressibility range (18-21) the flowability is
- 1) - A) Good
2) - B) Poor
3) + C) Fair to passable
4) - D) Very poor
- 60) 60- To improve solubility, salt formation is needed where the solubility is
- 1) + A) < 1mg/ ml
2) - B) <10 mg/ ml
3) - C) <30 mg/ ml
4) - D) All the above