!!JAY AMBE!!

MULTIPLE CHOICE QUESTIONS (PHARMACEUTICS)

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PHARMACEUTICS (MCQ)

1. Which of the following gelatine concentration is used to determine the viscosity of gelatine used for the preparation of soft gelatine capsules?

- A. 6 2/3 %
- B. 7 2/3%
- C. 5 2/3 %
- D. 6 3/4%
- Ans. A

2. Department of Transport Test (DOT) is performed for which of the following?

- A. Aerosols
- B. Glass containers
- C. Capsules
- D. None
- Ans. A

3. Measurement of particle size in pharmaceutical aerosol is by

- (P) Cascade impactor (Q) Light scatter decay (R) K-F method (S) IR
- A. Q, R
- B. R, S
- C. P, S
- D. P, Q
- Ans. D

4. According to Drugs and Cosmetics act, List of substances that should be sold by retail only on prescription of registered medical practitioner is given in which of the following Schedule?

- A. Schedule 'H'
- B. Schedule 'V'
- C. Schedule 'X'
- D. Schedule 'Q'

Ans. A

- 5. Identify the correct non-flammable propellant
- A. Dichloro monofluoro methane
- B. Trichloro monofluoro methane
- C. Di methyl ether
- D. Di fluoro methane
- Ans. B
- 6. The first aerosol insecticide was developed by
- A. Good-hue & Sullivan
- B. Good-hue
- C. Sullivan
- D. Franklin
- Ans. A

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- 7. The first pharmaceutical aerosol was developed in the year of
- A. 1945
- B. 1955
- C. 1949
- D. 1960

Ans. B

8. Which drug is formulated as first pharmaceutical aerosol?

- A. Epinephrine
- B. Codeine
- C. Chloropromazine
- D. Probenecid
- Ans. A
- 9. The dip tube in an aerosol container is made from one of the following
- A. Poly propylene
- B. Glass
- C. Al
- D. Stainless steel

Ans. A

10. Which one of the following device is used to increase the efficiency of drug delivery via aerosols?

- A. Tube spacers
- B. Metered valves
- C. Actuator
- D. Pressure valve

Ans. B

11. To dispense inhalation aerosols, which containers are used?

- A. Stain less steel containers
- B. Tin plate containers
- C. Glass containers
- D. Al containers

Ans. A

12. The valve body /housing in a aerosol bottle valve assembly, is made from one of the following

- A. Poly propylene
- B. Poly ethylene
- C. Nylon

D. Stain less steel

Ans. C

13. Among the propellants used in aerosols, one of the following is used for topical pharmaceutical aerosols A. Tri chloro monofluoro methane

B. Di chloro difluoro methane

C. Di chloro tetrafluoro ethane

D. Propane

Ans. D

14. Which one of the following propellant is used in the aerosol for oral use

- A. Propane
- B. Oxygen
- C. Trichloro monofluoro methane
- D. Methane
- Ans. C

15. The identification of propellants in pharmaceutical aerosols is carried out by (P) Gas chromatography (R) Pycnometer (Q) Tag open cup apparatus (S) IR spectrophotometer A. P,Q

- B. P,S
- C. Q, R
- D. R, S
- Ans. B
- 16. Aerosol packaging container mustresist pressure of
- A. 500 psig
- B. 140-180 psig
- C. 40 psig
- D. 20 psig
- Ans. B
- 17. Gasket is made up of
 A. Bure-N
 B. Neoprene rubber
 C. Both
 D. Non of above
 Ans. C
 18. Manufacturing of aerosol involves
 A. Gas filling
- B. Pressure filling
- C. Compressed gas filling
- D. All the above
- Ans. C

19. The nature of propellant is determined by

- A. R-F method
- B. Gas Chromatography
- C.UVD.
- D. None
- Ans. B

- 20. Viscosity enhancer in ophthalmic preparation is
- A. Poly vinyl alcohol
- B. Povidone
- C. Dextran
- D. Macrogol
- Ans. D
- 21. Ph of human tear is
- A. 7.6
- B. 4.5
- C. 7.2
- D. 9

Ans. A

- 22. Opthalmic solution is sterilized by
- A. Autoclave
- B. Hot air oven
- C. Membrane filter
- D. Bacterial filters

Ans. A

- 23. Which of the following one is used to adjust the isotonicity
- A. Dextrose
- B. Boric acid
- C. NaCl
- D. All the above
- Ans. D

24. The ability of a substance dissolves in a given solvent system is depends on

- A. Nature and intensity of the forces present in the solute
- B. Nature and intensity of the forces present in the solvent
- C. Interactions between solute and solvent
- D. All the above

Ans. A

25. Which of the following substances having poor water solubility

- A. Weak electrolytes
- B. Non-polar molecules
- C. Both
- D. None
- Ans. C

26. How co-solvents increase the solubility of poorly soluble drugs?

A. By reducing the interfacial tension between the predominant aqueous solution and hydro-phobic solute

- B. By reducing the interfacial tension between solute and solvent
- C. Both
- D. None
- Ans. A

27. The solubility of weak electrolytes &non-polar substances can be increased by adding water miscible solvents. This process is known as

- A. Co-solvency
- B. Complexation
- C. Both
- D. None
- Ans. A

28. Which of the following co – solvents are used to increase the solubility of a drug

- A. Ethanol
- B. Sorbitol
- C. Glycerin
- D. All the above
- Ans. D

29. Which of the following co - solvent is accepted as a co - solvent in parenteral products, but its use in oral liquids is limited

- A. Glycerol formal
- B. Glycerol
- C. Dimethyl acetamide
- D. None

Ans. C

30. Due to which factor, dimethyl aceta-mide is not been used as a co-solvent in oral liquids

A. Due to objectionable odor

B. Due to objectionable taste

C. Both

D. None

Ans. C

31. Thiomersal is belongs to which category preservative

A. Acidic

- B. Mercurial
- C. Neutral
- D. Quaternary ammonium compounds

Ans. B

32. Which of the following are widely used and excellent preservatives

A. Quaternary ammonium compounds

- B. Mercurial
- C. Both
- D. Acidic
- Ans. A

33. Benzalkonium chloride is categorized as

- A. Acidic preservative
- B. Neutral preservative
- C. Mercurial preservative
- D. Quaternary ammonium compounds

Ans. D

34. At which concentration, phenol act as preservative

- A. 0.2 0.5
- B. 0.5 0.8
- C. 0.05 0.1
- D. None
- Ans. A
- 35. Which of the following sugar has bitter taste
- A. Glucose
- B. Sucrose
- C. Saccharine
- D. None
- Ans. C

36. Which of the following is a synthetic sweetener

- A. Glucose
- B. Sucrose
- C. Sorbitol
- D. Aspartame

Ans. D

37. To increase the viscosity of liquid, which of the following agents are used A. PVP

- B. Methyl Cellulose
- C. Sodium Carboxy Methyl Cellulose
- D. All the above

Ans. D

38. Which of the following agents are used as flavoring agents

- A. Menthol
- B. Chloroform
- C. Both

- D. None Ans. C
- 39. Most widely used flavoring agent in food industry
- A. Menthol
- B. Chloroform
- C. Mono sodium glutamate
- D. None
- Ans. C

40. Which of the following flavor is not responsible for sour taste

- A. Citrus flavors
- B. Liquorice
- C. Raspberry
- D. Mint spice

Ans. D

41. The filling method of a pharmaceutical liquid depends on the following factors A. Viscosity of the liquid

B. Surface tension of the liquid

C. Compatibility with the materials used in the construction of the filling machine D. All the above **Ans. D**

42. Which of the following methods are generally used in liquid filling

- A. Gravimetric
- B. Volumetric
- C. Constant level method
- D. All the above
- Ans. D

43. In the formulation of suspensions, generally which types of drugs areselected?

- A. Hydrophilic
- B. Hydrophobic
- C. Both

D. None

Ans. B

44. In the formulation, to facilitate the wetting of insoluble solids, which of the following agents used

- A. Suspending agents
- B. Wetting agents
- C. Flavoring agents
- D. None
- Ans. B

45. How surfactants will facilitate or aid wetting of hydrophobic materials in liquid

- A. By decreasing the solid-liquid interfacial tension
- B. By increasing the solid-liquid interfacial tension
- C. Both
- D. None
- Ans. A
- 46. The stability of suspensions can be evaluated by
- A. Sedimentation volume
- B. Degree of flocculation
- C. Re-dispersibility
- D. All
- Ans. D
- 47. To identify the emulsion type, which of the following tests are conducted?
- A. Dilution test
- B. Dye test
- C. Conductivity test
- D. All
- Ans. D
- 48. Stoke's equation is expressed as
- A. V = $2r^2(d_1-d_2)g/18\eta$
- B. V = $2r^2(d_1-d_2)g/9\eta$
- C. Both
- D. None

Ans. B

49. The temperature at which the inversion occurs depends on emulsifier concentration is known as

- A. Phage temperature
- B. Inversion temperature
- C. Phase inversion temperature
- D. All
- Ans. D

50. Which of the following mechanical equipment can be used for emulsification?

- A. Homogenizers
- B. Mechanical stirrers
- C. Ultrasonifiers
- D. All

Ans. D

- 51. Which of the following is not used as a emulsifying agent?
- A. Surfactant
- B. Hydrophilic colloids
- C. Electrolytes

D. Finely divided solids **Ans. C**

- 52. HLB system was developed by
- A. Griffin
- B. Stock's
- C. Dalla Valle
- D. None
- Ans. A
- 53. Gum Arabic is a
- A. Anionic polysaccharide
- B. Cationic polysaccharide
- C. Neutral polysaccharide
- D. None

Ans. C

54. Which of the following is not a semisolid dosage form

- A. Paste
- B. Creams
- C. Ointments
- D. Suspensions
- Ans. D
- 55. Generally pastes contain
- A. High percentage of insoluble solids
- B. Low percentage of insoluble solids
- C. Both
- D. None
- Ans. A
- 56. Most widely used hydrocarbon in semisolid dosage forms
- A. Petrolatum
- B. Mineral oil
- C. Both
- D. None
- Ans. C

57. Which of the following hydrocarbon waxes are employed in the manufacture of creams and ointments?

- A. Paraffin wax
- B. Ceresin
- C. Both
- D. None
- Ans. C

58. Which of the following is not a vegetable oil

A. Peanut oil

B. Almond oil

C. Olive oil

D. Petrolatum

Ans. D

59. Which of the following fatty acid used in water removable creams as emulsifier?

A. Palmitic acid

B. Stearic acid

C. Both

D. None

Ans. B

60. Combination of a surfactant with oil-soluble auxiliary emulsifier is known as

A. Simple emulsifier system

B. Mixed emulsifier system

C. Both

D. None

Ans. B

61. Promulgen means

A. Anionic emulsifiers composed of fatty alcohols & their ethoxylates

C. Cationic emulsifiers composed of fatty alcohols & their ethoxylates

B. Non-ionic emulsifiers composed of fatty alcohols

theirethoxylates

D. All the above **Ans. B**

62. Promulgen D contains

A. Cetyl alcohol & Ceteareth-20

B. Stearyl alcohol & Ceteareth-20

C. Both

D. None

Ans. A

63. Promulgen G contains

A. Cetyl alcohol & Ceteareth-20

B. Stearyl alcohol & Ceteareth-20

C. Both

D. None

Ans. B

64. With promulgen D, which type of emulsion generally obtained?

A. Liquid emulsion

B. Thick consistency emulsion

C. Both

D. None Ans. B

65. With promulgen G, which type of emulsion generally obtained?

- A. Liquid emulsion
- B. Thick consistency emulsion
- C. Both
- D. None
- Ans. A

66. Which of the following polyols used as humectants in creams

- A. Glycerine
- B. Propylene glycol
- C. Sorbitol 70%
- D. All the above

Ans. D

67. The choice of humectants is based on

- A. Rate of moisture exchange \sim
- B. Viscosity and texture of preparation
- C. Both
- D. None
- Ans. C
- 68. Which of the following is more hygroscopic at low concentration?
- A. Sorbitol 70%
- B. Glycerine
- C. Both
- D. None

Ans. A

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69. Water number means
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A. Maximum amount of water that can be added to 100 g of a base at given temperature

- B. Maximum amount of water that can be added to 10 g of a base at given temperature
- C. Maximum amount of water tha tcan be added to 5 g of a base at given temperature
- D. All
- Ans. A

70. Lanolin is which type of baseA. Hydrocarbon baseB. Absorption baseC. NoneD. BothAns. D

71. In the preparation of vanishing creams, which types of bases are used generally?

- A. Absorption bases
- B. Water removable bases
- C. Hydrocarbon bases
- D. None
- Ans. B
- 72. In the preparation of cold creams, which types of bases are used generally?
- A. Absorption bases
- B. Water removable bases
- C. Hydrocarbon bases
- D. None
- Ans. A
- 73. Water soluble bases are also known as
- A. Greasy ointment bases
- B. Greaseless ointment bases
- C. Both
- D. None
- Ans. B

74. In pastes, the concentration of insoluble powder substances in

- A. 20%-50%
- B. 50%-100%
- C. 50%-75%
- D. None
- Ans. A
- 75. Jellies are generally
- A. Water-soluble bases
- B. Water-insoluble bases
- C. Both
- D. None

Ans. A

76. As per USP XX, the term "object ionable" means

A. An organism can cause disease or the presence may interrupt the function of the drug or lead to deterioration of the product

B. Pathogens if they produce disease or infection, in the newborn or debilitated persons

- C. Organisms or their toxins that are responsible for human disease or infection
- D. None

Ans. A

77. A suppository is generally intended for use in

A. RectumB. VaginaC. UrethraD. All the above

Ans. D

78. Vaginal suppositories also called as

- A. Pessaries
- **B.** Simple suppositories
- C. Bougies
- D. None
- Ans. A

79. "Oleum theobromae" was first recom-mended by

- A. A. B. Taylor
- B. Griffin
- C. Stocks's
- D. None
- Ans. A

80. Weight of rectal suppository for adults is

- A. 1 g
- B. 2 g
- C. 5 g
- D. None
- Ans. B
- 81. Weight of rectal suppository for children is
- A. 1 g
- B. 2 g
- C. 5 g
- D. None

Ans. A

- 82. Urethral suppositories also called as
- A. Pessaries
- B. Bougies
- C. Both
- D. None
- Ans. B
- 83. Urethral suppositories having which shape
- A. Oviform shape
- B. Torpedo shape
- C. Pencil shape
- D. None

Ans. C

84. Weight of urethral suppository for males & females respectively

- A. 4 & 2
- B. 2 & 4
- C. 4 & 6
- D. 6 & 4
- Ans. A
- 85. Shape of vaginal suppositories is
- A. Oviform shape
- B. Torpedo shape
- C. Pencil shape
- D. None
- Ans. A

86. Rectal suppositories mainly used for the treatment of

- A. Constipation
- B. Hemorrhoids
- C. Both
- D. None
- Ans. C

87. The number of milligrams of KOH required neutralizing free acids & saponify the esters contained in 1 g of fat is known as

- A. Iodine value
- B. Saponification value
- C. Water number
- D. Acid value

Ans. B

88. The number of grams of iodine that reacts with 100 g of fat is known as

- A. Iodine value
- B. Saponification value
- C. Water number

D. Acid value

Ans. A

89. The number of milligrams of KOH required neutralizing free acids in 1g of fat is known as A. Iodine value

- B. Saponification value
- C. Hydroxil value
- D. Acid value
- Ans. D

90. The number of milligrams of KOH required neutralize the acetic acid used to acetylate 1 g of fat is known as A. Iodine value B. Saponification value C. Hydroxil value D. Acid value Ans. C 91. Which of the following method is used to manufacture suppositories A. Hand molding B. Compression molding C. Pour molding D. All the above Ans. D 92. Which of the following is most commonly used suppository base A. Cocoa butter B. PEG 1000 C. PEG + Hexanetriol D. None Ans. A 93. Cocoa butter available in following forms A. α-form B. β-form C. y-form D. All Ans. D 94. The solidification point of cocoa butterlies between A. 12 – 13°C B. $20 - 30^{\circ}C$ C. $5 - 10^{\circ}$ C D. None Ans. A 95. Which of the following method is simple & oldest method of preparation of suppositories? A. Pour molding B. Hand molding

C. Compression molding

D. All the above

Ans. B

96. Most commonly used method for producing suppositories on both a small & large scale is A. Hand molding

B. Compression molding

C. Pour molding D. All the above **Ans. C**

97. Which formula can be used to calculate the amount of base that is replaced by active ingredients?

A.100 (G–E)f=+1(G) (X) B.100 (E–G)f=+100(G) (X) C. 100 (E–G)f=+1(G) (X) D.100 (E–G)f=+10(G) (X) Ans. C

98. Rancidity generally results from A. Auto oxidation

B. Decomposition of unsaturated fats

C. Both

D. None

Ans. C

99. Which of the following is not antioxi-dant

- A. BHT
- B. BHA
- C. Tocopherol
- D. Theobroma oil

Ans. D

100. Suppositories are generally evaluated by

- A. Melting range test
- B. Breaking test
- C. Liquefaction

D. All the above

Ans. D

101. Which of the following materials are used in pharmaceutical packaging?

A. Glass

- B. Plastic
- C. Metal
- D. All the above
- Ans. D

102. Which of the following packaging material is protect the drug content against light A. Plastic containers

- B. Amber colored glass containers
- C. Both
- D. None
- Ans. B

103. Major disadvantages of glass as a packing material are A. Fragility B. Weight C. Both D. None Ans. C 104. Composition of glass is A. Sand B. Soda ash C. Lime stone & Cullet D. All the above Ans. D 105. Soda ash also known as A. Pure silica B. Sodium carbonate C. Lime stone D. Calcium carbonate Ans. B 106. Which of the following one is a broken glass & acts as fusion agent A. Cullet B. Soda ash C. Lime stone D. Sand Ans. A 107. Which of the following methods are used in the production of glass A. Blowing B. Drawing C. Pressing & casting D. All the above Ans. D 108. To produce molten glass, which of the following method is used

- A. Blowing
- B. Drawing
- C. Pressing
- D. Casting
- Ans. A

109. To protect the contents of a bottle from the effects of sunlight by UV rays, which glass is used?

A. Amber glass

B. Red glass

C. Both

D. None

Ans. C

110. To evaluate the chemical resistance of glass, which of the following tests areconducted?

- A. Powder glass
- B. Water attack test

C. Both

D. None

Ans. C

111. Which of the following test is performed on crushed grains, to evaluate the chemical resistance of glass?

A. Powder glass

- B. Water attack test
- C. Both
- D. None

Ans. A

- 112. Which of the following test is performed on whole container?
- A. Powder glass
- B. Water attack tes
- C. Both
- D. None

Ans. B

113. Type I glass is also known as

- A. Borosilicate glass
- B. Regular soda-lime glass
- C. Treated soda-lime glass

D. None

Ans. A

114. The advantages of plastic containers over glass containers are

A. Easy formation

- B. Resistance to breakage
- C. Freedom of design
- D. All the above

Ans. D

115. Plastic containers are generally made from the following material

- A. Polyethylene
- B. Polypropylene
- C. Polystyrene
- D. All the above
- Ans. D

116. Which of the following ingredients are present in rubber stopper?

- A. Vulcanizing agent
- B. Softner
- C. Antioxidant
- D. All the above
- Ans. D

117. Which of the following packaging systems are identified by the FDA?

- A. Blister pack
- B. Strip pack
- C. Bubble pack
- D. All the above
- Ans. D

118. Which of the following packaging is commonly used for packaging of tablets & capsules?

- A. Blister pack
- B. Strip pack
- C. Both
- D. None
- Ans. B

119. Which of the following materials offer moisture barrier properties?

- A. Aclar
- B. Cellophane
- C. Polyester
- D. All the above

Ans. D

120. Which of the following mechanism is responsible for release of encapsulated core materials?

- A. By disrupting the coating by pressure
- B. By offering permeability facilities
- C. By leaching of permanent fluid
- D. All the above

Ans. D

- 121. Pre formulation studies mainly focuson
- A. Physical properties of new compound
- B. Chemical properties of new compound
- C. Physicochemical properties of new compound

D. None Ans. C

122. Which of the following information is helpful in designing the pre-formulation evaluation of a new drug?

A. Structure of a compound

- B. Formula & molecular weight of a compound
- C. Therapeutic indication of a new compound

D. All the above

Ans. D

123. Which of the following problems commonly encountered in evaluating salt forms are

- A. Poor crystallinity
- B. Hygroscopicity
- C. Instability

D. All the above

Ans. D

124. Which of the following salts generally used in pharmaceutical products?

- A. Acetate
- B. Gluconate
- C. Lactate
- D. All the above

Ans. D

125. Description of the outer appearance of a crystal is known as

- A. Crystal habit 🧹
- B. Internal structure
- C. Both
- D. None

Ans. A

126. Which of the following techniques used to prepare amorphous forms?

- A. Rapid precipitation
- B. Lyophilization
- C. Rapid cooling
- D. All the above

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Ans. D
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127. Amorphous forms generally having

- A. Low thermodynamic energy &low solubility
- B. High thermodynamic energy & high solubility
- C. Both
- D. None
- Ans. B

128. Which of the following compound possess high aqueous solubility's?

A. Hydrates

B. Anhydrates

C. Both

D. None

Ans. B

129. Which of the following properties may change with changing of the internal structure of a solid?

A. Melting point

B. Density

C. Optical properties

D. All the above

Ans. D

130. Which of the following methods generally used for studying solid forms?

A. DSC

B. XRD

C. TGA

D. All the above

Ans. D

131. Which of the following methods generally used to measure heat loss orgain within a sample?

A. DSC

B. DTA

C. Both

D. None Ans. C

132. Which of the following co-solvent can be used to increase the solubility of poor soluble drugs?
A. Ethanol
B. Propylene glycol
C. Glycerin
D. All the above

133. Partition co-efficient generally measuresA. Drug's lipophilicityB. Ability of drug to cross cell membraneC. BothD. None

Ans. C

134. Dissolution of a drug particle is described by A. Stock's equation

B. Noyes-Whitney equation

C. Drag's equation

D. None

Ans. B

135. The effect of temperature on drug stability can be described by

- A. Noyes-Whitney equation
- B. Stock's equation
- C. Arheneous equation
- D. None
- Ans. D

136. Unequal distribution of color on a tablet, refers to

- A. Picking
- B. Mottling
- C. Capping
- D. Sticking
- Ans. B
- 137. Which of the following one is responsible for sticking?
- A. Excessive moisture
- B. Low moisture
- C. Both
- D. None
- Ans. A

138. If the dose of a drug is inadequate, the nit generally requires the following one, to make up its bulk

- A. Binders
- B. Disintegrants
- C. Lubricants
- D. Diluents
- Ans. D

139. Which of the following mixer is a first high shear powder blender/mixer

- A. Diosna mixer
- B. Plow mixer
- C. Littleford lodige mixer
- D. Gral mixer
- Ans. C

140. The first and most widely used diluents in tablet formulation is

- A. Dextrose
- B. Lactose
- C. MCC
- D. Starch

Ans. B

- 141. Anhydrous lactose has the advantage over hydrous lactose
- A. Improved flow
- B. Absence of millard reaction
- C. Improved compressibility
- D. High microbial load

Ans. B

142. Which of the following is not a commercially available starch product?

- A. Sta-Rx 1500
- B. Celutab
- C. Emdex
- D. Sugar tab
- Ans. D

143. Which of the following is a synthetic adhesive?

- A. PVP
- B. MC
- C. HPMC
- D. HPC
- Ans. A
- 144. Which of the following is a water soluble lubricant?
- A. Stearic acid
- B. Mineral oil
- C. PEG
- D. Magnesium stearate
- Ans. C

145. Find out the correct statements regarding a sweetener, saccharin

- (P) It is 500 times sweeter than sucrose, but it is carcinogenic
- (Q) It is 500 times sweeter than sucrose, but it has bitter taste
- (R) It is sweeter than sucrose, but it is safe
- (S) It is sweeter than sucrose, but it is unstable
- A.P,S
- B. P, R
- C. P, Q
- D. R, S
- Ans. C

146. Aerosil is used as

- A. Glidant
- B. Lubricant
- C. Antiadherant
- D. None

Ans. A

147. What is the pH of duodenum?

A. 2-3

B. 7-8

D. 10

C. 4-6

Ans. D

148. Tablets, which are placed between cheek and teeth, are known as

A. Buccal

B. Sublingual

C. Lozenges

D. Troches

Ans. A

149. Which statement is not correct?

A. Buccal routes avoids first pass metabolism

B. Parenteral route avoids first pass metabolism

C. Sublingual route avoids first pass metabolism

D. Oral route avoids first pass metabolism

Ans. D

150. Enteric coating is achieved by using

A. HPMC

B. CMC

C. CAP

D. Povidine

Ans. C

151. The disintegration time for sugarcoated tablets is

A. 30 minutes

B. 45 minutes

C. 60 minutes

D. 75 minutes

Ans. C

152. Flow rate of granules from the hopper can be improved by adding

A. Disintegrant

B. Glidant

C. Binder

D. Lubricant

Ans. B

153. Given below are equipment used in the manufacture of following products P-T. Match them and find out correct answer

Zenasi (P) Tablet granules
 Hepa filter (Q) Tablet coating
 Chilsonator (R) Emulsion
 Accela cota (S) Injectables (T) Capsule
 A. 1-T, 2-S, 3-P, 4-Q
 I-P, 2-Q, 3-S, 4-R
 I-T, 2-R, 3-Q, 4-P
 I-S, 2-R, 3-P, 4-Q
 Ans. A

154. Match the ingredients according to their purpose in the formulation and find out correct set

- 1. Film coating (P) Sodium benzoate
- 2. Syrups (Q) Ethyl cellulose
- 3. Emulsification (R) Eudragit
- 4. Enteric coating (S) Sucrose (T) Sodium oleate
- A. 1-P, 2-Q, 3-R, 4-S
- B. 1-R, 2-S, 3-T, 4-Q
- C. 1-T, 2-P, 3-S, 4-Q
- D. 1-R, 2-S, 3-Q, 4-T22.

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Ans. B
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155. Sub coating is given to the tablets

- A. To increase the bulkiness
- B. To avoid deterioration due tomicrobial attack
- C. To prevent the solubility in acidicmedium

D. To avoid stickness

Ans. D

156. The following ingredients are commonly used as coating agents for film coating except A. CAP

- B. Carnauba wax
- C. HEC
- D. Sodium CMC

Ans. B

157. The courster process can be used to

- A. Coat tablets
- B. Determine the disintegration time
- C. Gas sterilize parenteral solution
- D. Automatic filling of capsules

Ans. A

158. Which of the following is the first process that must occur before a drug can become available for absorption from a tablet dosage form?A. Dissolution of the drug in GI fluids

B. Dissolution of the drug in epithelium

C. Ionization of the drug D. Disintegration of the drug **Ans. D**

159. Tablets are placed into coating chamber & hot air is introduced through the bottom of the chamber. Coating solution is applied through anatomizing nozzle from the upper end of the chamber. This technique is called

- A. Sealing before sugar coating
- B. Coating by air suspension
- C. Spray-pan coating
- D. Chamber coating

Ans. B

160. A synthetic sweetening agent which is approximately 200 times sweeter than sucrose & has no taste is

- A. Saccharin
- B. Aspartame
- C. Cyclamate
- D. Sorbitol
- Ans. B
- 161. Shellac is used the purpose of coating tablets as
- A. Polishing agent
- B. Film coating agent
- C. Enteric coating agent
- D. Sub-coating agent for sugarcoating

Ans. C

162. Dose dumping is a problem in the formulation of

- A. Compressed tab
- B. Suppository
- C. Soft gelatin capsules
- D. Controlled release drug products

Ans. D

163. Select the equation that gives the rate of drug dissolution from a tablet A. Fick's law

- B. Henderson-Hasselbatch equation
- C. Noyes-Whitney equation
- D. Michelis Menton equation

Ans. C

164. Which of the following substance is used as mucoadhesive

- A. Acacia
- B. Sodium CMC
- C. Burnt sugar

D. Saccharin Ans. B

165. In the preparation of multi layer tablets, one of the following is used for hydrophilic matrix coating

- A. Shellac
- B. CMC
- C. Stearyl alcohol
- D. Bees wax
- Ans. A

166. The diameter of the mesh aperture in the I.P. disintegration apparatus is given below. Choose the correct size

- A. 2 mm
- B. 4 mm
- C. 1mm
- D. 1.50 mm
- Ans. A

167. Diclofenac tablet with CAP has been administered to a patient. Where do you expect the drug to be released?

- A. Stomach
- B. Oral cavity
- C. Small intestine
- D. Liver

Ans. C

168. Which of the following flavor is used in a formulation containing sour taste?

- A. Wild cherry
- B. Vanilla
- C. Citrus
- D. Chocolate
- Ans. C

169. Durability of a tablet to combined effects of shock & abrasion is evaluated by using

- A. Hardness tester
- B. Disintegration test apparatus
- C. Friabilat or
- D. Screw guage
- Ans. C

170. A retardant material that forms a hydrophilic matrix in the formulation of matrix tablets is A. HPMC

- B. CAP
- C. Polyethylene
- D. Carnauba wax

Ans. A

171. A water soluble substance used as coating material in microencapsulation process is

- A. Polyethylene
- B. Silicone
- C. HEC
- D. Paraffin
- Ans. C

172. One of the following is used as a Ph Dependant controlled release excipient

- A. Carnauba wax
- B. HPMCP

C. MC

D. Glyceryl mono stearate

Ans. D

173. In the tablet coating process, inadequate spreading of coating solution before drying causes

- A. Orange peel effect
- B. Sticking effect
- C. Blistering effect
- D. Picking effect

Ans. A

- 174. Crown thickness of a tablet is measured by
- A. Micrometer
- B. Pychnometer
- C. Hydrometer
- D. All the above
- Ans. B

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175. Friabilator is operated at
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- A. 100 RPM
- B. 75 RPM
- C. 50 RPM
- D. 25 RPM
- Ans. D

176. Enteric coated tablet disintegrate in.....hours in simulated intestinal fluid

A. 1 B. 2 C. 3 D. 4

D. 4 Ans. A

177. In dissolution test, flask is maintained at A. $37^{o}C \pm 0.5^{o}C$

B. $41^{\circ}C \pm 1^{\circ}C$ C. $39^{\circ}C \pm 0.6 ^{\circ}C$ D. $40^{\circ}C \pm 1^{\circ}C$ Ans. A

178. Capping is prevented by using one of the following punches A. Flat

B. Circular

C. Square

D. Rectangular

Ans. A

179. Plating of punch faces are done by

A. Chromium

B. Zinc

C. Iron

D. All

Ans. A

180. Sta-Rx-1500 contains% of moisture

A. 15

B. 10

C. 18 D. 50

Ans. B

181. Acacia trgacanth is used in the concentration of

A. 10%-25 %

B. 60%-70 %

C. 40%-50 %

D. 90%

Ans. A

182. Starch on heating hydrolyze into A. Glucose

 \mathbf{P} Emission \mathbf{P}

B. Fructose & Sorbose

C. Fructose & Mannose

D. Dextrin & Glucose

Ans. D

183. PH of the small intestine is A. 1-2

B. 3-4

C. 6

D. 7-8

Ans. D

184. Aqua coat is a A. 30% w/v of ethyl cellulose dispersion **B.** Solution of HPMC C. 2% w/v of methyl cellulose dispersion D. None Ans. B 195. Lozenges were originally named as A. Capsule B. ODT C. Pastillies D. Sustained axn tab Ans. C 186. Implantation tab are NMT......mm in length A. 20 B. 100 C. 40 D. 8 Ans. C 187. Seal coating is done by using A. Shellac B. Acacia C. Gelatin D. None Ans. A 188. Sub coating is done to A. Round the edges B. Increase the bulk of tablet C. Both a & b D. Make water resistant Ans. C 189. CAP dissolves at PH A. Above 6 B. Below 6 C. 4 D. 2 Ans. A

190. Which of the following one is used as opacifier A. TiO2

B. MgoC. SiliactesD. All of the aboveAns. A

191. Green bone is a source of A. Type A Gelatin

- B. Type B Gelatin
- C. Both
- D. None
- Ans. B

192. Empty capsule has moisture content in the range of

- A. 60%
- B. 12%-15 %
- C. 50%-70%
- D. 30%
- Ans. C
- 193. Which treatment is used for solubility of gelatin
- A. Heat
- B. Formalin
- C. Water
- D. Alcohol
- Ans. B

194. Which of the following is used to fill powdered dry solid into soft gelatin capsule A. Aceo gel

- B. Rotobil
- C. Rotosort
- D. Rotoweigh
- Ans. A

195. Sealing of capsule is achieved by A. 100 °C B. 20 °C C. 37 °C - 40 °C D. 70 °C

Ans. C

- 196. Moisture content is determined by A. K-F Method
- B. Gas Chromatography
- C. Both
- D. None
- Ans. A

197. Foam stability is measured by A. IR Spectroscopy B. UV Spectroscopy C. Rotational viscometers D. All Ans. C 198. Particle size is determined by A. Gas Chromatography B. Cascade impactor C. Light scatter decay D. Both b & c Ans. D 199. Chewable tablet contains the following base A. Manitol B. Glucose C. Lactose D. None Ans. A 200. Which of the following is not added inlozenges? A. Sweetener B. Binder C. Disintegrant D. All Ans. C 201. Enteric coated tablet is disintegrated in A. Stomach B. Liver C. Intestine D. Mouth Ans. C 202. Micromeritics is the study of A. Big particles **B**. Small particles C. Both D. None of these. Ans. B 203. The size and surface area of a particles in? A. Physical

B. Chemical

- C. Pharmacologic properties of products
- D. All of these.

Ans. D.

204. Particle size of product can affect its release from dosage forms administered orally by

- A. Medically
- B. Clinically
- C. Both
- D. None of these.
- Ans. B

205. Frequency distribution curve is obtained when

- A. Number of particles is plotted against the mean size range
- B. Mean size range is plotted against the number of particles
- C. Number of particles and the mean size are on x-axis
- D. Both A and B

Ans. D

206. Methods for determining particle size include

- A. Optical microscopy
- B. Sieving
- C. Sedimentation
- D. All of these

Ans. D

207. Ordinary microscope can measure the particle size between range A. 0.2 to 100 m B. 0.2 to 100 mm C. 0.2 to 100 μ m d) 0.2 to 100 nm Ans. C

208. The size of particle is measured by microscope with the help of

- A. Eye-piece
- B. Micro-meter
- C. Eye-piece fitted with micro-meter
- d) None
- Ans. C

209. Sieving method uses a series of standard sieves calibrated by the

- A. National Bureau of standards
- B. IUPAC
- C. Any of these
- D. None
- Ans. A

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- 210. Order of sieves in sieving is
- A. Coarse, moderately coarse, moderately fine, fine, very fine
- B. Moderately coarse, coarse, moderately fine, fine, very fine
- C. Moderately coarse, coarse, fine, moderately fine, very fine
- D. Coarse, moderately coarse, fine, moderately fine, very fine

Ans. A

211. Sieving errors can arise by factors including

- A. Sieve loading & duration
- B. Intensity of agitation
- C. A & b
- D. None
- Ans. C

212. The particle size in sub sieve range can be found by gravity sedimentation as expressed in

- A. Van't hoff factor
- B. Ohm's law
- C. Graham's law
- D. Stoke's law

Ans. D

213. Andreasen Apparatus works under the principle of

- A. Microscopy
- B. Sedimentation
- C. Sieving
- D. All of above

Ans. B

214. Any instrument used for measuring volume of particle is......

- A. Andreasen apparatus
- B. Coulter counter
- C. Fisher sub sieveseizer
- D. None

Ans. B

- 215. Granulators are used for
- A. Making particles longitudinal
- B. Cuboidal
- C. Spherical
 - D. Elliptical

Ans. C

216. The specific surface is theA. Surface area per unit volumeB. Surface area per unit weight

C. Both A and B D. None of these **Ans. C**

- 217. Methods for determining surface area are
- A. Absorption method
- B. Adsorption method
- C. Air permeability method
- D. B & C
- Ans. D

218. The adsorbed layer in adsorption method is monomolecular at

- A. Very low pressure
- B. Low pressure
- C. High pressure
- D. Very high pressure

Ans. B

219. The adsorbed layer in adsorption method is multimolecular at

- A. Very low pressures
- B. Low pressures
- C. Higher pressures
- D. All of above

Ans. C

220. An instrument used to calculate the surface area of particles is

- A. Quantasorb QS-16
- B. Quanta-adsorb QD-16
- C. Boyton apparatus
- D. Quanta-apparatus

Ans. A

221. In adsorption method the particle whose surface area is to be measured is taken as

- A. Adsorbate
- B. Adsorbent
- C. Any of above
- D. Both of above
- Ans. B

222. Particle size of colloids,
A. 1 nm to 0.5μm
B. 1 μm to 0.5mm
C. 1 mm to 0.5m
D. 1 m to 0.5mm

Ans. A

223. The process which it consisted of at least two phases with one or more disperse phase in a single dispersion medium is called

- A. Disperse phase
- B. Dispersion medium
- C. Dispersion

D. All of these

Ans. C

224. How many types of dispersion?

- A. 1
- B. 2
- C. 3

D. 4

Ans. C (molecular dispersion, colloidal dispersion, coarse dispersion)

- 225. Molecular dispersion ranges from......
- A. 1 to 500nm
- B. <500nm
- C. <1nm
- D. None of these

Ans. C

227. The increasing trend of diameter is

A. Molecular dispersion, Colloidal dispersion, Coarse dispersion.

B. Colloidal dispersion, coarse dispersion, molecular dispersion.

- C. Corse dispersion, molecular dispersion, colloidal dispersion.
- D. All of these

Ans. A

228. The dispersion medium in blood is

- A. Platelets
- B. Serum
- C. Plasma
- D. Oxygen

Ans. C

229. The best example of all dispersion is.....

- A. Oxygen
- B. Blood
- C. Proteins
 - D. All of these
 - Ans. B

230. Molecular dispersion easily passes through......A. Electron microscope

B. Ultra filtrationC. Filter paperD. All of theseAns. D

231. No diffusion takes place inA. Molecular dispersionB. Colloidal dispersionC. Coarse dispersionD. None of theseAns. C

232. Osmoses cannot formed when particles are in.....A. Equilibrium stateB. Random stateC. Both A and BD. None of theseAns. A

233. Microscopic particles can be separated byA. Ultra filtrationB. FiltrationC. DialysisD. All of aboveAns. B

234. Colloids areA. Can't be observed by ordinary microscopeB. Detected under ultra microscopeC. Both A and B

D. None

Ans. C

235. Colloids can pass throughA. Filter paperB. Semi-permeable membraneC. Both A and BD. NoneAns. A

236. Colloids can't pass throughA. Filter paperB. SEMI-permeable

C. Both a and b

D. None of these

Ans. B

237. Diffusion of colloids is
A. Very slow
B. Slow
C. Fast
D. Very fast
Ans. A
238. Cheese is an example of
A. Molecular dispersion

B. Colloidal

C. Coarse

D. All of above

Ans. B

239. Example of colloidal dispersion isA. Oxygen moleculesB. MilkC. NoneD. AllAns. B

240. is not an example of colloidal dispersion

- A. Cheese
- B. Milk
- C. Synthetic polymers

D. RBC's

Ans. D

241. Scattering of light form colloidal particles isA. Faraday Tyndall effectB. Van't hoff factorC. Van't hoff dispersionD. NoneAns. A

242. Faraday Tyndall effect is observed by.....

- A. Light microscopy
- B. Ultramicroscope
- C. Radiography
 - D. None
 - Ans. B

243. Who invented ultra microscope...... A. Zsigmonday



B. Faraday C. Tyndall D. Ohm **Ans. A**

244. As a result of Tyndall effect.....A. Dark spotsB. Bright spots are formedC. Both A and BD. Any of A and BAns. B

245. The process in which dispersed phase is mix in a suitable solvent the process is known asA. SalvationB. DehydrationC. HydrationD. All of these

Ans. A

246. The instrument which is use to reduce the particle size is called.....

- A. Size reduction
- B. Milling
- C. Mold
- D. All of above

Ans. B

247. The process in which we converted coarse particles into colloidal then it is called

- A. Milling
- B. Size reduction
- C. Size oxidation
- D. None of these
- Ans. B

248. Any type of chemical compound that posses two distinct regions that is hydrophilic and hydrophobic portion within same molecule is called

- A. Amphiphyllic
- B. Electrophyle
- C. Both A and B
- D. None of these

Ans. A

- 249. Amphiphyllics are also called
- A. Association colloidal
- B. Surface active agents
- C. Amphipathics
- D. All of above

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Ans. D

250. Inter phase is composed ofA. Water phaseB. Air phaseC. Both A and BD. None of theseAns. C

251. The large phase is calledA. Inter phaseB. Bulk phaseC. Both A and BD. None of theseAns. B

252. The point at which bulk phase and air, water inter phase become saturated is called A. CMC B. Bulk phase

- C. Inter phase
- D. None of these
- Ans. A

253. It is an aggregation of surfactant molecule in a colloidal liquid then it is called

- A. CMC
- B. Micelles
- C. Aggregation number
- D. None of these

Ans. B

254. Dispersed phase and dispersion medium of smoke are

- A. Solid and liquid
- B. Liquid and liquid
- C. Solid and gas
- D. Gas and gas

Ans. C

255. Light scattering in colloidal system is known as

- A. Brownian motion
- B. Faraday-Tyndal effect
 - C. Coagulation
 - D. Electrophoresis

Ans. B

256. Adsorption is the process of A. Repulsion

- B. AdditionC. AdhesionD. None of theseAns. C
- 257. Surface on which ions, atoms or molecules accumulate
- A. Adsorbent
- B. Adsorbate
- C. Specific surface
- D. All
- Ans. A
- 258. Adsorbate are ions, atoms or molecules
- A. Which allow accumulation on their surface
- B. Which accumulate on a specific surface
- C. Which don't accumulate
- D. Both
- Ans. B

259. If both adsorption & absorption are going side by side then it is

- A. Disorption
- B. Desorption
- C. Sorption
- D. Resorption

Ans. C

- 260. Reverse of adsorption is called
- A. Disorption
- B. Desorption
- C. Sorption
- D. Resorption
- Ans. B
- 261. Vander-wall adsorption is synonym of
- A. Physical adsorption
- B. Chemical adsorption
- C. Physi-adsorption
- D. A& C
- Ans. D
- 262. Physi-adsorption is effected by
- A. Temperature only
- B. Pressure only
- C. Temperature and pressure
- D. None
- Ans. C

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263. Strong bonding is present in
A. Chemical adsorption
B. Physical adsorption
C. Vander-wall adsorption
D. A&C
Ans. A
264. Absorption is phenomenon
A. Bulk
B. Surface
C. Phase difference
D. Bulk & phase

Ans. A

265. Adsorption hasA. UniformityB. Non-uniformityC. Bulk uniformityD. A & CAns. B

266. Chemical adsorption involves Bonding A. Hydrogen

- B. Ionic
- C. Covalent
- D. Ionic & covalent

Ans. B

267. Chemical adsorption isA. ReversibleB. IrreversibleC. Mostly reversible

D. Some-times irreversible

Ans. B

268. Disposable syringe made up ofA. PolypropyleneB. Transparent polystyreneC. GlassD. Poly tetra chloro ethyleneAns. A



269. Water attack test is used to identify the alkalinity in A. Type – I Glass B. Type – II Glass

C. Type – III Glass D. All the 3 types **Ans. B**

270. As per G.M.P permitted limit of solid contents in water for injection is

- A. 100 ppm
- B. 1.0 ppm
- C. 0.1 ppm
- D. 10 ppm
- Ans. D

271. Sterilization temperature for aqueous solution in autoclave (moist heat) is

- A. 72°C
- B. 121°C
- C. 147°C
- D. 160°C
- Ans. B

272. Sterility test for the material meant for surgical suture required incubation for

- A. 7 Days
- B. 14 Days
- C. 21 Days
- D. 28 Days

Ans. B

273. An amphoteric surfactant used in pharmaceutical disperse system is

- A. Bile salt
- B. Lecithin
- C. Sorbitan monolaurate
- D. Sorbitan monostearate

Ans. B

274. An abrasive used in dentifrices is

- A. Dicalcium Phosphate
- B. Sodium carboxy methyl cellulose
- C. Sodium Lauryl Sulphate

D. Dioctyl Sodium sulfosuccinate

Ans. A

275. Florentine receiver is used to separate the liquids based on

- A. Molecular weight
- B. Sedimentation rate
- C. Density
- D. Freezing point

Ans. C

276. The official dissolution test apparatus contains cylindrical vessel and the lower edge of the blade is positioned from inside bottom of the vessel at

- A. 18 to 22mm
- B. 23 to 27mm
- C. 20 to 24mm
- D. 25 to 29mm

Ans. B

277. As per Drugs and Cosmetics Act and Rules, the Good Manufacturing Practice is included under Schedule

- A. W
- B. P
- C. S
- D. M
- Ans. D

278. In multistation punching machine, the upper as well as lower punches are connected by

- A. Cams
- B. Turrets
- C. Wire meshes
- D. Revolving belts
- Ans. D

279. As per the Drugs and Cosmetics Act, the HEPA filters are required to filter the air in the pharmaceutical manufacturing unit. Grade A filter is used for

A. Aseptic preparation and filling

- B. Background room used for preliminary activities
- C. Filtering liquid preparations
- D. Handling of components after washing

Ans. A

280. Lyposomes are used as carriers for drugs and macromolecules in pharmaceutical formulations. They are

A. Phospholipids dispersed gently in aqueous medium to obtain multilamellar vesicles

B. Hydrophilic or lipophilic polymer matrix with a drug reservoir

C. A shallow compartment moulded from a drug impermeable system and rate controlling polymeric membrane

D. Microporous membrane made from ethylene / vinyl acetate polymer

16. Due to which factors, petrolatum is most widely used as a hydrocarbon basic in ointments

- A. Its consistency
- B. Its neutral characteristics
- C. Its ability to spread easily on the skin
- D. All
- Ans. D