# UNIT – I PHARMACEUTICS

- 1. The first edition of I.P was published in the year:
  - (a) 1955 (b) 1965
  - (c) 1945 (d) None of them
- 2. The 7<sup>th</sup> edition of I.P was published in the year:
  - (a) 2012 (b) 2014
  - (c) 2007 (d) None of them
- 3. ..... is known as the father of the pharmacy education in India.
  - (a) William Martindale
  - (b) Prof. M L Schroff
  - (c) Dr. B Suresh
  - (d) None of them
- 4. The pharmacy council was established in the year:.
  - (a) 1955 (b) 1948
  - (c). 1972 (d) None of them
- 5. The pharmacopoeia contains:
  - (a) Description, formulae
  - (b) Standard tests
  - (c) Monograph
  - (d) All of these
- 6. The meaning of pharmakon:
  - (a) Medicine (b) Drug
  - (c) Both a and b (d) None of them
- 7. The word 'Pharmacy' is derived from the Greek word:
  - (a) Pharmakon (b) Pharmacos
  - (c) Pharmacon (d) None of them

- New edition of British Pharmacopoeia is published after every ...... years.
  - (a) Four (b) Five
  - (c) Six (d) None of them
- 9. The 1<sup>st</sup> edition of national formulary was published in India in the year:
  - (a) 1955 (b) 1960
  - (c) 2014 (d) None of them
- 10. The 8<sup>th</sup> edition of I.P was published in the year:
  - (a) 1955 (b) 1960
  - (c) 2018 (d) None of them
- 11. 1<sup>st</sup> British Pharmacopoeia was published in the year:
  - (a) 1864 (b) 1960
  - (c) 2014 (d) None of them
- 12. The extra pharmacopoeia was 1st published in the year ..... by William Martindale.
  - (a) 1955 (b) 1960
  - (c) 1883 (d) None of them
- 13. The extra pharmacopoeia was 1st published in 1883 by:
  - (a) William Martindale
  - (b) Prof. M L Schroff
  - (c) Merck
  - (d) None of them

- The I.P 1996 contains ..... monographs and ..... appendices and available in two volumes.
  - (a) 1150 and 125
  - (b) 1149 and 123
  - (c) 1145 and 120
  - (d) None of them
- 15. Which are the non-official compendia:
  - (a) Merck index (b) Martindale
  - (c) Both a and b (d) None of them
- 16. The 1<sup>st</sup> edition of USP was published in which language:
  - (a) English (b) Latin
  - (c) Both a and b (d) None of them
- 17. Pharm.D course is started in India to meet international standard of:
  - (a) Dispensing pharmacist
  - (b) Clinical pharmacist
  - (c) Community pharmacist
  - (d) None of them
- 18. Expand USP:
  - (a) United States Pharmacopoeia.
  - (b) United States Pharmacist.
  - (c) United Standard Pharmacopoeia.
  - (d) None of these.
- 19. Expand MDI:
  - (a) Metered Dose Inhaler.
  - (b) Monitored Dose Inhaler.
  - (c) Measured Dose Inhaler.
  - (d) None of these.

- 20. Which of the following is not a dosage form:
  - (a) Excipient (b) Tablet
  - (c) Capsule (d) Implant
- 21. Which route of administration bypasses the first-pass metabolism:
  - (a) Oral (b) Intravenous
  - (c) Sublingual (d) None of these
- 22. ..... are the substances which have no or little pharmacological effect but are essential for preparation of pharmaceutical dosage forms are known as pharmaceutical aids.
  - (a) Pharmaceutical aids
  - (b) Flavoring agents
  - (c) Disintegrating agents
  - (d) None of them
- 23. Which of the following is used to increase the viscosity of a liquid:
  - (a) Methyl cellulose
  - (b) Methanol
  - (c) Chloroform
  - (d) None of them
- 24. Which of the following are the examples of coloring agents:
  - (a) Sunset yellow
  - (b) Indigo carmine
  - (c) Tartrazine
  - (d) All of them

- 25. Which of the following is antimicrobial preservative:
  - (a) Benzalkonium chloride
  - (b) EDTA
  - (c) BHA
  - (d) Sorbitol
- 26. Which is the example of artificial preservative:
  - (a) Honey
  - (b) Sodium chloride
  - (c) Sodium benzoate
  - (d) Lemon
- 27. Which is the following is synthetic sweetener:
  - (a) Sucrose (b) Aspartame
  - (c) Glucose (d) Sorbitol
- 28. Benzalkonium chloride is characterized as:
  - (a) Neutral preservative
  - (b) Mercurial preservative
  - (c) Quaternary ammonium compound
  - (d) Acidic preservative
- 29. Which of the following is an example of natural sweetener:
  - (a) Sucrose (b) Dextrose
  - (c) Sorbitol (d) All of them
- 30. Which of the following is an example of synthetic sweetener:
  - (a) Aspartame (b) Dextrose
  - (c) Sucrose (d) None of them

- 31. Saccharin is used as .....agent

  (a) Binding
  (b) Coloring
  (c) Sweetening
  (d) Lemon

  32. Which of these sugars have bitter taste?

  (a) Glucose
  (b) Saccharine
  (c) Sucrose
  (d) None of these

  33. Which of the following is used to increase the viscosity?
  - (a) PVP
  - (b) Sodium CMC
  - (c) Methyl cellulose
  - (d) All of these
  - 34. Cochineal is a ..... agent.
    - (a) Sweetening (b) Flavoring
    - (c) Coloring (d) None of these
  - 35. Which of the following is artificial sweetener:
    - (a) Alitame (b) Neotame
    - (c) Aspartame (d) All of these
  - 36. Which of the following is natural sweetener:
    - (a) Xylitol, (b) Mannitol
    - (c) Lactitol (d) All of these
  - 37. In ...... % thiomersal is used as preservative in liquid orals.
    - (a) 0.3 (b) 0.2
    - (c) 0.1 (d) None of them

- The substance which prevents or inhibits the growth of microbes is known as:
  - (a) Preservative (b) Sweetener
  - (c) Antioxidant (d) None of them
- Flavors, colors and sweeteners grouped together as ...... agents.
  - (a) Antioxidant (b) Excipient
  - (c) Organoleptic (d) None of them
- 40. Soda ash is also called as.....
  - (a) Sodium carbonate
  - (b) Sodium chloride
  - (c) Sodium benzoate
  - (d) None of them
- 41. The other name of Type-I glass:
  - (a) Soda lime glass
  - (b) Borosilicate glass
  - (c) Regular soda lime glass
  - (d) None of them
- 42. The other name of Type-II glass: is also called as:
  - (a) Soda lime glass
  - (b) Borosilicate glass
  - (c) Soda lime silica glass
  - (d) None of them
- 43. Hydrolytic resistance of glass test is performed to know its:
  - (a) Limit of acidity
  - (b) Limit of alkalinity
  - (c) Limit of neutrality
  - (d) None of them

- 44. Which glass is used for all types of laboratory glasswares:
  - (a) Type-I (b) Type-II
  - (c) Type-III (d) None of them
- 45. .....is the process of release of fine particles of glass into the product.
  - (a) Vulcanization
  - (b) Hermetic
  - (c) Flaking
  - (d) None of them
- 46. Packaging material which protect the drug from light:
  - (a) Plastic
  - (b) Amber colored glass
  - (c) Both a & b
  - (d) None of them
- 47. Which is the composition of borosilicate glass:
  - (a) SiO<sub>2</sub>(60%), B<sub>2</sub>O<sub>3</sub>(5%), Al<sub>2</sub>O<sub>3</sub>(2%)
  - (b) SiO<sub>2</sub>(90%), B<sub>2</sub>O<sub>3</sub>(8%), Al<sub>2</sub>O<sub>3</sub>(4%)
  - (c) SiO<sub>2</sub>(80%), B<sub>2</sub>O<sub>3</sub>(12%), Al<sub>2</sub>O<sub>3</sub>(6%)
  - (d) None of them
- 48. What is the composition of regular soda lime glass:
  - (a) SiO<sub>2</sub>(75%), Na<sub>2</sub>O(15%), CaO(10%)
  - (b) SiO<sub>2</sub>(65%), Na<sub>2</sub>O(15%), CaO(20%)
  - (c) SiO<sub>2</sub>(55%), Na<sub>2</sub>O(15%), CaO(15%)
  - (d) None of them
- 49. Polymer which does not belong to thermosetting plastic?
  - (a) Polyester (b) PVC
  - (c) Polyurethane (d) None of them

- 50. Vulcanization of rubber is performed by treating it with?
  - (a) Sodium (b) Sulphur
  - (c) Selenium (d) None of them
- 51. Which rubber has excellent ageing property?
  - (a) Silicon (b) Nitrile
  - (c) Butyl (d) None of them
- 52. ..... agent increases the hardness of the rubber.
  - (a) Vulcanizing (b) alkalizing
  - (c) Acidic (d) None of them
- 53. Plastic containers are generally prepared from?
  - (a) Polystyrene (b) Polypropylene
  - (c) Polyethylene (d) All of them
- 54. .....°C is the melting point of PVC.
  - (a) 55 (b) 75
  - (c) 60 (d) None of them
- 55. Plastic containers are sterilized by which of the following method:
  - (a) Autoclaving
  - (b) Hot air oven
  - (c) Gas sterilization
  - (d) None of these
- 56. Which is the commonly used pharmaceutical packaging material due to its excellent protective properties?
  - (a) Glass (b) Plastic
  - (c) Aluminium (d) None of them

- 57. ..... is defined as the broken or waste glass used in the manufacturing of new glass container.
  - (a) Closure (b) Container
  - (c) Cullet (d) None of them
- 58. What is full form of PMMA?
  - (a) Poly methyl methacrylate.
  - (b) Poly methyl metacrylate.
  - (c) Ploy methyl muramic acid.
  - (d) None of these.
- 59. Metal preferred as pharmaceutical packaging material due to its light weight and elegant appearance.
  - (a) Glass (b) Plastic
  - (c) Aluminium (d) None of them
- 60. Photosensitive pharmaceutical products are stored in: colored bottle.
  - (a) Yellow colored bottle
  - (b) White colored bottle
  - (c) Amber colored bottle
  - (d) None of them
- 61. Which of the following is test for packaging:
  - (a) Vibration test (b) Drop test
  - (c) Shock test (d) All of them
- 62. The composition of glass is:
  - (a) Silica, soda ash and lime stone
  - (b) Silica, sodium bicarbonate and lime stone
  - (c) Silica, soda ash and aluminium oxide
  - (d) None of them

- 63. Airtight containers are also called as ..... containers. (a) Amber (b) Hermetic (d) None of them (c) Alkaline 64. Glass container treated with ..... is used to store alkali sensitive products. (b) Silicone (a) Limestone (c) Acid (d) None of them 65. Borosilicate glass is: (a) Type-I (b) Type-III (c) Type-II (d) None of them 66. Treated soda-lime glass is: (a) Type-IV (b) Type-II (d) None of them (c) Type-III 67. Which is used as vulcanizing agent in rubber closure: (a) Talc (b) Activated carbon (c) Sulphur (d) None of them 68. What is the disadvantage of glass as a packaging material: (a) Weight (b) Fragility (c) Both a and b (d) None of them 69. Aerosol are made from which of the following material: (a) Tin (b) Aluminium (d) None of them (c) Brass 70. Define size reduction? (a) It is the process of reduction of material into smaller pieces or to powder.
  - (b) It is the process by which there is separation of different sized of particles.
  - (c) It is the process in which two or more components are mixed
  - (d) None of these.
  - 71. Which of the following is not the mechanism of size reduction:
    - (a) Cutting (b) Compression
    - (c) Sifting (d) None of them
  - 72. Size reduction increases ..... of the particles.
    - (a) Surface area (b) Particle size
    - (c) Density (d) None of them
  - 73. Hammer mill works on the principle of:
    - (a) Cutting (b) Impaction
    - (c) Attrition (d) None of them
  - 74. The mechanisms involved in size reduction are:
    - (a) Cutting (b) Compression
    - (c) Attrition (d) All of them
  - 75. Ball mill works on the principle of:
    - (a) Cutting
    - (b) Compression
    - (c) Impaction and attrition
    - (d) None of them
  - 76. Size reduction equipment working on the principle of attrition?
    - (a) Ball mill (b) Roller mill
    - (c) Both a and b (d) None of them

7

- 77. Mill which works on the principle of both impaction and attrition?
  - (a) Hammer mill (b) Ball mill
  - (c) Roller mill (d) None of them
- 78. Which of the following is a noisy mill.
  - (a) Hammer mill (b) Cutter mill
  - (c) Ball mill (d) None of them
- 79. Balls in ball mill occupy .....% of mill volume.
  - (a) 30-50 (b) 20-40
  - (c) 50-60 (d) None of them
- 80. Factor which does not affect size reduction:
  - (a) Viscosity (b) Hardness
  - (c) Abrasiveness (d) None of them
- 81. The synonyms of size reduction:
  - (a) Pulverization (b) Comminution
  - (c) Grinding (d) All of them
- 82. Which of the following factors affect size reduction:
  - (a) Stickiness (b) Moisture
  - (c) Hardness (d) All of them
- 83. In sieving sieves are arranged in ..... order.
  - (a) Descending (b) Ascending
  - (c) Random (d) None of them
- 84. Name the mechanisms of size separation:
  - (a) Agitation (b) Brushing
  - (c) Centrifugal (d) All of them

- 85. .....is defined as the number that indicates the number of meshes in a length of (b)54cm in each transverse direction parallel to the wires.
  - (a) Sieve
  - (b) Sieve number
  - (c) Nominal size of aperture
  - (d) None of them
- Sieve number denotes number of meshes in linear length of:
  - (a) 2.54 cm (b) 3.54 cm
  - (c) 1.54 cm (d) None of them
- 87. ..... is defined as the distance between the wires.
  - (a) Sieve
  - (b) Sieve number
  - (c) Nominal size of aperture
  - (d) None of them
- ..... powder is the powder of which all the particles pass through sieve No.10 and not more than 40% through sieve No.44.
  - (a) Coarse (b) Fine
  - (c) Very fine (d) None of them
- 89. ..... powder is the powder of which all the particles pass through sieve No.85.
  - (a) Coarse (b) Fine
  - (c) Very fine (d) None of them

- 90. ..... powder is the powder of which all the particles pass through sieve No.120.
  - (a) Coarse (b) Fine
  - (c) Very fine (d) None of them
- 91. ..... powder is the powder of which all the particles pass through sieve No.22 and not more than 40% through sieve No.65.
  - (a) Moderately Coarse
  - (b) Coarse
  - (c) Very fine
  - (d) None of them
- 92. According to Indian Pharmacopoeia powders are grade into ...... grades.
  - (a) Three (b) Four
  - (c) Five (d) None of them
- 93. In the cyclone separator the powder is separated depending on its:
  - (a) Density
  - (b) Density and particle size
  - (c) Particle size
  - (d) Shape of particles
- 94. The particle which is retained on the mesh is known as:
  - (a) Oversize (b) Undersize
  - (c) Average size (d) None of these
- 95. The material that passes through the mesh/sieve is known as .....
  - (a) Oversize (b) Undersize
  - (c) Average size (d) None of these

- 96. All the particles of moderately fine powder pass through which sieve number:
  - (a) 100 (b) 40
  - (c) 85 (d) 22
- 97. The synonyms of size separation:
  - (a) Sieving (b) Sifting
  - (c) Screening (d) All of them
- 98. Which metal is used for construction of sieves?
  - (a) Copper (b) Iron
  - (c) Stainless steel (d) None of them
- 99. Brushing method increases the movement of ..... particles.
  - (a) Sticky (b) Dry
  - (c) Anhydrous (d) None of them
- 100. The I.P has given the nominal aperture size for majority of sieves in:
  - (a) Nanometer (b) Millimeter
  - (c) Both a and b (d) None of them
- 101. The apparatus having a wire mesh used for separation of solids liquids or large particles form small particles is called as:
  - (a) Sieve (b) Aperture
  - (c) Sieve number (d) None of them
- 102. As per Indian Pharmacopoeia powders are graded into how many grades?
  - (a) Five grades (b) Six grades
  - (c) Four grades (d) None of them

- 103. ..... is the process in which two or more components are mixed so that each particle comes in contact with each other.
  - (a) Mixing
  - (b) Homogenization
  - (c) Clarification
  - (d) None of them
- 104. The different mechanisms of mixing are:
  - (a) Connective mixing
  - (b) Shear mixing
  - (c) Diffusive mixing
  - (d) All of them
- 105. .....is the process by which the large globules or particles in a coarse emulsion or suspension or semisolid preparation are broken into smaller globules or particles by passing the sample under pressure through a narrow orifice.
  - (a) Mixing
  - (b) Homogenization
  - (c) Clarification
  - (d) None of them
- 106. Degree of mixing is also known as:
  - (a) Random mixing
  - (b) Extent of mixing
  - (c) Degree of homogeneity
  - (d) None of them
- 107. Which of the following apparatus can be used for mixing of powers:
  - (a) Tumbler

- (b) Double cone blender
- (c) Air mixer
- (d) All of them
- 108. A double cone mixer is used for mixing of:
  - (a) Solids (b) Suspensions
  - (c) Liquids (d) None of them
- 109. Which mechanism is not used in solid-solid mixing.
  - (a) Tumbling (b) Gliding
  - (c) Rolling (d) None of them
- 110. Mixing of semisolids is carried out in:
  - (a) Double cone blender
  - (b) Planetary mixer
  - (c) Tumbler blender
  - (d) None of them
- 111. The triple roller mill works on the principle of .....
  - (a) Vibration (b) Shear forces
  - (c) Tumbling (d) None of them
- 112. Working principle of Double cone blender:
  - (a) Agitation (b) Vibration
  - (c) Tumbling (d) None of them
- 113. Which mechanism is not used in solid-solid mixing.
  - (a) Agitation (b) Tumbling
  - (c) Turbulent (d) None of them

- 114. Working principle of turbine mixer: filtration: (a) Multiple forces (a) Density (b) Attractive forces (c) Shear forces (d) None of them filtration? 115. Mechanism of silverson mixer? (a) Laminar (b) Turbulent (d) None of them (c) Random 116. Liquid mixing is usually done using: (a) Impellers (b) Blades (c) Choppers (d) None of them 117. Mechanism of solid mixing: filter cake. (a) Diffusive (b) Connective (a) Slurry (d) All of them (c) Shear 118. Mechanism of liquid mixing: (a) Turbulent (b) Laminar (d) All of them (c) Molecular (a) Slurry 119. ..... is the process by which finely divided solids and colloidal materials present in low concentration are separated from (a) Slurry liquids. (b) Clarification (a) Filtration (c) Evaporation (d) None of them aid: 120. .... is defined as the separation of solids from liquids by means of a porous medium. (c) Cotton (b) Clarification (a) Filtration (d) Perlite (c) Evaporation (d) None of them
  - 121. Which factor does not influence
    - (b) pH
    - (c) Viscosity (d) Temperature
  - 122. Name the mechanism involved in
    - (a) Straining
    - (b) Impingement
    - (c) Entanglement
    - (d) All of them
  - 123. ..... is the solid material which increases the rate of filtration by increasing permeability of the
    - (b) Filter media
    - (c) Filter aids (d) None of them
  - 124. ..... is the porous media, which allow the fluid to pass and retains the solid on its surface?
    - (b) Filter media
    - (c) Filter aids (d) None of them
  - 125. is defined as the suspension to be filtered.
    - (b) Filter media
    - (c) Filter aids (d) None of them
  - 126. Which of the following is not a filter
    - (a) Cellulose
    - (b) Diatomaceous

- 127. The rate of filtration through the filter cake is ..... proportional to the thickness of the cake.
  - (a) Indirectly (b) Inversely
  - (c) Directly (d) None of them
- 128. Give examples of filter aids?
  - (a) Cellulose (b) Asbestos
  - (c) Perlite (d) All of them
- 129. Filter aids are added to the liquid to:
  - (a) Increases permeability
  - (b) Increases porosity
  - (c) Both a and b
  - (d) Perlite
- 130. Which of the following theory does not describes rate of filtration?
  - (a) Poiseuille's equation
  - (b) Noye's Whitney equation
  - (c) Kozeny Carman equation
  - (d) None of them
- 131. Which of the following is used as filter aid?
  - (a) Charcoal (b) Silica gel
  - (c) Bentonite (d) All of them
- 132. The material used for construction of membrane filters:
  - (a) Cellulose nitrate
  - (b) Cellulose acetate
  - (c) Both a & b
  - (d) None of them

- 133. .....is the process where in a liquid substance is poured through a porous or perforated device or material in order to separate out any solid matter.
  - (a) Straining (b) Percolation
  - (c) Maceration (d) Infusion
- 134. The porous medium retaining solids in filtration process is known as:
  - (a) Filter cake (b) Filter media
  - (c) Both a & b (d) None of them
- 135. The temperature at which the particles of glass adhere together is called as ...... temperature.
  - (a) Melting (b) Boiling
  - (c) Sintering (d) None of them
- 136. .....is a process of extraction in which the soluble constituents are extracted from a comminuted drug by slowly passing a suitable solvent through a column of the drug.
  - (a) Straining (b) Percolation
  - (c) Maceration (d) Infusion
- 137. In ..... process the extraction of comminuted drugs is soaked in the menstruum until the cellular structure is softened and penetrated by the menstruum and soluble constituents are dissolved.
  - (a) Straining (b) Percolation
  - (c) Maceration (d) Infusion

- 138. .....is defined as the process in which the extracting drug substance or flavors from plant material by keeping it in water for a specified period and finally filtering it.
  - (a) Straining (b) Percolation
  - (c) Maceration (d) Infusion
- 139. ..... is the process which involves treatment of plant or animal tissue with solvents to remove soluble active substance from insoluble residue like cell tissues and most of inactive or inert components.
  - (a) Extraction (b) Percolation
  - (c) Decoction (d) Infusion
- 140. ..... is defined as the process in which the drug is boiled with water for a specified time.
  - (a) Extraction (b) Percolation
  - (c) Decoction (d) Infusion
- 141. ..... is called as the solvent used in extraction.
  - (a) Marc (b) Menstruum
  - (c) Decoction (d) None of them
- 142. The inert substance which is insoluble and remains after extraction is called as .....
  - (a) Marc (b) Menstruum
  - (c) Decoction (d) None of them
- 143. Following are the processes used in extraction process except:
  - (a) Digestion (b) Percolation
  - (c) Maceration (d) Sublimation

- 144. Which of the following is method of extraction:
  - (a) Maceration (b) Infusion
  - (c) Decoction (d) All of them
- 145. ..... time is required to macerate the drug in a percolator.
  - (a) 15 hrs (b) 18 hrs
  - (c) 24 hrs (d) None of them
- 146. .....is the process in which the powdered drug is moistened with a suitable amount of menstruum and allowed to stand.
  - (a) Imbibition (b) Percolation
  - (c) Maceration (d) None of them
- 147. Preparations such as decoctions, infusions, elixirs and spirits are commonly called as .....
  - (a) Solutions (b) Galenicals
  - (c) Parenterals (d) None of them
- 148. Alcohol is used as menstruum in ..... process.
  - (a) Sublimation (b) Percolation
  - (c) Maceration (d) None of them
- 149. Solvents used in the process of extraction:
  - (a) Alcohol (b) Water
  - (c) Ether (d) All of them
- 150. When a crude drug is in unorganized state ..... is the method preferred for extraction.
  - (a) Decoction (b) Evaporation
  - (c) Maceration (d) None of them

151. Leaching by immersion of crude material is also called as ..... (b) Evaporation (a) Infusion (d) None of them (c) Maceration 152. Which method is used for extraction of thermolabile drugs? (a) Percolation (b) Maceration (c) Decoction (d) Both a and b 153. The residue left after extracting the desired constituents is called as ..... (a) Pellet (b) Marc (d) None of them (c) Precipitate 154. Extraction technique using soxhlet apparatus is called as: (a) Simple percolation (b) Maceration (c) Continuous hot percolation (d) None of them 155. The process used for extraction except: (a) Sublimation (b) Infusion (d) None of them (c) Maceration 156. ..... is defined as a process in which the liquid is removed from a material by the application of heat leaving a dry solid. (a) Drying (b) Evaporation (c) Lyophilization (d) None of them 157. .... is defined as the

process of removal of water vapor

- from a frozen solution by sublimation. (a) Drying (b) Evaporation (c) Lyophilization (d) None of them 158. ..... dryer is also known as lyophilizer. (a) Freeze (b) Fluidized bed (c) Tray (d) None of them 159. Drying process involves ..... transfer operation. (a) Mass (b) Heat (c) Both a and b (d) None of them 160. Example of static bed dryer? (a) FBD (b) Tray dryer (c) Drum dryer (d) None of them 161. Example of pneumatic dryer? (a) Spray dryer (b) Freeze dryer (c) Rotary drum dryer (d) None of them 162. Dryer suitable for drying thermolabile substances: (a) Tray dryer (b) FBD (c) Rotary drum dryer (d) None of them 163. Mode of heat transfer in drying process is by:
  - (a) Conduction (b) Convection
  - (c) Radiation (d) All of these

164. The principle involved in freeze (a) Mottling (b) Capping drying is: (c) Sticking (d) None of them (a) Condensation (b) Sublimation 171. ..... is the process in which a (c) Evaporation (d) None of these solid solute enters a solution. 165. Formation of large tablets in dry (a) Dispersion (b) Disintegration granulation is called as: (c) Dissolution (d) None of them (a) Chipping (b) Capping 172. ..... is the time taken for the (d) None of them (c) Slugging tablet to completely break into small granules or particles. 166. ..... are defined as solid dosage forms containing medicinal (a) Dispersion (b) Disintegration substances with or without suitable (d) None of them (c) Dissolution diluents, prepared either by 173. Give examples of lubricants used in compression or moulding. tableting? (a) Tablets (b) Capsules (a) Stearic acid (b) Talc (c) Suppositories (d) None of them (c) Both a and b (d) None of them 167. ..... is defined as partial or 174. Which of the following are complete separation of the top or examples of disintegrating agents? bottom of the tablet. (a) Starch (b) Gums (a) Mottling (b) Capping (d) All of them (c) Cellulose (d) None of them (c) Sticking 175. Write the examples of binders used 168. Tablets placed under the tongue in tablets? are called as: (a) Starch (b) Acacia (a) Chewable tablets (c) Tragacanth (d) All of them (b) Sublingual tablets 176. The disintegration time for (c) Buccal tablets effervescent tablets is..... (d) None of them (a) 5 mins (b) 10 mins 169. ..... is defined as unequal (c) 15 mins (d) None of them distribution of coloring agent on 177. The disintegration time for the surface of the tablet. uncoated tablets is ..... as per (a) Mottling (b) Capping I.P. (d) None of them (c) Sticking (b) 10 mins (a) 20 mins 170. Tablet material adhering to the die (c) 15 mins (d) None of them wall is called as:

- 178. The disintegration time for sugar coated /film coated tablets:
  - (a) 60 mins (b) 90 mins
  - (c) 30 mins (d) None of them
- 179. Weight variation limit of tablets above 250mg as per I.P.
  - (a) 5% (b) 10%
  - (c) 7.5% (d) 15%
- 180. Weight variation limit of tablets below 80mg as per I.P.
  - (a) 7.5% (b) 5%
  - (c) 10% (d) 15%
- Weight variation limit of tablets above 80mg and less than 250mg as per I.P.
  - (a) 10% (b) 7.5%
  - (c) 5% (d) 15%
- 182. Percentage limit for friability test for tablets.
  - (a) 5% (b) 3%
  - (c) 1% (d) None of these
- Which of the following is unofficial test for evaluation of tablets:
  - (a) Friability (b) Disintegration
  - (c) Dissolution (d) None of them
- 184. Which of the following is not official test in I.P:
  - (a) Content uniformity test
  - (b) Disintegration
  - (c) Hardness
  - (d) None of them

done by:
(a) Gelatin
(b) Shellac
(c) Beeswax
(d) None of them
186. Which of the following tablets after oral administration release the drug at a desired time for prolonged effect:
(a) Sustained release tablets

185. Sealing of sugar-coated tablet is

- (b) Enteric coated tablets
- (c) Sugar coated tablets
- (d) None of them
- 187. The disintegration time for sugar coated tablets as per I.P is:
  - (a) 30 mins (b) 60 mins
  - (c) 45 mins (d) None of them
- 188. Lamination process is ..... of tablets.
  - (a) Polishing (b) Coating
  - (c) Breaking (d) None of them
- 189. Which of the following is used as a binder in tablets?
  - (a) HPMC (b) Starch
  - (c) Cellulose (d) All of them
- 190. Which of the following is used as a diluent in tablets?
  - (a) Sorbitol
  - (b) Calcium phosphate
  - (c) Mannitol
  - (d) All of them

191.	What is rpm of F	riabi	lator per	(b) Hard Gelatin capsules					
	(a) 25 rpm (c) 100rpm	(b) (d)	50rpm None of them	197	(d) None of these	se ile is i	done at which		
192.	Which of the folloof sugar coating:	owir	ng is first step	137.	of the following temperature: (a) 37-40°C (b) 20°C				
	(a) Sealing	(b)	Sub-coating		(c) 70°C	(d)	None of these		
193	(c) Smoothing	(d) e sol	None of them	198.	100mg is the po capsule size nur	wer o nber	capacity of the		
	forms consisting	of s	ingle dose of		(a) 00	(b)	000		
	drug enclosed in a water soluble				(c) 5	(d)	0		
	(a) Capsules	yen (b)	Tablets	199.	950mg is the power capacity of the capsule size number				
104	(c) Suppositories	5 (a)	None of them		(a) 00	(b)	000		
194.	velatin capsules?	SITIO	n of hard	200.	(c) 5	(d)	0		
	(a) Gelatin, color	ager	nt and titanium		Largest size of capsule is:				
	dioxide.				(a) 0	(b)	00		
	(b)Gelatin, water	and	glycerin or	201.	(c) 000 (d) None of them				
	sorbitol or pro	pyle	ene glycol.		Smallest size of	capsu	ule is:		
	(c) Both a and b.				(a) Five	(b)	Two		
	(d) None of these	2.			(c) One	(d)	None of them		
195.	Write the compo gelatin capsules?	sitio	n of soft	202.	Plasticizer preferred in manufacturing of capsules:				
	(a) Gelatin, color	agei	nt and titanium		(a) HPMC	(b)	Sorbitol		
	dioxide.				(c) Povidone	(d)	PEG		
	(b) Gelatin, water sorbitol or pr	r and opyl	d glycerin or ene glycol.	203.	Empty gelatin capsule has moisture concentration in the				
	(c) Both a and b.				range of:				
	(d) None of these	e.			(a) 50-70%	(b)	50-90%		
196.	Bloom strength i check the quality	s car of:	rried out to		(c) 20-40%	(d)	65%		
	(a) Tablets								

- 204. What is the ratio of gelatin and glycerin for hard gelatin capsules:
  - (a) 0.8:1 (b) 0.7:1
  - (c) 0.6:1 (d) None of them
- 205. Chemically gelatin is:
  - (a) Protein (b) Carbohydrate
  - (c) Lipid (d) None of them
- 206. Opacifier used in capsules:
  - (a) Sorbitol
  - (b) Methyl paraben
  - (c) Titanium dioxide
  - (d) None of them
- 207. Route of administration of BCG vaccine:
  - (a) Intradermal (b) Subcutaneous
  - (c) Intramuscular (d) None of them
- 208. Route of administration Hepatitis B vaccine:
  - (a) Intravenous (b) Intramuscular
  - (c) Intradermal (d) None of them
- 209. Which of the following is passive immunization:
  - (a) Tetanus antitoxin
  - (b) BCG vaccine
  - (c) Tuberculin PPD
  - (d) None of them
- 210. Route of administration Measles vaccine:
  - (a) Intradermal
  - (b) Intravenous
  - (c) Subcutaneous
  - (d) None of them

- 211. Route of administration DPT vaccine:
  - (a) Intramuscular (b) Intradermal
  - (c) Intravenous (d) None of them
- 212. The immunity obtained during a lifetime:
  - (a) Acquired immunity
  - (b) Active immunity
  - (c) Passive immunity
  - (d) None of them
- 213. Which of the following is a combined vaccine:
  - (a) Polio vaccine
  - (b) MMR
  - (c) Cholera vaccine
  - (d) None of them
- 214. Shick test is done to identify immunity to detect:
  - (a) Tuberculosis (b) Diptheria
  - (c) Malaria (d) None of them
- 215. Mantoux test is done to identify immunity to detect:
  - (a) Tuberculosis (b) Cholera
  - (c) Malaria (d) None of them
- 216. ....is defined as the substances which stimulate the body to produce antibodies.
  - (a) Antigen (b) Immunity
  - (c) Virulence (d) None of them
- 217. ....is defined as the power of the body which prevents the invasion of pathogens.
  - (a) Antibody (b) Immunity
  - (c) Virulence (d) None of them

218.	substance forme response to stime	defined as the ed in the body in ulation by antigens.	224.	are the microorganism which are capable of producing infection or disease.				
	(a) Antigen	(b) Immunity		(a) Antitoxins	(b)	Toxins		
	(c) Antibody	(d) None of them		(c) Pathogens	(d)	None of them		
219.	or ability of an or the host. (a) Antibody	ed as the capacity rganism to infect (b) Immunity	225.	Which system protects our body from pathogenic organisms: (a) Digestive system				
	(c) Virulence	(d) None of them		(c) Urinany system				
220.	Which cells are in mediated immun	nvolved in the cell nity:		(d) None of them				
	<ul><li>(a) Mast cells</li><li>(c) T cells</li></ul>	<ul><li>(b) Thrombocytes</li><li>(d) Leucocytes</li></ul>	226.	vaccine suspension prepa salmonella typhi.	is a ared	sterile from strains of		
221.	containing antibute	e the substances odies produced by which specifically		(a) Typhoid (b) BCG (c) Polio (d) None of th				
	neutralize the to particular microb (a) Antitoxins (c) Pathogens	oxins produced by be. (b) Toxins (d) None of them	227.	<ul> <li>(c) Folio (d) Hole of the mediated involved in cell-mediated immunity.</li> <li>(a) Neutrophil (b) Null cells</li> </ul>				
222.	are substances prod which leads to in in humans or anii (a) Antitoxins (c) Pathogens	e the poisonous luced by pathogen infection or disease imals? (b) Toxins (d) None of them	228.	(c) T-cens inside the bactor released when it (a) Endotoxin (c) Toxoid	(d) the erial disir (b) (d)	toxin present cell which is ntegrates. Exotoxin None of them		
223.	with chemical to without losing	n which is treated destroy its toxicity g its antigenic	229.	is the bacterial cell surroundings?	e toxin released by into its			
	(a) Toyoid	(b) Massing		(a) Endotoxin	(b)	Exotoxin		
	(c) Antitoxins	(d) None of them		(c) Toxoid	(d)	None of them		

- 230. ..... is a toxin which is treated with chemical to destroy its toxicity without losing its antigenic properties.
  - (a) Endotoxin (b) Exotoxin
  - (c) Toxoid (d) None of them
- 231. ..... are the substances which are administered in the body to produce resistance against certain infectious disease.
  - (a) Vaccine (b) Exotoxin
  - (c) Toxoid (d) None of them
- 232. ..... is defined as the process of ingestion of microbes by phagocytic cells of the body, which make them harmless.
  - (a) Vaccine (b) Exotoxin
  - (c) Phagocytosis (d) None of them
- 233. ..... is the immunity in which the host body takes an active part in the formation of antibodies to develop resistance against disease.
  - (a) Active immunity
  - (b) Passive immunity
  - (c) Phagocytosis
  - (d) None of them

234. ..... is the immunity produced due to the introduction of readymade antibodies into the body of an individual.

- (a) Active immunity
- (b) Passive immunity
- (c) Phagocytosis
- (d) None of them

- 235. The immunity obtained during a lifetime is known as:
  - (a) Active immunity
  - (b) Passive immunity
  - (c) Acquired immunity
  - (d) None of them
- 236. The first vaccine was developed by which of the following scientist:
  - (a) Joseph Miester
  - (b) Edward Jenner
  - (c) Louis Pasteur
  - (d) None of them
- 237. BCG vaccine is used to protect:
  - (a) Typhoid (b) Poliomyelitis
  - (c) Tuberculosis (d) None of them
- 238. Polio vaccine is stored at:
  - (a) 2°C-8°C (b) 2°C-10°C
  - (c)  $2^{\circ}C-12^{\circ}C$  (d) None of them
- 239. Polio virus replicates in:
  - (a) GIT (b) Pancreas
  - (c) Intestine (d) None of them
  - 240. Monophasic liquid dosage forms include:
    - (a) Solutions
    - (b) Tinctures
    - (c) Aromatic waters
    - (d) All of the these
  - 241. The ingredient present in solution in a small quantity is:
    - (a) Solvent (b) Solute
    - (c) Co-solvent (d) None of them

242.	Gargles must be	before						
	(a) Diluted	(b)	Concentrated					
	(c) Heated	(d)	None of them					
243	is defi	ned	as a liquid					
2.10.	preparation which contains one or more substances dissolved in a solvent to form a homogenous							
	(a) Solution	(b)	Elixir					
	(c) Svrup	(d)	None of them	25				
244	Solutions are:	(-)						
	<ul><li>(a) Biphasic</li><li>(c) Both 1 and 2</li></ul>	(b) (d)	Monophasic None of them	25				
245.	Emulsions and suspensions are							
	(a) Biphasic	(b)	Monophasic					
	(c) Both 1 and 2	(d)	None of them					
246.	are clear, sweetened, aromatic, hydroalcoholic liquids intended for oral use							
	(a) Solution	(b)	Elixir					
	(c) Syrup	(d)	None of them					
247.	Use of glycerin ir (a) Vehicle	n elix	kir:	25				
	(b) Preservative							
	<ul><li>(c) Flavoring agent</li><li>(d) None of them</li></ul>							
248.	Throat paints are preparations.		liquid	25				
	(a) Alcoholic	(b)	Viscous					
	(c) Aromatic	(d)	None of them					

- 49. .....are concentrated aqueous preparations of sugar with or without flavoring and medicinal substances.
  - (a) Solution (b) Elixir
  - (c) Syrup (d) None of them
- 250. Concentration of sucrose in syrup:
  - (a) 66.7% (b) 67.6%
  - (c) 68.6% (d) None of them
- 251. The sugar present in syrup:
  - (a) Fructose (b) Sucrose
  - (c) Glucose (d) None of them
- 252. Emulsion used for external use should be ...... type.
  - (a) Oil/water
  - (b) Water/oil
  - (c) Water/oil/water
  - (d) None of them
- 253. Emulsifying agents reduce ..... tension between two phases.
  - (a) Surface (b) Interfacial
  - (c) Both a and b (d) None of them
- 254. ..... is defined as a biphasic liquid preparation containing two immiscible liquids, one of which is dispersed as minute globules into the other.
  - (a) Emulsion (b) Elixir
  - (c) Syrup (d) None of them
- 255. Which of the following is emulsifying agent:
  - (a) Chloroform (b) Lactose
  - (c) Acacia (d) None of them

- 256. Phase separation of emulsion is due 263. Which of the following is not a to:
  - (a) Change in temperature
  - (b) Change in phase
  - (c) Coalescence
  - (d) All of them
- 257. Emulsion is which type of dosage form:
  - (a) Monophasic (b) Diphasic
  - (c) Both a & b (d) None of them
- 258. Liniments must not be applied to the ..... skin.
  - (b) Broken (a) Intact
  - (c) Both a and b (d) None of them
- 259. ------ is used as rubefacient, counter-irritant and soothing agent.
  - (a) Liniments (b) Solution
  - (c) Elixir (d) None of them
- 260. ..... are liquid preparations meant for application on to the skin.
  - (a) Ointment (b) Liniment
  - (d) None of them (c) Emulsion
- 261. An ideal suspension particle should be:
  - (a) Forming cake (b) Re-dispersed (c) Non-dispersible(d) None of these
- 262. Which of the following in not an example of water-in-emulsion?
  - (a) Butter (b) Milk
  - (c) Cod liver oil (d) Cold cream

- monophasic liquid dosage form?
  - (a) Suspension (b) Gargles
  - (c) Elixir (d) Syrups
- 264. Simple syrup is saturated solution of.....
  - (a) Fructose (b) Glucose
  - (d) None of them (c) Sucrose
- 265. Simple syrup I.P is:
  - (a) 66.7%w/w sucrose solution
  - (b) 66.7%w/v sucrose solution
  - (c) 66.7%v/w sucrose solution
  - (d) None of these
- 266. Rectified spirit contains how much ethanol:
  - (a) 80%v/v ethanol
  - (b) 70%v/v ethanol
  - (c) 95%v/v ethanol
  - (d) None of them
- 267. The dry gum method is also called as ..... method.
  - (a) Continental (b) Collateral
  - (c) Cascading (d) Solution
- 268. Which of the following is not a monophasic liquid dosage form?
  - (a) Gargles (b) Suspension
  - (d) Solution (c) Enemas
- 269. ..... prevent caking of suspensions.
  - (a) Disintegrating agents
  - (b) Emulsifying agents
  - (c) Suspending agents
  - (d) Insufflation

- 270. Suspending agent increases which of the following:
  - (a) Viscosity (b) Solubility
  - (c) Dissolution (d) Insufflation
- 271. The rate of sedimentation is slow in:
  - (a) Deflocculated suspension
  - (b) Flocculated suspension
  - (c) Both a&b
  - (d) None of them
- 272. Which mixture contains label shake well before use:
  - (a) Potent medicament
  - (b) Soluble medicament
  - (c) Diffusible medicaments
  - (d) None of them
- 273. Immiscibility of oil and water can be overcome by which formulation?
  - (a) Suspension (b) Emulsion
  - (c) Elixir (d) Insufflation
- 274. Type of emulsion is identified by:
  - (a) Dye test
  - (b) Dilution test
  - (c) Conductivity test
  - (d) All of them
- 275. The component present in the solution in small quantity is called as.....
  - (a) Solute (b) Solvent

  - (c) Syrup (d) None of them
- 276. Elixirs are ..... liquids.
  - (a) Non-aqueous
  - (b) Aqueous

- (c) Hydroalcoholic
- (d) None of them
- 277. Lotion is ..... type of dosage form.
  - (a) Topical (b) Parenteral
  - (c) Oral (d) None of them
- 278. ..... is separation of two layers of disperse phase and continuous phase due to coalescence of disperse phase globules which are difficult to re-disperse by shaking.
  - (a) Phase inversion
  - (b) Cracking
  - (c) Creaming
  - (d) None of them
- 279. .....is defined as upward movement of dispersed particles or globules to form a thick layer at the surface.
  - (a) Phase inversion
  - (b) Cracking
  - (c) Creaming
  - (d) None of them
- 280. Mandl's paint is also called as
  - ..... lodine paint.
  - (a) Compound (b) Concentrated
  - (c) Colloidal (d) Solution
- 281. The flocculating agent reduces the ..... of the suspension.
  - (a) Surface tension
  - (b) Density
  - (c) Viscosity
  - (d) None of them

- 282. Thickening agents used in suspensions are...... colloids.
  - (a) Amphiphilic (b) Lipophilic
  - (c) Hydrophilic (d) None of them
- 283. Suspending agents increases .....
  - (a) Solubility (b) Surface area
  - (c) Viscosity (d) None of them
- 284. Which of the following is used to increase the viscosity of liquid:
  - (a) Methyl cellulose
  - (b) Sodium CMC
  - (c) PVP
  - (d) All of them
- 285. Which are the co-solvents used to increase the solubility of a drug.
  - (a) PEG (b) Ethanol
  - (c) Glycerin (d) All of them
- 286. .....are solid dosage form of medicaments for insertion into the body cavities other than mouth.
  - (a) Suppositories
  - (b) Ointments
  - (c) Displacement value
  - (d) None of them
- 287. ..... are semisolid preparations meant for external application to the skin or mucous membrane.
  - (a) Suppositories
  - (b) Ointments
  - (c) Displacement value
  - (d) None of them

- 288. Ointments are:
  - (a) Liquid dosage form
  - (b) Solid dosage form
  - (c) Semisolid dosage form
  - (d) None of them
- 289. The quantity of drug which displaces one part of the base is known as .....
  - (a) Suppositories
  - (b) Ointments
  - (c) Displacement value
  - (d) None of them
- 290. Oleaginous bases are also known as ..... bases.
  - (a) Hydrocarbon (b) Hydrophilic
  - (c) Synthetic (d) None of them
- 291. Theobroma oil is also called as:
  - (a) Witepsol (b) Massuppol
  - (c) Cocoa butter (d) None of them
- 292. What is the displacement value of castor oil:
  - (a) 1.0 (b) 1.5
  - (c) 2.0 (d) None of them
- 293. Wool fat on treating with ...... forms wool alcohol.
  - (a) Acid (b) Alkali
    - (c) Alkaloid (d) None of them
- 294. Identify wrong statement for suppositories:
  - (a) Should melt at body temperature.
  - (b) Should retain its shape when handled.

- (c) Should release medicament easily.
- (d) Should be pleasant in taste.
- 295. Write the formula for calculating displacement value?

(a) 
$$= \frac{d}{(a-b)}$$
  
(b)  $= \frac{d}{(a-b)} \times 100$   
(c)  $= \frac{d}{(a-b)} \times 10$ 

- (d) None of them
- 296. HLB scale was prepared by:
  - (a) Griffin (b) Sorenson
  - (c) Ostwald (d) None of them
- 297. HLB values of SLS is:
  - (a) 10 (b) 20
  - (c) 40 (d) None of them
- 298. Which of the following is not a semisolid dosage form:
  - (a) Ointment (b) Paste
  - (c) Cream (d) Suspension
- 299. Which of the following is not a emulsifying agent:
  - (a) Electrolyte
  - (b) Surfactant
  - (c) Finely divided solids
  - (d) Hydrophilic colloids
- 300. Vaginal suppositories are also called
  - as .....
  - (a) Simple suppositories
  - (b) Pessaries
  - (c) Bougies
  - (d) None of them

- 301. Which of the following is most commonly used as suppository base:
  - (a) Coca butter
  - (b) Poly ethylene glycol
  - (c) Glycerin
  - (d) None of them
- 302. Which of the following is not a vegetable oil:
  - (a) Almond oil (b) Petrolatum
  - (c) Olive oil (d) Peanut oil
- 303. The suppositories used in the vagina are called as pessaries.
  - (a) Simple suppositories
  - (b) Bougies
  - (c) Pessaries
  - (d) None of them
- 304. Which of the following fatty base is used in suppositories:
  - (a) Coca butter (b) Massupol
  - (c) Witespol (d) None of them
- 305. Route of administration of suppositories:
  - (a) Vagina (b) Rectum
  - (c) Oral (d) Both a & b
- 306. Example of absorption ointment base:
  - (a) Bees wax (b) Lanolin
  - (c) Wool alcohol (d) All of these
- 307. Example of water soluble base used in suppositories:
  - (a) Soft paraffin (b) Wool alcohol
  - (c) Macrogols (d) None of them

- 308. Which of these is not a vegetable oil:
  - (a) Peanut oil (b) Petrolatum
  - (c) Olive oil (d) None of them
- 309. Which of these is not a semi-solid dosage form:
  - (a) Ointment (b) Cream
  - (c) Suspension (d) None of them
- 310. Ear preparations are also called as ...... preparations.
  - (a) Otic (b) Ophthalmic
  - (c) Rectal (d) None of them
- 311. Nasal drop should be isotonic with 0.9% .....
  - (a) NaCl (b) CaCl<sub>2</sub>
  - (c) KCl (d) None of them
- 312. Ear drops are used generally for:
  - (a) Cleaning of ear
  - (b) Softening of wax
  - (c) Treating mild infections
  - (d) All of these
- 313. Ear drop label should be stated as:
  - (a) Dilute before use.
  - (b) For internal use only.
  - (c) For external use only.
  - (d) None of the above.
- 314. Ear drops and nasal drops should be:
  - (a) Non irritant.
  - (b) Sterile preparations.
  - (c) Non toxic
  - (d) All of the above.

- 315. Vehicle used in ear drop are:
  - (a) Glycerin and Propylene glycol
  - (b) Glycerin and water
  - (c) Glycerin and alcohol
  - (d) None of them
- 316. Nasal drops should be:
  - (a) Hypotonic (b) Isotonic
  - (c) Hypertonic (d) None of them
- 317. ..... are defined as medicated dusting powders meant for introduction into the body cavities such as nose, throat, ears and vagina with the help of the insufflator which spray the powder in the form of fine particles to the site of application.
  - (a) Bulk powder
  - (b) Dusting powder
  - (c) Insufflations
  - (d) None of them
- 318. Write the composition of effervescent granules?
  - (a) Sodium bicarbonate, citric acid and tartaric acid.
  - (b) Sodium hydroxide, citric acid and tartaric acid.
  - (c) Sodium bicarbonate, boric acid and tartaric acid.
  - (d) None of these.
- 319. Effervescent powder release
  - ..... in water.
  - (a) Carbon dioxide
  - (b) Carbon monoxide
  - (c) Oxygen
  - (d) None of them

- 320. ..... dilution is used when potent substances are to be mixed with more amounts of diluents.
  - (a) Geometric (b) Harmonic
  - (c) Equivalent (d) Solution
- 321. Cachets are also called as ..... capsules.
  - (a) Water (b) Wafer
  - (c) Wallet (d) Solution
- 322. Abrasive agents used in dentifrices:
  - (a)  $CaSO_4$  (b)  $MgCO_3$
  - (c)  $Na_2CO_3$  (d) All of these
- 323. Which of the following are externally used powders:
  - (a) Bulk powder
  - (b) Dusting powder
  - (c) Effervescent powders
  - (d) None of them
- 324. Which of the ingredient used in dusting powder should be sterilized:
  - (a) Kaolin (b) Starch
  - (c) Zinc oxide (d) Solution
- 325. Medicated dusting powders are used for:
  - (a) Body cavities
  - (b) Superficial skin infections
  - (c) Major wounds
  - (d) None of these.
- 326. ..... are labelled with direction immerse in water for a few second and then swallow with draught of water.

- (a) Cachets (b) Implant
- (c) Insufflations (d) None of them
- 327. Identify the wrong statement: Pyrogens are .....
  - (a) Lipololysaccharide
  - (b) Insoluble in water
  - (c) Thermostable
  - (d) Unaffected by bactericides
- 328. Benzethonium chloride is the
  - ..... as preservative.
  - (a) Quaternary ammonium compound
  - (b) Phenol
  - (c) Mercurial
  - (d) Solution
- 329. Which is used for adjusting isotonicity in the following:
  - (a) Sodium Chloride
  - (b) Dextrose
  - (c) Boric acid
  - (d) All of these
- 330. Which of the following are uses of intravenous fluids:
  - (a) Electrolyte balance
  - (b) Chemotherapy
  - (c) Deliver medications
  - (d) All of these
- The solution having osmolarity equivalent to that of blood is known as:
  - (a) Hypertonic (b) Isotonic
  - (c) Hypotonic (d) None of these

- The additive which increases eye contact time of ophthalmic preparation:
  - (a) Methyl cellulose
  - (b) PEG
  - (c) CMC
  - (d) All of these
- 333. The stability of formulations is evaluated as per:
  - (a) FDA guidelines
  - (b) ICH guidelines
  - (c) GMP guidelines
  - (d) None of these
- 334. Wax used in the preparation of eye ointment:
  - (a) White soft wax
  - (b) Carnauba wax
  - (c) Bees wax
  - (d) None of these
- 335. .....is used as viscosity enhancer in ophthalmic preparations:
  - (a) Povidone (b) Macrogol
  - (c) PVP (d) Dextran
- 336. In ophthalmic preparation polysorbate-80 is used as:
  - (a) Wetting agent
  - (b) Suspending agent
  - (c) Binding agent
  - (d) Dextran
- 337. Which method of sterilization is used for ophthalmic preparations:
  - (a) Filtration (b) Hot air oven
  - (c) Autoclaving (d) None of these

- 338. Give examples of preservatives used in parenteral preparations?
  - (a) Phenol
  - (b) Benzyl alcohol
  - (c) Methyl paraben
  - (d) All of them
- 339. ..... sodium chloride is said to be isotonic.
  - (a) 1.0%w/v (b) 0.9%w/v
  - (c) 0.5%w/v (d) None of them
- 340. According to WHO quality control is part of:
  - (a) ICH (b) FDA
  - (c) GMP (d) None of them
- 341. cGMP regulations are established by:
  - (a) DCGI (b) WHO
  - (c) US FDA (d) All of them
- 342. .....is a system for evaluating performance, service of the quality of a product against system, standard or specified requirement for customers.
  - (a) Quality
  - (b) Quality assurance
  - (c) Quality control
  - (d) None of them
- 343. ..... is defined as the sum of the attributes or properties that describe a product.
  - (a) Quality
  - (b) Quality assurance
  - (c) Quality control
  - (d) None of them

344. GMP ensures which of the following 350. Which of the following parameters: (b) Quality (a) Efficacy

- (d) All of these (c) Safety
- 345. cGMP is part of:
  - (a) Quality assurance
  - (b) R & D
  - (c) Marketing
  - (d) None of these
- 346. Validation is a study of:
  - (b) Facilities (a) System
  - (c) Process (d) All of these
- 347. Nanoparticles, liposomes are examples of ..... drug delivery system.
  - (b) Transdermal (a) Novel
  - (c) Oral (d) None of them
- 348. The dosage form which releases drug for a longer period of time are called as ..... dosage form.
  - (a) Sustained release
  - (b) Immediate release
  - (c) Controlled release
  - (d) None of them
- 349. Liposomes are small sphere shape vesicles of 50-1000nm in diameter consisting of one or more bilayers of phospholipid.
  - (a) Nanoparticles (b) Liposomes
  - (d) None of them (c) Niosomes

- is the formula for spreadability:
  - (a)  $\frac{h \times L}{T}$
  - (b)  $\frac{M \times L}{T}$
  - (c)  $\frac{d \times L}{T}$

  - (d) None of them

351.

	=	swollen microspheres mass-dry microspheres mass
		dried microspheres mass

- (a) Swelling index
- (b) Cars index
- (c) Compressibility index
- (d) None of them
- 352. Which of the following is the formula of angle of repose:
  - (a)  $tan^{-1}$
  - (b)  $tan^{-1}\left(\frac{r}{h}\right)$
  - (c)  $tan^{-1}\left(\frac{d}{r}\right)$
  - (d) None of them
- 353. Expand SOP:
  - (a) Simple Operating Procedure.
  - (b) Standard Operating Procedure.
  - (c) Soft Operating procedure.
  - (d) None of these.
- 354. Expand cGMP:
  - (a) Current Good Manufacturing Practice.
  - (b) Common Good Manufacturing Practice.
  - (c) Controlled Good Manufacturing Practice.
  - (d) None of these.

355. Which of the following is the Young's formula:

(a) dose for the child = <u>age in years</u> <u>age in years+18</u> × adult dose
(b) dose for the child = <u>age in years+12</u> × adult dose
(c) dose for the child = <u>age in years+20</u> × adult dose
(d) None of these.

356. Which of the following is the Dilling's formula:

(a) dose for the child =  $\frac{age in years}{30} \times adult dose$ (b) dose for the child =  $\frac{age in years}{40} \times adult dose$ (c) dose for the child =  $\frac{age in years}{20} \times adult dose$ (d) None of these.

357. Which of the following is the Clark's formula:

(a) dose for the child =  $\frac{child \ weight \ in \ Kg}{70} \times adult \ dose$ (b) dose for the child =  $\frac{child \ weight \ in \ Kg}{40} \times adult \ dose$ (c) dose for the child =  $\frac{child \ weight \ in \ Kg}{20} \times adult \ dose$ (d) None of these. 358. Which of the following is the Fried's

formula:

 $\frac{(a) dose for the child}{\frac{Age in months}{70}} \times adult dose$ 

(b) dose for the child =  $\frac{Age \text{ in months}}{150} \times adult \text{ dose}$ (c) dose for the child =  $\frac{Age \text{ in months}}{100} \times adult \text{ dose}$ 

- (d) None of these.
- 359. ..... Is a branch of medical science which deals with dose or quantity of drugs which can be administered to a patient to get the desired pharmacological actions.
  - (a) Prescription
  - (b) Posology
  - (c) Suppositories
  - (d) None of them
- 360. One gallon is equal to how much fluid ounces:
  - (a) 160
  - (b) 120
  - (c) 140
  - (d) None of them
- 361. One drachm is equal to how much grains:
  - (a) 40
  - (b) 60
  - (c) 80
  - (d) None of them
- 362. One Pint is equal to how much fluid ounces:
  - (a) 40
  - (b) 50
  - (c) 20
  - (d) None of them

363. One fluid ounce is equal to how 369. In which language the abbreviations much minims: in the prescription writing is very common in dosage Instruction: (a) 480 (b) 400 (a) Latin (b) French (c) 430 (d) None of them (c) Greek (d) None of them 364. One guart is equal to how much fluid ounces: 370. The abbreviation of Latin word Rx means: (a) 60 (b) 40 (b) To eat (a) To give (c) 30 (d) None of them (c) To Take (d) None of them 365. One pound is equal to how much 371. In the day of mythology, the symbol grains: Rx was considered as a prayer to: (b) 5700 (a) 5760 (a) Mars (b) Jupiter (c) 5720 (d) None of them (c) Venus (d) None of them 366. The superscription is represented by a symbol: 372. The part of the prescription called inscription contains: (a) R<sub>N</sub> (b) R<sub>x</sub> (a) Name & age (c) R<sub>w</sub> (d) None of them (b) Signature, address 367. The prescription is an order written (c) Name & Quantity of ingredients by a registered medical practitioner (d) None of them to the: (a) Patient (b) Nurse 373. The part of prescription called (c) Pharmacist (d) None of them subscription contains: (a) Direction to the pharmacist 368. The prescription must be received (b) Direction to the nurse and checked by: (b) Nurse (c) Direction to the patient (a) Patient (d) None of them (d) None of them (c) Pharmacist

ANSWER KEY											
1.	(a)	38.	(a)	75.	(c)	112.	(c)	149.	(d)	186.	(a)
2.	(b)	39.	(c)	76.	(c)	113.	(b)	150.	(c)	187.	(b)
3.	(b)	40.	(a)	77.	(b)	114.	(c)	151.	(a)	188.	(c)
4.	(b)	41.	(b)	78.	(c)	115.	(b)	152.	(d)	189.	(d)
5.	(d)	42.	(c)	79.	(a)	116.	(a)	153.	(b)	190.	(d)
6.	(c)	43.	(b)	80.	(a)	117.	(d)	154.	(c)	191.	(a)
7.	(a)	44.	(a)	81.	(d)	118.	(d)	155.	(a)	192.	(a)
8.	(b)	45.	(c)	82.	(d)	119.	(b)	156.	(a)	193.	(a)
9.	(b)	46.	(b)	83.	(a)	120.	(a)	157.	(c)	194.	(a)
10.	(c)	47.	(c)	84.	(d)	121.	(b)	158.	(a)	195.	(b)
11.	(a)	48.	(a)	85.	(b)	122.	(d)	159.	(c)	196.	(b)
12.	(c)	49.	(c)	86.	(a)	123.	(c)	160.	(b)	197.	(a)
13.	(a)	50.	(b)	87.	(c)	124.	(b)	161.	(a)	198.	(c)
14.	(b)	51.	(a)	88.	(*)	125.	(a)	162.	(b)	199.	(b)
15.	(c)	52.	(a)	89.	(a)	126.	(c)	163.	(d)	200.	(c)
16.	(c)	53.	(d)	90.	(b)	127.	(b)	164.	(b)	201.	(a)
17.	(b)	54.	(c)	91.	(a)	128.	(d)	165.	(c)	202.	(b)
18.	(a)	55.	(a)	92.	(c)	129.	(c)	166.	(a)	203.	(a)
19.	(a)	56.	(a)	93.	(b)	130.	(b)	167.	(b)	204.	(c)
20.	(a)	57.	(c)	94.	(a)	131.	(d)	168.	(c)	205.	(a)
21.	(b)	58.	(a)	95.	(b)	132.	(c)	169.	(a)	206.	(c)
22.	(a)	59.	(c)	96.	(b)	133.	(a)	170.	(c)	207.	(a)
23.	(a)	60.	(c)	97.	(d)	134.	(b)	171.	(C)	208.	(b)
24.	(d)	61.	(d)	98.	(c)	135.	(c)	172.	(b)	209.	(b)
25.	(a)	62.	(a)	99.	(a)	136.	(b)	173.	(c)	210.	(c)
26.	(c)	63.	(b)	100.	(c)	137.	(c)	174.	(d)	211.	(a)
27.	(b)	64.	(b)	101.	(a)	138.	(d)	1/5.	(d)	212.	(a)
28.	(C)	65.	(a)	102.	(a)	139.	(a)	1/6.	(a)	213.	(b)
29.	(d)	66.	(b)	103.	(a)	140.	(c)	1//.	(C)	214.	(b)
30.	(a)	67.	(c)	104.	(d)	141.	(b)	1/8.	(a)	215.	(a)
31.	(C)	68.	(C)	105.	(b)	142.	(a)	179.	(a)	216.	(a)
32.	(b)	69.	(b)	106.	(c)	143.	(d)	180.	(C)	217.	(b)
33.	(d)	/0.	(a)	107.	(d)	144.	(a)	181.	(b)	218.	(c)
34.	(C)	/1.	(C)	108.	(a)	145.	(c)	182.	(C)	219.	(C)
35.	(d)	/2.	(a)	109.	(a)	146.	(a)	183.	(a)	220.	(C)
36.	(d)	/3.	(b)	110.	(b)	147.	(b)	184.	(C)	221.	(a)
37.	(C)	/4.	(d)	111.	(D)	148.	(C)	185.	(b)	222.	(a)

223.	(a)	249.	(c)	275.	(a)	301.	(a)	327.	(b)	353.	(b)
224.	(c)	250.	(a)	276.	(c)	302.	(b)	328.	(a)	354.	(a)
225.	(b)	251.	(b)	277.	(a)	303.	(c)	329.	(d)	355.	(b)
226.	(a)	252.	(a)	278.	(b)	304.	(a)	330.	(d)	356.	(c)
227.	(c)	253.	(b)	279.	(c)	305.	(d)	331.	(b)	357.	(a)
228.	(a)	254.	(a)	280.	(a)	306.	(d)	332.	(d)	358.	(b)
229.	(b)	255.	(c)	281.	(a)	307.	(c)	333.	(b)	359.	(b)
230.	(c)	256.	(d)	282.	(c)	308.	(b)	334.	(a)	360.	(a)
231.	(a)	257.	(b)	283.	(c)	309.	(c)	335.	(b)	361.	(a)
232.	(c)	258.	(b)	284.	(d)	310.	(a)	336.	(a)	362.	(c)
233.	(a)	259.	(a)	285.	(d)	311.	(a)	337.	(c)	363.	(a)
234.	(b)	260.	(b)	286.	(a)	312.	(d)	338.	(d)	364.	(b)
235.	(c)	261.	(b)	287.	(b)	313.	(c)	339.	(b)	365.	(a)
236.	(b)	262.	(c)	288.	(c)	314.	(d)	340.	(c)	366.	(b)
237.	(c)	263.	(a)	289.	(c)	315.	(a)	341.	(c)	367.	(c)
238.	(a)	264.	(c)	290.	(a)	316.	(b)	342.	(b)	368.	(c)
239.	(c)	265.	(a)	291.	(c)	317.	(c)	343.	(a)	369.	(a)
240.	(d)	266.	(c)	292.	(a)	318.	(a)	344.	(d)	370.	(c)
241.	(b)	267.	(a)	293.	(b)	319.	(a)	345.	(a)	371.	(b)
242.	(a)	268.	(b)	294.	(d)	320.	(a)	346.	(d)	372.	(c)
243.	(a)	269.	(c)	295.	(*)	321.	(b)	347.	(a)	373.	(a)
244.	(b)	270.	(a)	296.	(a)	322.	(d)	348.	(c)		
245.	(a)	271.	(a)	297.	(c)	323.	(b)	349.	(b)		
246.	(b)	272.	(c)	298.	(d)	324.	(a)	350.	(*)		
247.	(b)	273.	(b)	299.	(a)	325.	(b)	351.	(a)		
248.	(b)	274.	(d)	300.	(b)	326.	(a)	352.	(a)		