PHB Education

Government Exam and D. Pharm Exit Exam Preparation

Questions Bank

Subject: Pharmaceutics

Chapter 12 : Liquid Dosage Forms

Section A: Solutions (1–20)

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1. A solution is a _____ system.
   a) Homogeneous
   b) Heterogeneous
   c) Colloidal
   d) Coarse
   → **a**
2. The solvent used most commonly in pharmaceutical solutions is:
   a) Water
   b) Alcohol
   c) Ether
   d) Acetone
   → **a**
3. The solute in a solution is present in a _____ amount.
   a) Lesser
   b) Greater
   c) Equal
   d) Variable
   → **a**
4. Oral solutions are administered by:
   a) Mouth
   b) Injection
   c) Rectum
   d) Skin
   → **a**
5. Solutions can be classified based on:
   a) Route of administration
   b) Solvent used
   c) Composition
   d) All of these
   → **d**

6. Saturated solution contains:
   a) Maximum solute dissolved
   b) Minimum solute
   c) No solute
   d) None
   → **a**
7. Supersaturated solutions are:
   a) Unstable
   b) Stable
   c) Solid
   d) None
   → **a**
8. The process of dissolving solute in solvent is called:
   a) Solubilization
   b) Diffusion
   c) Precipitation
   d) None
   → **a**
9. Solubility increases with:
   a) Temperature (for solids)
   b) Pressure (for gases)
   c) Stirring
   d) All of these
   → **d**
10. Co-solvents are used to:
    a) Increase solubility
    b) Decrease viscosity
    c) Add color
    d) None
    → **a**
11. Common co-solvents used:
    a) Glycerin, ethanol, propylene glycol
    b) Benzene
    c) Chloroform
    d) None
    → **a**

12. Sweeteners improve:
    a) Palatability
    b) Solubility
    c) Stability
    d) None
    → **a**
13. Preservatives prevent:
    a) Microbial growth
    b) Crystallization
    c) Oxidation
    d) None
    → **a**
14. The main preservative in oral solution is:
    a) Sodium benzoate
    b) Formalin
    c) Phenol
    d) None
    → **a**
15. Filtration of solutions removes:
    a) Undissolved particles
    b) Microbes
    c) Air bubbles
    d) None
    → **a**
16. Clarification refers to:
    a) Removal of suspended impurities
    b) Color enhancement
    c) Flavoring
    d) None
    → **a**
17. Common evaluation test for solutions:
    a) Clarity test
    b) Viscosity test
    c) pH test
    d) All of these
    → **d**

18. Solutions are stored in:
    a) Well-closed containers
    b) Open bottles
    c) Paper packs
    d) None
    → **a**
19. Oral solutions must be:
    a) Palatable and stable
    b) Sterile
    c) Injectable
    d) None
    → **a**
20. Solutions for external use are labeled:
    a) “For External Use Only”
    b) “Sterile”
    c) “For Oral Use”
    d) None
    → **a**

Section B: Elixirs (21–35)

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21. Elixirs are:
    a) Sweetened hydro-alcoholic solutions
    b) Pure alcohol
    c) Syrupy liquids
    d) Suspensions
    → **a**
22. The alcohol content of elixirs ranges between:
    a) 4–40%
    b) 60–90%
    c) 1–5%
    d) None
    → **a**
23. Elixirs are more stable than:
    a) Syrups
    b) Emulsions

c) Suspensions

d) None

→ **a**

24. The main solvent in elixirs is:

a) Alcohol-water mixture

b) Ether

c) Oil

d) None

→ **a**

25. Elixirs are prepared by:

a) Simple dissolution

b) Filtration

c) Mixing with flavor and color

d) All of these

→ **d**

26. Alcoholic content improves:

a) Solubility of poorly soluble drugs

b) Color

c) Flavor only

d) None

→ **a**

27. Flavored elixirs are known as:

a) Aromatic elixirs

b) Medicinal elixirs

c) Both a & b

d) None

→ **a**

28. Elixirs are clear due to:

a) Homogeneous nature

b) Suspended solids

c) Emulsion

d) None

→ **a**

29. Elixirs should be stored in:

a) Tightly closed amber-colored bottles

b) Open jars

c) Plastic pouches

d) None

→ **a**

30. Elixirs are evaluated for:

a) Clarity and alcohol content

b) Color only

c) Smell

d) None

→ **a**

31. Alcohol acts as:

a) Solvent and preservative

b) Colorant

c) Flavoring agent

d) None

→ **a**

32. Elixirs are more palatable than:

a) Bitter solutions

b) Suspensions

c) Emulsions

d) None

→ **a**

33. Non-medicated elixirs are used as:

a) Vehicles

b) Drugs

c) Coloring agents

d) None

→ **a**

34. Example of medicated elixir:

a) Phenobarbital elixir

b) Simple syrup

c) Orange oil

d) None

→ **a**

35. The main disadvantage of elixir:

a) Alcohol content unsuitable for children

b) Low solubility

c) Unstable

d) None

→ **a**

Section C: Syrups (36–50)

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36. Syrups are:

a) Concentrated sugar solutions

b) Alcoholic

c) Suspensions

d) None

→ **a**

37. Sucrose concentration in syrup is:

a) 60–70% w/v

b) 20%

c) 90%

d) None

→ **a**

38. Syrups are used as:

a) Vehicles

b) Sweetening agents

c) Both a & b

d) None

→ **c**

39. Syrups prevent microbial growth due to:

a) High osmotic pressure

b) Preservatives

c) Alcohol

d) None

→ **a**

40. Simple syrup contains:

a) Only sugar and water

b) Drug

c) Alcohol

d) None

→ **a**

41. Medicated syrup contains:
    a) Drug + sweet vehicle
    b) Alcohol
    c) Only color
    d) None
    → **a**
42. Syrups are prepared by:
    a) Solution with heat or agitation
    b) Emulsification
    c) Suspension
    d) None
    → **a**
43. Excessive heating of syrup may cause:
    a) Inversion of sugar
    b) Crystallization
    c) Separation
    d) None
    → **a**
44. Flavored syrups mask:
    a) Bitter taste of drug
    b) Solubility
    c) Stability
    d) None
    → **a**
45. Syrups are stored in:
    a) Tightly closed glass bottles
    b) Plastic jars
    c) Open vessels
    d) None
    → **a**
46. Syrup spoilage may occur due to:
    a) Fermentation
    b) Evaporation
    c) Sublimation
    d) None
    → **a**

47. Syrups are evaluated for:
    a) Viscosity and microbial stability
    b) Color
    c) Weight
    d) None
    → **a**
48. Artificial sweeteners used:
    a) Saccharin, aspartame
    b) Alcohol
    c) Citric acid
    d) None
    → **a**
49. Preservatives used in syrup:
    a) Benzoic acid
    b) Glycerin
    c) Propylene glycol
    d) All of these
    → **d**
50. Syrup clarity test is done to ensure:
    a) No suspended particles
    b) No color
    c) Odorless
    d) None
    → **a**

Section D: Suspensions (51–70)

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51. A suspension is a _____ system.
    a) Heterogeneous
    b) Homogeneous
    c) Clear
    d) None
    → **a**
52. Dispersed phase in suspension is:
    a) Insoluble solid particles
    b) Solvent

c) Liquid

d) None

→ **a**

53. Dispersion medium is usually:

a) Water

b) Alcohol

c) Ether

d) None

→ **a**

54. Suspensions are used when:

a) Drug is insoluble

b) Drug is soluble

c) Volatile

d) None

→ **a**

55. Suspending agents prevent:

a) Sedimentation

b) Crystallization

c) Evaporation

d) None

→ **a**

56. Example of suspending agent:

a) CMC, tragacanth, xanthan gum

b) Alcohol

c) Ether

d) None

→ **a**

57. Wetting agents reduce:

a) Surface tension

b) Density

c) Viscosity

d) None

→ **a**

58. Deflocculated suspensions are:

a) Uniform and slow to settle

b) Quickly settling

c) Clear

d) None

→ **a**

59. Flocculated suspensions are easy to:

a) Redisperse

b) Separate

c) Filter

d) None

→ **a**

60. Sedimentation volume measures:

a) Stability

b) Clarity

c) Density

d) None

→ **a**

61. Suspensions are prepared by:

a) Wet gum or dry gum method

b) Melting

c) Heating

d) None

→ **a**

62. Suspensions are stored in:

a) Wide-mouth bottles

b) Metal tins

c) Plastic bags

d) None

→ **a**

63. Label instruction for suspension:

a) “Shake well before use”

b) “Keep away from sunlight”

c) “For external use only”

d) None

→ **a**

64. Evaluation test:

a) Redispersibility

b) Sedimentation

c) Viscosity

d) All of these

→ **d**

65. Flocculation improves:

a) Physical stability

b) Color

c) Odor

d) None

→ **a**

66. Viscosity influences:

a) Sedimentation rate

b) Solubility

c) Evaporation

d) None

→ **a**

67. Antimicrobial agents are added to prevent:

a) Microbial contamination

b) Sedimentation

c) Crystallization

d) None

→ **a**

68. Suspensions must have:

a) Uniform distribution of solids

b) Layer separation

c) High density

d) None

→ **a**

69. Example of oral suspension:

a) Paracetamol suspension

b) Glycerin

c) Syrup

d) None

→ **a**

70. Parenteral suspensions must be:

a) Sterile

b) Non-sterile

c) Viscous

d) None

→ **a**

Section E: Emulsions (71–85)

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71. An emulsion is a:

a) Heterogeneous system of two immiscible liquids

b) Solid mixture

c) Gas mixture

d) None

→ **a**

72. The dispersed phase is:

a) Internal phase

b) External phase

c) Solvent

d) None

→ **a**

73. Emulsions are stabilized by:

a) Emulsifying agents

b) Preservatives

c) Colorants

d) None

→ **a**

74. Example of emulsifying agents:

a) Tween, Span, acacia

b) Alcohol

c) Oil

d) None

→ **a**

75. Types of emulsions:

a) O/W and W/O

b) Solid/Solid

c) Gas/Liquid

d) None

→ **a**

76. O/W emulsion means:
    a) Oil dispersed in water
    b) Water in oil
    c) Both
    d) None
    → **a**
77. Primary emulsion is prepared by:
    a) Dry gum or wet gum method
    b) Fusion
    c) Crystallization
    d) None
    → **a**
78. Dry gum method ratio (oil:water:gum) is:
    a) 4:2:1
    b) 1:2:3
    c) 2:1:1
    d) None
    → **a**
79. Emulsions are evaluated for:
    a) Type, stability, droplet size
    b) Color
    c) Odor
    d) None
    → **a**
80. Phase separation in emulsions is known as:
    a) Cracking
    b) Creaming
    c) Sedimentation
    d) None
    → **a**
81. Creaming is:
    a) Reversible
    b) Irreversible
    c) Permanent
    d) None
    → **a**

82. Coalescence leads to:
    a) Breaking of emulsion
    b) Stability
    c) Thickening
    d) None
    → **a**
83. Emulsions should be stored in:
    a) Well-closed, cool containers
    b) Open jars
    c) Metal tins
    d) None
    → **a**
84. Label instruction for emulsion:
    a) “Shake well before use”
    b) “Refrigerate”
    c) “Keep away from light”
    d) None
    → **a**
85. Example:
    a) Cod liver oil emulsion
    b) Paracetamol
    c) Glycerin
    d) None
    → **a**

Section F: Dry Powder for Reconstitution (86–100)

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86. Dry powder for reconstitution is:
    a) Sterile powder to be mixed with solvent before use
    b) Tablet
    c) Suspension
    d) None
    → **a**
87. This dosage form is useful for:
    a) Unstable drugs in solution form
    b) Stable drugs

c) Creams

d) None

→ **a**

88. Common example:

a) Amoxicillin dry syrup

b) Paracetamol tablet

c) Glycerin

d) None

→ **a**

89. Reconstitution involves adding:

a) Specified volume of water

b) Alcohol

c) Oil

d) None

→ **a**

90. After reconstitution, the product is usually:

a) Suspension

b) Solution

c) Cream

d) None

→ **a**

91. Shelf life after reconstitution:

a) 7–14 days (commonly)

b) 1 month

c) 1 day

d) None

→ **a**

92. Dry powders are stored in:

a) Airtight glass bottles

b) Open jars

c) Plastic pouches

d) None

→ **a**

93. Storage temperature:

a) Cool and dry place

b) Freezer

c) Hot shelf

d) None

→ **a**

94. Evaluation includes:

a) Reconstitution time

b) Appearance after mixing

c) Sedimentation and uniformity

d) All of these

→ **d**

95. Preservatives in dry powder:

a) Methylparaben, propylparaben

b) Alcohol

c) Oil

d) None

→ **a**

96. Buffers maintain:

a) pH stability

b) Color

c) Odor

d) None

→ **a**

97. Label instruction:

a) “Add water to mark and shake well”

b) “For external use only”

c) “Keep frozen”

d) None

→ **a**

98. Flavors are added to improve:

a) Palatability

b) Solubility

c) Viscosity

d) None

→ **a**

99. Before use, the dry powder must be:

a) Reconstituted with prescribed volume of water

b) Swallowed dry

c) Mixed with milk

d) None

→ **a**

100. The main advantage of dry powder formulation

a) Better stability during storage

b) Easier manufacturing

c) Lower viscosity

d) None

→ **a**

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