



MCQs Bank of Pharmaceutical IV

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Tablets

1. Which of the following is a major advantage of tablets as a dosage form?

- A) Tablets are difficult to transport.
- B) Tablets allow for an accurate dosage of medication.
- C) Tablets have a short shelf life.
- D) Tablets are typically more expensive to produce than liquid forms.

2. What is the primary function of lubricants in tablet formulation?

- A) To increase the dissolution rate of the drug.
- B) To reduce tablet strength and improve flowability.
- C) To prevent tablet disintegration.
- D) To enhance drug stability.

3. Which of the following is a commonly used lubricant in tablet formulations?

- A) Sodium alginate
- B) Magnesium stearate.
- C) Colloidal silica.
- D) Sodium lauryl sulfate.

4. What effect do stearates, like magnesium stearate, have on tablet disintegration?

- A) They accelerate disintegration.
- B) They prolong disintegration.
- C) They completely inhibit disintegration.
- D) They have no effect on disintegration.

5. Which of the following substances is known for its ability to act as both a binder and a diluent in tablet formulations?

- A) Starch.
- B) Sodium lauryl sulfate.
- C) Dicalcium phosphate.
- D) none.



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6. Which of the following best describes the role of glidants in tablet formulation?

- A) To prevent drug degradation.
- B) To enhance the tablet's disintegration.
- C) To improve powder flowability during tablet compression.
- D) To enhance the taste of the tablet.

7. What role do lubricants play in the tablet manufacturing process?

- A) They aid in tablet disintegration.
- B) They prevent microbial contamination.
- C) They reduce the friction during tablet compression.
- D) They improve the drug's solubility.

8. Which of the following statements about disintegrants is true?

- A) Disintegrants are not necessary for tablet formulations.
- B) Disintegrants increase tablet strength and compactibility.
- C) Disintegrants promote the breakup of tablets in the gastrointestinal tract.
- D) Disintegrants make the tablet more hydrophobic.

9. What is the main disadvantage of using lactose as a diluent in tablet formulations?

- A) It is highly reactive with most drugs.
- B) It can absorb moisture and become sticky.
- C) It significantly alters drug solubility.
- D) It is too expensive to use.

10. What is the main function of a diluent in tablet formulation?

- A) To increase tablet size and weight.
- B) To improve tablet flowability.
- C) To prevent tablet disintegration.
- D) To enhance tablet dissolution



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11. Which of the following can be used as a diluent?

- A) Lactose.
- B) Starch.
- C) Dicalcium phosphate.
- D) All the mentioned

12. What is the primary function of binders in tablet formulations?

- A) To improve tablet hardness.
- B) To facilitate tablet disintegration.
- C) To hold the ingredients together and provide cohesiveness.
- D) To improve tablet flowability.

13. The role of the disintegrating agent in chewable tablets is...

- A) Disintegrants are not required .
- B) Disintegrants increase tablet strength and compactibility.
- C) Disintegrants promote the breakup of tablets in the mouth.
- D) Disintegrants make it more hydrophobic.

14. Which of the following is a common coating material for tablets?

- A) Cellulose acetate.
- B) Microcrystalline cellulose.
- C) Polyvinyl alcohol.
- D) Magnesium stearate.

15. Which of the following is commonly used as a sweetener in chewable tablets?

- A) Saccharin.
- B) Aspartame.
- C) Mannitol.
- D) Sodium chloride.

16. Which of the following combinations of excipients might cause undesirable effects, such as chemical degradation or poor dissolution properties, when used in a tablet formulation?

- A) Sodium starch glycolate and microcrystalline cellulose.
- B) Dicalcium phosphate and ascorbic acid.
- C) Magnesium stearate and colloidal silica.
- D) Lactose and polyvinylpyrrolidone (PVP).



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17. Why is mannitol often chosen as a diluent in chewable tablets, especially for drugs that need to be rapidly absorbed?

- A) It imparts a cooling sensation when dissolved and is highly soluble.
- B) It acts as a disintegrant, accelerating the breakup of the tablet in the GIT.
- C) It has a negative heat of solution, which helps mask unpleasant drug taste.
- D) It improves tablet hardness and reduces the tablet's dissolution rate.

18. What characteristic of sodium lauryl sulfate (SLS) makes it an effective excipient in tablet formulations where rapid disintegration is desired?

- A) It enhances tablet flowability by reducing friction during compression.
- B) It acts as a surfactant, reducing surface tension and improving wetting properties.
- C) It increases the solubility of the active ingredient in the GIT.
- D) It improves tablet hardness and reduces the dissolution rate.

19. Which excipient is commonly used as a disintegrant in tablet formulation?

- A) Lactose.
- B) Tween .
- C) Sodium starch glycolate.
- D) Talc.

20. What is the purpose of enteric coating in tablets?

- A) To improve taste.
- B) To protect the active ingredient from stomach acid.
- C) To enhance dissolution in water.
- D) To facilitate quick absorption.

21. What role does a binder play in tablet formulation?

- A) It increases solubility.
- B) It holds the tablet ingredients together.
- C) It enhances flavor.
- D) It serves as a disintegrant.



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22. Which method of tablet production involves adding a liquid to the powder mixture?

- A) Direct compression.
- B) Wet granulation.
- C) Dry granulation.
- D) All

23. What is the role of flavoring agents in tablet formulation?

- A) To enhance stability.
- B) To mask unpleasant tastes.
- C) To aid in disintegration.
- D) To control release rates.

24. Which of the following types of tablets is not administered orally?

- A) Film coated tablets
- B) Implants tablets
- C) Pastilles .
- D) B & C

25. What does the term "tablet formulation" refer to?

- A) The process of creating tablets.
- B) The packaging of tablets.
- C) The marketing of tablets.
- D) The sale of tablets.

26. What is the effect of moisture on tablet formulation?

- A) It has no effect.
- B) It can affect stability.
- C) It always improves quality.
- D) It makes tablets dissolve faster.

27. What can cause tablet rupture during administration?

- A) High tablet hardness.
- B) Swelling of disintegrant particles in fluids.
- C) Excessive lubrication.
- D) Large granule size.



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28. Which of the following best describes the effect of binding agents on tablet granulation?

- A) They decrease the bulk density.
- B) They improve flowability and compressibility.
- C) They have no effect on tablet properties.
- D) They solely enhance taste.

29. What is the primary mechanism by which disintegrants facilitate drug release?

- A) They increase tablet density.
- B) They promote swelling and breakdown of the tablet.
- C) They enhance drug solubility.
- D) They bind the active ingredients.

30. What is the effect of using a high concentration of disintegrants in tablet formulation?

- A) It enhances tablet hardness.
- B) It may lead to rapid disintegration.
- C) It has no significant effect.
- D) It increases drug stability.

31. How does moisture affect the stability of tablets?

- A) It always improves stability.
- B) It can lead to degradation and affect dissolution.
- C) It has no effect.
- D) It only improves flowability.

32. What does the term "tablet disintegration" refer to?

- A) The process of tablet compression.
- B) The breakdown of tablets into smaller particles.
- C) The coating of tablets.
- D) The binding of active ingredients.



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33. One of the following is not a type of dry method in preparation of tablets?

- A) Direct compression.
- B) Wet granulation.
- C) Slugging
- D) Roller compaction.

34. What is the significance of the dissolution rate in drug formulation?

- A) It determines the flavor of the tablet.
- B) It affects the bioavailability of the drug.
- C) It has no impact on drug efficacy.
- D) It only influences tablet color.

35. What does a glidant improve in tablet formulation?

- A) Drug solubility.
- B) Tablet hardness.
- C) Powder flowability.
- D) Tablet color.

Capsules

36. Drugs in Capsules are enclosed within a small shell or container prepared from:

- A) Lactose
- B) Agar
- C) Gelatin
- D) Starch

37. Consists of a body and a shorter cap:

- A) Hard gelatin capsules
- B) Soft gelatin capsules
- C) Tablets
- D) Suppositories

38. Regarding the advantages of hard gelatin capsules, except:

- A) Masks the unpleasant taste of drugs
- B) Allowing for quicker dissociation and absorption
- C) They permit liquid medications to become easily portable
- D) Easier than tablets to swallow



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39. Properties of gelatin that make it the only material from which capsules have been successfully made, except:

- A) Non-toxic
- B) Soluble in biological fluids
- C) Good film-forming material
- D) Don't undergo reversible phase change easily (sol to gel)

40. The gelatin used in hard capsule manufacture is termed whereas for soft gelatin is termed

- A) High bloom gelatin / Low bloom gelatin
- B) Low bloom gelatin / High bloom gelatin
- C) Good bloom gelatin / Bad bloom gelatin
- D) Short bloom gelatin / Long bloom gelatin

41. Hard gelatin contains high amounts of plasticizer

- A) False
- B) True

42. The most frequently used plasticizers include:

- A) Glycerol
- B) Sorbitol
- C) Propylene glycol
- D) All of the above

43. White pigment used as an opacifying agent in capsules:

- A) Oxides of iron
- B) Aluminum
- C) Titanium dioxide
- D) Xanthene

44. Added to capsules to prevent microbiological contamination:

- A) Colorants
- B) Preservatives
- C) Plasticizers
- D) Antioxidants

45. Soft gelatin capsules also referred to as soft elastic gelatin or softgels?

- A) False
- B) True

46. The largest size of hard gelatin capsule:

- A) 000
- B) 5
- C) 0
- D) 00

47. Capsules formed, filled, and sealed in one operation:

- A) Hard gelatin capsules
- B) Soft gelatin capsules
- C) Tablets
- D) None



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48.Regarding the advantages of soft gelatin capsules:

- A) Highly ulcerogenic
- B) Low dose uniformity
- C) Low drug stability
- D) Good bioavailability

49.The composition of soft capsule shell consists mainly of:

- A) Gelatin
- B) Plasticizers
- C) Starch
- D) A and B

50.Excipients added to soft capsules include:

- A) Preservatives
- B) Dyes
- C) Opacifiers
- D) All of the above

51.Soft gelatin capsules contain higher plasticizer than hard gelatin capsules

- A) False
- B) True

52.The common preservatives added to soft gelatin capsules include:

- A) Benzoic acid
- B) Potassium sorbate
- C) Parabens
- D) B and C

53.Enteric properties can be imparted to soft gelatin shells by coating with 4%:

- A) Sodium bicarbonate
- B) Titanium dioxide
- C) Cellulose acetate phthalate
- D) None

54.Soft gelatin capsules can be filled with, except:

- A) Pastes
- B) Non-aqueous liquid
- C) solid in suspension
- D) Emulsions

55.Regarding liquid vehicles, water-immiscible oils include:

- A) Volatile and non-volatile oils
- B) Fixed oils
- C) Aliphatic and aromatic hydrocarbons
- D) All of the above

56.Propylene glycol and glycerol can be used as water-miscible vehicles in capsules but the concentration must be..... in order to prevent migration into the gelatin and softening of the shell:

- A) High(5-10%)
- B) low(5-10%)
- C) medium
- D) none



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57. Shapes of soft gelatin capsules, except:

- A) Round
- B) Oval
- C) Tube
- D) None of the above

58. Surfactants added to soft gelatin capsules:

- A) Span
- B) Polysorbate 80
- C) Tween 80
- D) B and C

59. Tween 20 is added to soft gelatin capsules as:

- A) Suspending agent
- B) Solubilizing agent
- C) Wetting agent
- D) All of the above

60. The choice of manufacturing method depends on the nature of the raw material, as:

- A) Skins are mainly acid-processed
- B) Bones are usually basic-processed
- C) Skins are mainly basic-processed
- D) A and B

Powder and Granules

61. Which of the following is a disadvantage of bulk powders or granules compared to tablets and capsules?

- A) They are more convenient for patients to carry.
- B) They have a higher stability.
- C) They are less convenient for patients to carry.
- D) They are easier to manufacture.

62. What is a common method to mask the unpleasant taste of powders and granules?

- A) Adding more excipients.
- B) Formulating an effervescent product.
- C) Increasing the dose of the active ingredient.
- D) Using a more bitter-tasting agent.



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63. Why are powders and granules generally not suitable for administering drugs with a low dose?

- A) They are not effective at high doses.
- B) Tablets and capsules have replaced them for such uses.
- C) They are difficult to manufacture in small doses.
- D) They require specific types of excipients for low doses.

64. Which of the following types of drugs would NOT be suitable for administration in powders or granules?

- A) Drugs that are easily absorbed in the stomach.
- B) Drugs that are inactivated in the stomach.
- C) Drugs that have a very high dose requirement.
- D) Drugs that are poorly soluble.

65. Why are enteric-coated tablets used instead of powders or granules for some drugs?

- A) To enhance the taste of the drug.
- B) To avoid drug inactivation in the stomach.
- C) To ensure rapid disintegration in the stomach.
- D) To provide a faster absorption rate.

66. What is one disadvantage of using bulk powders for drug administration?

- A) They are easier to administer.
- B) They are not suitable for high-dose drugs.
- C) They require sophisticated packaging to ensure accuracy of dose.
- D) They are unstable in humid conditions.

67. Which formulation method is commonly used to mask the unpleasant taste of powders and granules?

- A) Granulation with flavoring agents.
- B) Coating with a sweetener.
- C) Making the product effervescent.
- D) Mixing with capsules.



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68. Powders and granules are generally avoided for drugs that are inactivated by stomach acid due to the lack of:

- A) Proper packaging.
- B) Effective storage conditions.
- C) Protective coatings like enteric coatings.
- D) Water-soluble excipients.

69. What is a major inconvenience when using bulk powders or granules for drug administration?

- A) They require refrigeration.
- B) They are bulky and less convenient to carry.
- C) They are difficult to manufacture in high quantities.
- D) They are more expensive to produce than tablets.

70. What packaging innovation has improved the convenience of carrying bulk powders or granules?

- A) Effervescent formulations.
- B) Individual doses in convenient packaging.
- C) Capsules for powders.
- D) Enhanced tablet coatings.

71. Which of the following is an advantage of using tablets over powders or granules?

- A) Tablets are less likely to contain excipients.
- B) Tablets are easier to swallow and carry.
- C) Tablets are generally harder to produce.
- D) Tablets have a shorter shelf-life than powders.

72. Which of the following is a significant disadvantage of using powders for administration?

- A) They cannot be precisely dosed.
- B) They have high stability.
- C) They are easier to manufacture than tablets.
- D) They are less expensive than tablets.



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73. For which type of drug formulation is an effervescent preparation most likely to be used?

- A) For drugs with a pleasant taste.
- B) For drugs that need to be absorbed slowly.
- C) For drugs with an unpleasant taste.
- D) For drugs that are activated in the stomach.

74. Why is the use of powders and granules generally not recommended for drugs with low doses?

- A) Low-dose drugs are difficult to formulate into solid forms.
- B) Low-dose drugs may be inactivated in the gastrointestinal tract.
- C) Accurate dosing of low-dose drugs is difficult with powders.
- D) Powders cannot mask the taste of low-dose drugs.

75. What is the primary reason that granules and powders are not suitable for certain drugs that are inactivated in the stomach?

- A) They cannot be mixed with excipients.
- B) They require rapid dissolution.
- C) They lack protective coatings like enteric coatings.
- D) They are poorly soluble.

76. Which of the following is NOT a disadvantage of powders and granules as drug formulations?

- A) Inaccurate dosing.
- B) Difficulty in masking unpleasant tastes.
- C) Inability to be used for low-dose drugs.
- D) They are easier to manufacture than tablets.

77. What type of drugs are best suited for powder or granule dosage forms?

- A) Drugs that are inactivated by stomach acid.
- B) Drugs that require rapid absorption in the gastrointestinal tract.
- C) Drugs with very low doses.
- D) Drugs with a bitter taste.



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78. Why might tablets be preferred over bulk powders in many situations?

- A) Tablets are more stable than powders.
- B) Tablets are easier to dose and carry.
- C) Tablets are harder to manufacture.
- D) Tablets cannot mask unpleasant drug tastes.

79. In terms of stability, why might powders and granules be less stable than tablets?

- A) Powders absorb moisture easily, which can lead to degradation.
- B) Powders contain fewer excipients, making them more prone to instability.
- C) Powders have a higher density, making them more stable.
- D) Powders are less hygroscopic than tablets.

80. Which of the following excipients would help to make powders or granules more palatable?

- A) Magnesium stearate.
- B) Sodium chloride.
- C) Flavoring agents.
- D) Cellulose.

81. Which of the following statements is true about the use of granules in tablet formulations?

- A) Granules can help improve the flowability of powder blends.
- B) Granules are usually used to reduce tablet hardness.
- C) Granules are typically used to reduce the stability of a tablet.
- D) Granules prevent the disintegration of tablets.

82. Which of the following types of drugs should NOT be administered in powder form?

- A) Drugs requiring rapid absorption.
- B) Drugs that are unstable in the stomach.
- C) Drugs with very high doses.
- D) Drugs with low molecular weight.

83. How does the use of effervescent formulations help with the masking of unpleasant tastes in powders?

- A) By dissolving the powder more slowly.
- B) By providing a cooling sensation and masking the bitter taste.
- C) By reducing the solubility of the active ingredient.
- D) By increasing the dissolution time in the stomach.



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84. Which of the following would be the best method for delivering a drug that is poorly absorbed in the stomach but effective in the small intestine?

- A) Granule dosage form.
- B) Effervescent tablet.
- C) Enteric-coated tablet.
- D) Powder dosage form.

85. Which of the following is NOT a disadvantage of using powders or granules for drug administration?

- A) They are difficult to carry in bulk.
- B) They are harder to dose accurately.
- C) They are more prone to degradation from moisture.
- D) They have a longer shelf life than tablets.

86. What is the primary reason for using effervescent formulations in powders or granules?

- A) To make the formulation more stable.
- B) To speed up the absorption process.
- C) To mask the unpleasant taste of the drug.
- D) To increase the drug's half-life.

87. Which of the following types of drugs are NOT usually administered as powders or granules?

- A) Highly hygroscopic drugs.
- B) Drugs that are highly soluble in water.
- C) Drugs that are unstable in the stomach.
- D) Drugs that need rapid absorption.

88. What is the main function of granules in tablet formulations?

- A) To speed up drug absorption.
- B) To provide a protective coating.
- C) To improve the flow properties and compressibility of powders.
- D) To reduce the taste of the active ingredient.

89. Which of the following would be most beneficial for formulating a drug that has a bad taste and is intended for rapid absorption?

- A) Powder dosage form with a flavor mask.
- B) Capsule formulation.
- C) Granule dosage form without a flavor mask.
- D) Effervescent tablet formulation.



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90. Which of the following is true about the stability of powders and granules?

- A) They are less stable than tablets because of their higher moisture content.
- B) They are more stable than tablets when stored in sealed packaging.
- C) They have a similar stability to tablets when exposed to light.
- D) Their stability is not affected by temperature fluctuations.

91. Why are granules sometimes preferred over powders for tablet formulations?

- A) Granules are easier to compress into tablets due to their better flow properties.
- B) Granules are more difficult to manufacture than powders.
- C) Granules are not used in tablet formulations.
- D) Granules are less expensive than powders.

92. Which of the following is an advantage of using an effervescent formulation in powders or granules?

- A) It increases the formulation's viscosity.
- B) It makes the formulation more hygroscopic.
- C) It helps improve the taste by producing a bubbling effect.
- D) It reduces the dissolution time.

93. Which of the following is a disadvantage of using an effervescent powder or granule formulation?

- A) It is less stable than non-effervescent formulations.
- B) It cannot mask the taste of the drug.
- C) It is difficult to manufacture.
- D) It cannot be used with water-soluble drugs.

94. Which of the following types of dosage forms is least likely to be used for drugs with low solubility?

- A) Powders.
- B) Granules.
- C) Tablets.
- D) Liquid preparations.

95. Which of the following is NOT a key factor when considering the use of powders or granules as a dosage form?

- A) The drug's solubility.
- B) The drug's stability in the stomach.
- C) The need to mask the drug's taste.
- D) The drug's compatibility with capsules.



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96. For which type of drug would powders or granules be a less optimal choice?

- A) A drug requiring rapid dissolution in the gastrointestinal tract.
- B) A drug that is hygroscopic and absorbs moisture.
- C) A drug that is very bitter and requires taste masking.
- D) A drug that is heat-sensitive and needs a low-temperature preparation.

97. Which excipient is commonly used in granules to improve their compressibility and flowability?

- A) Magnesium stearate.
- B) Lactose.
- C) Sodium chloride.
- D) Sodium starch glycolate.

98. Which of the following is true regarding the use of enteric-coated tablets over powders or granules?

- A) Enteric-coated tablets are generally used for drugs that need to dissolve in the stomach.
- B) Enteric-coated tablets are ideal for drugs that are inactivated by stomach acid.
- C) Enteric-coated tablets are less expensive to manufacture than powders.
- D) Enteric-coated tablets are absorbed faster than powders.

99. Why is the use of powders or granules avoided for drugs with low doses?

- A) Powders cannot dissolve quickly enough for low-dose drugs.
- B) It is difficult to provide accurate dosing in such small amounts.
- C) Low-dose drugs require too many excipients to be effective.
- D) Low-dose drugs have an unpleasant taste that cannot be masked.

100. Which of the following is a common packaging option to make bulk powders more convenient for patients to carry?

- A) Glass containers with a tight-fitting lid.
- B) Pre-measured, single-dose packets or sachets.
- C) Capsules filled with the powder.
- D) Tablets that dissolve in water.



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Answers

1	B	21	B	41	A	61	C	81	A
2	B	22	B	42	D	62	B	82	B
3	B	23	B	43	C	63	B	83	B
4	B	24	B	44	B	64	B	84	C
5	A	25	A	45	B	65	B	85	D
6	C	26	B	46	A	66	C	86	C
7	C	27	B	47	B	67	C	87	C
8	C	28	B	48	D	68	C	88	C
9	B	29	B	49	D	69	B	89	D
10	A	30	B	50	D	70	B	90	A
11	D	31	B	51	B	71	B	91	A
12	C	32	B	52	D	72	A	92	C
13	A	33	B	53	C	73	C	93	A
14	C	34	B	54	D	74	C	94	D
15	C	35	C	55	D	75	C	95	D
16	B	36	C	56	B	76	D	96	B
17	A	37	A	57	D	77	B	97	B
18	B	38	C	58	D	78	B	98	B
19	C	39	D	59	C	79	A	99	B
20	B	40	A	60	D	80	C	100	B