

Pharmaceutics Questions: Spirits, Elixirs, and Linctus

Part 1: Multiple Choice Questions (Circle the correct answer)

- Spirits are best described as:
 - A. Aqueous suspensions
 - B. Hydro-alcoholic solutions of volatile substances
 - C. Oily emulsions
 - D. Solid dispersions
- The alcoholic content of most spirits is usually:
 - A. Less than 10%
 - B. Less than 30%
 - C. More than 60%
 - D. Exactly 40%
- Peppermint spirit is mainly used as:
 - A. Antiseptic
 - B. Flavoring agent
 - C. Antibiotic
 - D. Antacid
- In peppermint spirit preparation, talc is used to:
 - A. Increase viscosity
 - B. Clarify the solution
 - C. Add flavor
 - D. Act as preservative
- Ethanol in peppermint spirit acts as:
 - A. Coloring agent
 - B. Vehicle and preservative
 - C. Thickening agent
 - D. Sweetener
- Spirits should be stored in:
 - A. Plastic containers exposed to light
 - B. Open containers
 - C. Tight light-resistant containers
 - D. Metal containers
- Dilution of spirits with water may cause:
 - A. Increased clarity
 - B. Turbidity and precipitation
 - C. Increased sweetness
 - D. Increased viscosity
- Tinctures are usually prepared from:
 - A. Animal or vegetable drugs
 - B. Only synthetic drugs
 - C. Only mineral substances
 - D. Only proteins
- Iodine tincture is commonly used as:
 - A. Antipyretic
 - B. Antiseptic
 - C. Analgesic
 - D. Antacid
- Elixirs are defined as:
 - A. Viscous suspensions
 - B. Clear sweetened hydro-alcoholic liquids for oral use

- C. Solid dosage forms
 - D. Oily liquids
11. Compared with syrups, elixirs are:
- A. More viscous
 - B. More sweet
 - C. Less viscous
 - D. Completely insoluble
12. Elixirs are preferred over syrups because they:
- A. Are harder to prepare
 - B. Maintain alcohol-soluble and water-soluble substances in solution
 - C. Are always more sweet
 - D. Contain no alcohol
13. Alcohol content above about 10–12% in elixirs usually:
- A. Requires additional preservatives
 - B. Causes precipitation
 - C. Acts as self-preservative
 - D. Causes crystallization
14. During elixir preparation, the aqueous solution should be added to:
- A. Alcoholic solution
 - B. Syrup
 - C. Oil phase
 - D. Talc
15. Talc in elixir preparation acts as:
- A. Lubricant
 - B. Clarifying agent
 - C. Sweetening agent
 - D. Coloring agent
16. Aromatic elixir is mainly used as:
- A. Antiseptic
 - B. Vehicle for drugs
 - C. Antibiotic
 - D. Analgesic
17. Linctus is defined as:
- A. A solid dosage form
 - B. A viscous oral liquid used to relieve cough
 - C. A topical ointment
 - D. Injectable solution
18. Linctus preparations should be taken:
- A. With large amount of water
 - B. Rapidly swallowed
 - C. Sipped slowly without dilution
 - D. Injected
19. The viscous nature of linctus helps by:
- A. Increasing drug solubility
 - B. Coating the throat
 - C. Increasing blood pressure
 - D. Decreasing absorption
20. Codeine in pediatric codeine linctus acts as:
- A. Antipyretic
 - B. Antitussive
 - C. Antibiotic
 - D. Sedative only
21. Benzoic acid in the linctus formula acts as:
- A. Preservative

- B. Coloring agent
- C. Flavoring agent
- D. Thickening agent

22. Chloroform in pediatric codeine linctus acts as:

- A. Preservative
- B. Expectorant
- C. Coloring agent
- D. Sweetener

23. Compound tartrazine solution acts as:

- A. Vehicle
- B. Coloring agent
- C. Preservative
- D. Solvent

24. The auxiliary label for linctus usually states:

- A. Shake well before use
- B. For external use only
- C. Refrigerate immediately
- D. Inject slowly

25. Linctus preparations should be stored in:

- A. Clear plastic bottles
- B. Amber glass containers
- C. Metal containers
- D. Paper containers

Part 2: Calculation Questions (Essay)

Question 1: If the master formula of peppermint spirit contains Peppermint oil = 100 mL and Ethanol = q.s to 1000 mL, calculate the amount of peppermint oil required to prepare 250 mL.

Question 2: If the master formula for aromatic elixir produces 1000 mL, calculate the amount of syrup needed for 200 mL preparation. (Master formula syrup = 375 mL).

Question 3: The master formula of aromatic elixir contains 240 mL ethanol per 1000 mL. Calculate the amount of ethanol required for 150 mL of elixir.

Question 4: If pediatric codeine linctus master formula produces 1000 mL, calculate the amount of lemon syrup required for 50 mL preparation.

Question 5: If the formula contains 30 g talc per 1000 mL, calculate the amount required to prepare 300 mL.

Model Answers

MCQ Answers:

- 1. B
- 2. C
- 3. B
- 4. B
- 5. B
- 6. C
- 7. B
- 8. A
- 9. B
- 10. B
- 11. C
- 12. B
- 13. C
- 14. A
- 15. B
- 16. B
- 17. B
- 18. C
- 19. B
- 20. B
- 21. A
- 22. B
- 23. B
- 24. A
- 25. B

Calculation Answers:

- 1. 25 mL peppermint oil
- 2. 75 mL syrup
- 3. 36 mL ethanol
- 4. 10 mL lemon syrup
- 5. 9 g talc