

Sodium lauryl sulphate is an example of which of the following?

- A. Binder
- B. Glidant
- C. Disintegrant
- D. Surface active agent

3. Which of the following is a glycoside?

- A. Catechu
- B. Glycyrrhiza
- C. Belladonna
- D. Asafoetida

4. If a doctor likes to suggest his patient to take one 500 mg tablet of Paracetamol every six hours, he would write "Take 1 tablet by mouth every six hours" or, using abbreviations, "1 tab PO q6h. Which part of prescription represents this information?

- A. Superscription
- B. Inscription
- C. Subscription
- D. Signatura

4. Which of the following are high molecular weight solid substances which when added to water produce high viscous solutions, suspensions or gels?

- A. Glucose
- B. Sugar
- C. CMC sodium
- D. Magnesium stearate

5. Which of the following are substances that form stable water soluble complexes with metals and increase stability of drug?

- A. Stabilizers
- B. Antioxidants
- C. Buffers
- D. Chelating agents

6. Sodium acetate is often used as buffering agent in many syrups. What is its role?

- A. Used as solubility enhancer
- B. Increase viscosity
- C. Used as preservative
- D. Resist change in

7. Which of the following is a transdermal dosage form?

- A. Liniment
- B. Inhaler
- C. Capsule
- D. Nebulizer

8. Which of the following are the main ingredients of Elixirs?

- A. Alcohol and water
- B. Glycerin and water
- C. Glycerin and sorbitol
- D. Glycerin and Spirit

9. Which of the following sugar syrup is considered as self-preservative?

- A. 60.7% W/W BP
- B. 66.7% W/W BP
- C. 80.5 % W/V USP
- D. 33.3% W/W BP



10. Which of the following are chemical substances that are responsible for developing pressure within a container and expel the product when actuated?
- A. Propellants
  - B. Metering valve
  - C. Actuator
  - D. Active ingredient
11. Which of the following is a device that delivers a specific amount of drug to the lungs in the form of an aerosolized medicine?
- A. Aerosol
  - B. Nebulizer
  - C. Metered dose inhaler
  - D. Spray
12. Its function is to deliver the aerosol product in proper and desired form.
- A. Actuator
  - B. Dip tube
  - C. Housing
  - D. Stem
13. Which of the following tablets are coated with such material that resists acidic pH and disrupts in alkaline medium to release the drug in intestine?
- A. Effervescent tablets
  - B. Sugar coated tablets
  - C. Multiple compressed tablets
  - D. Enteric coated tablets
14. Which process is used for the manufacture of certain thermolabile pharmaceutical and biological product and increase their shelf life?
- A. Sublimation
  - B. Heat Sterilization
  - C. Lyophilization
  - D. Ignition
15. Which of the following ingredient is used for the enteric coating of tablets?
- A. HPMC
  - B. Carbowax
  - C. Polyethylene glycol
  - D. Cellulose acetate phthalate
16. Which of the following capsule shell number has the largest capacity to fill the drug?
- A. 0
  - B. 1
  - C. 2
  - D. 3
17. Calculate the dose of Ibuprofen 400 mg tablet for a 70 lbs. 12-year boy by using Clark's Formula?
- A. 130 mg
  - B. 186 mg
  - C. 200 mg
  - D. 284 mg
18. Which of the following is the process in which tea is boiled with water for at least 10 min?
- A. Percolation
  - B. Maceration
  - C. Sublimation

19. Which of the following is responsible for the elasticity in soft gelatin capsule shells?

- A. Glycerin
- B. Sorbitol
- C. Liquid glucose
- D. A & B

20. Which of the following is the dosage form used to deliver medication by insertion into the body orifices other than mouth?

- A. Tablet
- B. Suppositories
- C. Capsule
- D. Ointment

21. Which of the following part of prescription contains instructions for the patient regarding administration of drugs?

- A. Superscription
- B. Inscription
- C. Subscription
- D. Signatura

22. Which of the following is an alkaloidal drug?

- A. Catechu
- B. Glycyrrhiza
- C. Belladonna
- D. Asafoetida

23. Calculate the dose of Paracetamol 500 mg tablet for a 30 lbs. 4-year boy by using Friedls rule?

- A. 80 mg
- B. 100 mg
- C. 125 mg
- D. 160 mg

24. Which container does not allow the air and other gases to pass through it.

- A. Multi dose containers
- B. Air tight containers
- C. Single dose containers
- D. Hermetically sealed containers

25. Which type of glass container is most suitable for low volume pH sensitive parenteral products?

- A. Type I
- B. Type II
- C. Type III
- D. Neutral glass

26. Which of the following interaction between two or more drugs block or reduce the therapeutic effect of drug?

- A. Synergism
- B. Antagonism
- C. Adsorption
- D. Calcination

27. Santonica drug has \_\_\_\_\_ present santonin.

- A. 2.0 - 3.5
- B. 10 - 15
- C. 15 - 20
- D. 8 - 10

28. Mistakenly given double dose of codeine phosphate is a typical example of which of the following incompatibility?

- A. Chemical
- B. Physical
- C. Therapeutic
- D. Drug synergy



39. Which of the following is an unorganized drug?

- A. Digitalis
- B. Caraway
- C. Cardamom
- D. Aloe

40. Which of the following is an organized drug?

- A. Opium
- B. Acacia
- C. Ginger
- D. Almond

41. Strychnine is the active constituent of which of the following plant?

- A. Opium
- B. Belladonna
- C. Nux vomica
- D. Rauwolfia serpentina

42. Datura stramonium belongs to which of the following family?

- A. Apiaceae
- B. Solanaceae
- C. Fabaceae
- D. Papaveraceae

43. Which of the following is a hypotensive drug?

- A. Aloe
- B. Squil
- C. Catharanthus
- D. Rauwolfia

44. Aloe belongs to which of the following family?

- A. Liliaceae
- B. Leguminosae
- C. Moraceae
- D. Solanaceae

45. Which of the following drug is a bronchodilator?

- A. Fennel
- B. Capsicum
- C. Ephedra
- D. Catharanthus

46. Sphingolipid is a chemical constituent of which of the following plant?

- A. Colocynth
- B. Catechu
- C. Nut Gall
- D. Almond

47. Which of the following is Resin producing plant?

- A. Styrax benzoin
- B. Acacia senegal
- C. Astragalus gummifer
- D. Quecus infectoria

48. Which of the following is the botanical name of Caraway?

- A. Foeniculum vulgare
- B. Curcuma longa
- C. Urginea maritima
- D. Carum carvi

29. Which of the following is the process of removing the water of crystallization from the hydrated crystalline  $\text{CuSO}_4$  by heat?

- A. Distillation
- B. Exsiccation
- C. Lyophilization
- D. Sterilization

30. If a prescription contains Flagyl 400 mg. Which part of prescription represents it?

- A. Superscription
- B. Inscription
- C. Subscription
- D. Signatura

31. Which of the following is stationary phase?

- A. Petroleum ether
- B. Activated charcoal
- C. Methanol
- D. Ethanol

32. Which technique is used to separate different liquids on the basis of their volatilities?

- A. Distillation
- B. Evaporation
- C. Decantation
- D. Desiccation

33. Which of the following is also known as Soxhlet extraction?

- A. Percolation
- B. Digestion
- C. Maceration
- D. Continuous hot extraction

34. Which of the following plant belongs to the Araceae family?

- A. Cannabis sativa
- B. Atropa belladonna
- C. Nicotiana tabacum
- D. Arisaema triphyllum

35. Which of the following is the ratio between the distance travelled by any substance to the distance covered by the Mobile Phase?

- A. RF value
- B. DF value
- C. MF value
- D. Cut off value

36. Which of the following plant causes gastric mucosa toxicity?

- A. Colocasia esculenta
- B. Manihot esculenta
- C. Narcissus tazetta
- D. Cicuta virosa

37. Calculate the dose of Amoxicillin 500 mg capsule for a 20 lbs. 2-year boy by using Fried's rule?

- A. 50 mg
- B. 80 mg
- C. 100 mg
- D. 125 mg

38. Which of the following contains tannin?

- A. Catechu
- B. Glycyrrhiza
- C. Belladonna
- D. Asafoetida

49. Which of the following symptom is caused by Digitalis?
- A. Diarrhea
  - B. Gastritis
  - C. Liver damage
  - D. Sinus arrhythmia
50. Cannabis sativa belongs to which of the following family?
- A. Euphorbiaceae
  - B. Moraceae
  - C. Umbelliferae
  - D. Solanaceae
51. Which of the following symptom is caused by Conium maculatum?
- A. Dermatitis
  - B. Paralysis of spinal cord
  - C. Gastritis
  - D. Dryness of mouth
52. Which of the following plant increases intestinal motility?
- A. Datura stramonium
  - B. Atropa belladonna
  - C. Nicotiana tobaccum
  - D. Digitalis purpurea
53. Hard/Woody crude drug extraction is done by which of the following methods?
- A. Percolation
  - B. Maceration
  - C. Infusion
  - D. Decoction
54. Mobile phase moves down through column by which of the following mechanism?
- A. Capillary action
  - B. Diffusion
  - C. Gravity
  - D. Extraction
55. Which of the following enzymes catalyze the transfer of a functional group from one molecule to another?
- A. Hydrolases
  - B. Lyases
  - C. Ligases
  - D. Transferases
56. Which of the following is the most severe allergic reaction caused by insect sting?
- A. Pneumonia
  - B. Hay fever
  - C. Anaphylaxis
  - D. Sinusitis
57. Calculate the dose of Paracetamol 500 mg tablet for a 60 lbs. 10-year girl by using Clark's Formula?
- A. 100 mg
  - B. 200 mg
  - C. 300 mg
  - D. 400 mg
58. In order to obtain Santonica, the flowers of Artemisia cina are collected in \_\_\_\_\_
- A. February and March
  - B. May and June
  - C. April and May
  - D. July and August

59. Which of the following part of prescription describes instructions for the pharmacist regarding type and compounding of dosage form including number of doses?

- A. Superscription
- B. Inscription
- C. Subscription
- D. Signatura

60. Atopine is an alkaloid obtained from \_\_\_\_\_:

- A. Land
- B. Belladonna
- C. Ephedra
- D. Opium

Answer all questions, each question is 05 marks.

1. Define ionization and write the applications of ionization.
2. Define pH. Explain pH indicators.
3. Define Crystallization, its types & application in pharmacy.
4. Write the contributions of AL-Bironi and Ibn-Zuhur in pharmacy.
5. Differentiate between vacuum and fractional distillation.
6. What is the principal of Freeze drying? Explain the steps involved in freeze drying and its applications.
7. Define crude drugs. Explain classification of crude drugs with examples.
8. Define hypersensitivity. What are the various types of allergens?
9. Write a note on organoleptic evaluation of crude drugs.
10. Differentiate between Enzyme and catalyst?
11. Differentiate between percolation and maceration with examples?