

Final Year B. Pharm CBCS (Semester VIII)
Pharmaceutics IV Theory Examination
ACADEMIC YEAR 2019-2020
MOCK QUESTIONS

Cluster 1

1. Sealed glass containers with an elongated neck
 - a. Gauge
 - b. Ampules
 - c. CSP
 - d. Vial

2. A high efficiency air filter
 - a. HEPA filter
 - b. Diluent
 - c. Final filter
 - d. Web filter

3. A solvent that dissolves a lyophilized powder or dilutes a solution
 - a. Diluent
 - b. Solvent
 - c. Additive
 - d. Admixture

4. Movement of particles in a solution through permeable membranes
 - a. Filter
 - b. Dialysis
 - c. Flow rate
 - d. Anhydrous

5. Methods that maintain sterility products
 - a. Aseptic technique
 - b. Bleaching
 - c. A clean person
 - d. Admixture

6. The rate (in ml/hour or ml/minute) at which the solution is administered to the patient
 - a. Gauge
 - b. Coring
 - c. Diluent

- d. Flow rate
7. The A drugs molecular weight divided by its valence, a common measure of electrolyte concentration.
- a. Coring
 - b. Valence
 - c. Flow rate
 - d. Equivalent weight
8. Chemicals produced by microorganisms that can cause fever reactions in patients
- a. Bacteria
 - b. Viuruses
 - c. Pyrogens
 - d. Microorganisms
9. When a solution has an osmolarity equivalent to that of blood
- a. Hypotonic
 - b. Isotonic
 - c. Hypertoni
 - d. Therapeutic
10. When a solution has a lesser osmolarity than that of blood
- a. Hypotonic
 - b. Hypertonic
 - c. Isotonic
 - d. Tonic
11. Which of the following route has rapid onset of action
- a. Parenteral
 - b. Oral
 - c. Transdermal
 - d. Rectal
12. What percentage of NaCl is isotonic with eyes
- a. 0.5%
 - b. 0.9
 - c. 1.9
 - d. 5

13. Tears have pH of about
- 5.4
 - 6.4
 - 7.4
 - 8.4
14. What percentage of boric acid seems to be isotonic with eyes
- 0.9
 - 1.9
 - 0.5
 - 2.9
15. Which layer of eye is also called as white of eye
- cornea
 - Sclera
 - Iris
 - Retina
16. WFI contains bacteriostatic agents when in containers of
- 100ml of less
 - 30ml of less
 - 50ml of less
 - 10ml of less
17. Parenteral in the form suspension are usually given by
- IV
 - SC or IM
 - ID
 - IA
18. Which of the following used as enteric resin in microencapsulation
- stearic acid
 - PVA
 - Cellulose acetate phthalate
 - Ethyl cellulose
19. Which of the following is not a water soluble coating material
- Ethyl cellulose
 - CMC
 - PVP

d. Gelatin

20. Which of the following is not used as thickening agent in ophthalmic products

- a. Methyl cellulose
- b. CMC
- c. Ethyl cellulose
- d. PEG

21. Most commonly used preservative in ophthalmic preparation is

- a. Chlorobutanol
- b. Phenyl mercuric acetate
- c. Phenyl mercuric nitrite
- d. Benzalkonium choride

22. Which of the following surfactant prefer in ophthalmic due to less irritation?

- a. ionic
- b. cationic
- c. amphoteric
- d. Nonionic

23. The Sterility test of Liquid involves:

- a. Colorimetric Assay
- b. Guinea Pigs Assay
- c. Culturing in the fluid thioglycollate medium
- d. HPLC assay

24. Which of the following is TRUE:

- a. Rabbit pyrogen test is quantitative biologic test
- b. Pyrogenic effect is high with IM compared to IV injection
- c. Greater danger of pyrogens exists in LVP's than SVP's
- d. LAL test is in vivo test

25. Non ionic surfactant vesicles related to:

- a. Liposomes
- b. Niosomes
- c. Nanoparticles
- d. Nanosuspension

26. Powdered glass test challenges the leaching potential of:

- a. Exterior structure of glass
- b. Plastic containers
- c. Interior structure of glass
- d. Intact surface of glass

27. The efficiency of HEPA filter is:
- Remove at least 99.97% of airborne particles 0.3 micrometers (μm) in diameter.
 - Remove at least 100% of airborne particles 0.3 micrometers (μm) in diameter.
 - Remove at least 99.97% of airborne particles 2 micrometers (μm) in diameter.
 - Remove at least 97.99% of airborne particles 0.3 micrometers (μm) in diameter.
28. According to IP, the preparation passes the Rabbit Pyrogen test if:
- The group of three rabbits does not exceed 0.6°C
 - The group of three rabbits does not exceed 1.4°C and if the response of individual rabbit is less than 0.3°C
 - The group of three rabbits does not exceed 1.4°C and if the response of individual rabbit is less than 0.6°C
 - The group of six rabbits does not exceed 1.4°C and if the response of individual rabbit is less than 0.6°C
29. Which of the following is NOT true about LAL test:
- It is an in vivo biological test
 - It is performed using lysates of amoebocytes of the horseshoe crab (*Limulus Polyphemus*)
 - It is a biochemical test performed in a test tube
 - It is simple, rapid and more sensitive (5-10 times) than rabbit pyrogen test
30. As per USP which of the following is correct
- WFI should contain NMT 1000 ppm of solids
 - WFI should contain NMT 100 ppm of solids
 - WFI should contain NMT 10 ppm of solids
 - WFI should contain NMT 1 ppm of solids
31. Pyrogens are
- nontoxic
 - thermostable
 - non-filterable
 - volatile
32. Cryoprotectants or Lyoprotectants used in freeze dried parenteral products
- Mannitol
 - Starch
 - Magnesium stearate

d. PVP

33. Class 1,00,000 is _____ number of particles of size _____ or larger per cubic foot of air

- a. 100, 5 μm
- b. 1,00,000, 0.5 μm
- c. 1000, 0.05 μm
- d. 10,000, 0.005 μm

34. Freeze dried injectable products have to be reconstituted with _____ to form solution or suspension for administration

- a. Sterile Water for Injection
- b. Water for Injection
- c. Purified water
- d. Boiling water

35. Sterility testing of Parenteral products uses Soyabean Casein digest medium for:

- a. *Aspergillus niger*
- b. *Pseudomonas aeruginosa*
- c. *E.coli*
- d. *S. aureus*

36. HEPA filters have capacity to retain particles is as small as _____ size of particles with efficiency _____

- a. 3 μm , 99.97%
- b. 0.03 μm , 99.9%
- c. 0.003 μm , 99.97%
- d. 0.3 μm , 99.99%

37. Lipid layer of tear film contains

- a. electrolytes
- b. Cholesterol esters
- c. proteins
- d. enzymes

38. Which amongst following is the easy to prepare ophthalmic dosage form.

- a. suspension
- b. ointment

- c. solution
- d. gel

39. Benzalkonium Chloride is incompatible with

- a. nitrates
- b. cetrimide
- c. sodium oleate
- d. sodium stearate

40. Non-swellable water insoluble polymer

- a. Ethyl cellulose
- b. HPMC
- c. Carbopol
- d. Polycarbophil

41. Penn Kinetic system is

- a. Dissolution controlled DDS
- b. Diffusion controlled DDS
- c. Ion exchange DDS
- d. Osmotic DDS

42. Particle size of microcapsules is

- a. 10-5000 micron
- b. 5000- 10000 micron
- c. 10000-12000 micron
- d. 15000-30000 micron

43. State the method of microencapsulation for cinnamon oil.

- a. Air suspension coating
- b. pan coating
- c. coacervation phase separation by salt addition
- d. coacervation phase separation by temperature change

44. In case of pan coating method of microencapsulation, core is in the form of

- a. suspension
- b. solid
- C. emulsion
- d. liquid

45. If mixing is too high, it leads to air entrapment in suspension and air is removed using _____

- a. dessicator
- b. versator
- c. dryer
- d. pump

46. The building(s) used for the factory shall obey the conditions laid down in the Factories Act,

- a. 1945
- b. 1948
- c. 1947
- d. 1946

47. To prevent any interaction between tank material with the product some tanks are lined with _____ as liners

- a. PVC
- b. polytetrafluoroethylene
- c. Polyester

d. Nylon

48. Prospective validation done when there is a _____ in the manufacturing process

- a. consistency
- b. change
- c. uniformity
- d. similarity

49. ----- is used as mucoadhesive polymer.

- a. span 80
- b. bentonite
- c. polysorbate
- d Carbopol

50. Which component is a primary requirement of osmotically active drug delivery system?

- a. lubricant
- b. osmotically active salt
- c. disintegrant
- d. low density polymer

51. Topical drug delivery systems are used for treating

- a. local infections
- b. diabetes
- c. hypertension
- d. hypotension

52. Ocular inserts have following feature:

- a. blurred vision
- b. low bioavailability

- c. sticking of eyelids
- d. Increased retention

53. Approach used in colon targeted drug delivery system includes

- a. prodrug
- b. floating polymers
- c. low density polymers
- d. soluble salt

54. In the equation $\log C = \log C_0 - Kt/2.303$, what does C_0 stand for _____

- a. Plasma drug concentration after 60 min of i.v. injection
- b. Plasma drug concentration after 15 min of i.v. injection
- c. Plasma drug concentration after 30 min of i.v. injection
- d. Plasma drug concentration immediately after i.v. injection

55. The i.v. bolus dosage is 500mg and the plasma drug concentration is 0.8 mg/ml. What should be the volume of distribution?

- a. 625 mg/ml
- b. 625 l
- c. 625 ml
- d. 16 mg/ml

56. The acceptable limits of osmolarity with respect to tonicity for parenteral solutions are

- a. 250- 269 mosm/L
- b. 278 – 328 mosm/L
- c. 329-350 mosm/L
- d. 240 -260 mosm/L

57. Trehalose, mannitol, dextrans are examples of ----- used in parenterals

- a. Preservatives

- b. Buffers
- c. Cryoprotectants
- d. Vehicles

58. Infusions, irrigating solutions, dialyzing fluids are examples of

- a. Small volume parenterals
- b. Lyophilized parenterals
- c. Parenterals for intravenous administration
- d. Large volume parenterals

59. The sequential steps involved in freeze drying of parenterals are

- a. Freezing, Vacuum Drying, Sublimation
- b. Vacuum Drying, Freezing, Sublimation
- c. Freezing, Sublimation, Vacuum Drying
- d. Sublimation, Vacuum Drying , Freezing

60. The recommended particle size of dispersed active pharmaceutical ingredient in ophthalmic suspension is

- a. More than 10 microns
- b. Not more than 10 microns
- c. Not more than 5 microns
- d. Not more than 20 microns