

59. It was clearly mentioned on the label of Amoxicillin suspension that reconstitute the powder with cool boiled water but the patient reconstitutes it with milk. What type of medication error is it?

- A. Incorrect preparation
- B. Incorrect rate
- C. Incorrect dosage form
- D. Incorrect duration

60. How much is the total amount of hazardous waste is generated by health-care activities?

- A. 20%
- B. 30%
- C. 40%
- D. 50%

SEQs

Answer all questions, each question is 05 marks.

Pharmaceutics II

1. Write down the methods of Ointment preparation.
2. Differentiate between wet gum method and dry gum method of emulsion?
3. What is sterilization? Explain methods of sterilization.
4. What are the factors influencing the choice of



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packaging material?

5. What should be the properties of a good packaging material?
6. What do you know about the quality assurance system of a pharmaceutical industry?

Pharmaceutics III

7. What are the methods which can be used to control hospital medicines?
8. What do you mean by health accessories & surgical supplies write with examples.
9. Define epidemiology & write main purposes of epidemiology.
10. What is health policy of Pakistan? What are the specific objectives of drug policy of Pakistan?
11. Write a note on pharmaceutical & hospital waste management & general guidelines for proper disposal of waste.
12. Write about the minimum elements of complete management program.

49. What is the effectiveness of birth control pills in family planning?

- A. 80%
- B. 85%
- C. 90%
- D. 95%

50. Which of the following is a communicable disease?

- A. Stroke
- B. Heart attack
- C. Hepatitis
- D. Asthma

51. Which of the following is a non-communicable disease

- A. AIDS
- B. Ebola
- C. Covid
- D. Cancer

52. All of the systems are used for drug distribution in a hospital EXCEPT

- A. Individual Prescription Order System
- B. Complete Floor Stock System
- C. The multi dose method
- D. Combination of (i) and (ii)

53. STI stands for.

- A. Sexually transmitted indication
- B. Sexually transmitted infection
- C. Sexually transferred infection
- D. Safely transmitted infection

54. Which of the following is a common pharmaceutical waste?

- A. Anatomic wastes (body parts and tissues)
- B. Sharps waste (syringes, needles, and blades)
- C. Chemical waste
- D. Test animal remains

55. Which of the following is a communicable disease?

- A. Congenital heart failure
- B. Pulmonary hypertension
- C. Hypertension
- D. Chicken pox

56. What is the effectiveness of birth control injections in family planning?

- A. 80%
- B. 85%
- C. 90%
- D. 99%

57. All of the following are health accessories EXCEPT

- A. Blanket
- B. Wheel chair
- C. Hospital bed
- D. Cable

58. Which route of administration is used for OPV?

- A. IM
- B. IV
- C. SC
- D. PO

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32. All of the following are operation theatre supplies EXCEPT

- A. Operating table
- B. Protective cap
- C. Electronic blood pressure measuring machine
- D. Electronic treadmill

33. What is meant by Pharmacotherapy?

- A. Medical treatment by radiations
- B. Medical treatment by vaccines
- C. Medical treatment by isotopes
- D. Medical treatment by drugs

34. Physician prescribed Cetrizine tablet OD but the patient takes it BD mistakenly. Which type of medication error is it?

- A. Incorrect preparation
- B. Incorrect rate
- C. Incorrect dosage form
- D. Incorrect duration

35. Which type of Pharmacists are experts in the therapeutic use of medications.

- A. Community
- B. Hospital
- C. Consultant
- D. Clinical

36. BCG is administered at which age?

- A. At birth
- B. 6 week
- C. 10 week
- D. 2 years

37. The process of ensuring the right amount of medicine is available in the hospital is known by which of the following?

- A. Inventory control
- B. Storage
- C. Record keeping
- D. Order system

38. WHO initiated EPI for children vaccination. IT stands for which of the following?

- A. Extended program on immunization
- B. Expanded program on immunization
- C. Expanded program initiative
- D. European payment initiative

39. Which of the following is the disadvantage of unit dose method system?

- A. Patients receive improved pharmaceutical service 24 hours a day.
- B. All doses of medication required at the nursing station are prepared by the pharmacy thus allowing the nurse more time for direct patient care.
- C. Increase volume of work in pharmacy
- D. Allow the pharmacists to check a copy of the physician's original order thus reducing medication errors.



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23. How is the sedimentation of particles in a suspension minimized?

- A. By increasing the particle size of the active ingredient
- B. By increasing the viscosity of the medium
- C. By preventing the exposure of drug to the solvent
- D. By decreasing the particle size of the active ingredient

24. Which of the following is a substance added to the primary solvent in small amount to increase the solubility of a poorly soluble compound?

- A. Solvent
- B. Suspending agent
- C. Co solvent
- D. Emulsifying agent

25. Which of the following is the disadvantage of plastic material?

- A. Flexibility
- B. Light in weight
- C. Durability
- D. Stress cracking

26. Which of the following is the main type of rubber used in parenteral containers sealing and packaging?

- A. Butyl rubber
- B. Nitrile rubber
- C. Synthetic
- D. Natural rubber

27. Who is responsible for maintaining the quality of a product?

- A. Quality assurance
- B. Quality control
- C. Quality audit
- D. Every employee

28. Which of the following option best explains NP with reference to the parenteral products?

- A. Non pyrogenic
- B. Non plastic
- C. Non protectant
- D. Non parentral

29. Which of the following is the cheapest of all the metal containers?

- A. Aluminum
- B. Steel
- C. Tin
- D. Lead

30. Which of the following is the advantage of plastic containers?

- A. Heavy in weight
- B. Permeability of moisture
- C. Permeability of gases
- D. Non breakable

PHARMACEUTICS – HOSPITAL AND COMMUNITY PHARMACY

31. All of the following are health accessories EXCEPT

- A. Thermometer
- B. Sphygmomanometer
- C. Viscometer
- D. Towel and washcloths



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15. Which is the first step during the preparation of emulsion by wet gum method?

- A. One part of water and one part of acacia mixture is to be triturated
- B. Two parts of water and one parts of acacia mixture is to be triturated
- C. One part of water and two parts of acacia mixture is to be triturated
- D. The oil is mixed in acacia with mortar and pestle

Which type of APIs are unsuitable for wet granulation method?

- A. Heat labile
- B. Heat sensitive
- C. Hygroscopic
- D. Synthetic

17. Which of the following can be the most suitable binder for the manufacturing of Ciprofloxacin tablets by way of wet granulation?

- A. Magnesium stearate
- B. Avicel
- C. Silicon dioxide
- D. Starch

18. What should be the ratio of oil water and acacia for the preparation of emulsion by bottle method?

- A. 1:1:2
- B. 2:1:1
- C. 1:2:1
- D. 1:2:3

19. Which of the following material increases the flow of powder from hopper to the die of the tablet compression machine?

- A. Magnesium stearate
- B. Talcum
- C. Titanium dioxide
- D. Silicon dioxide

20. Which of the following rays are most commonly used in the process of radiation sterilization?

- A. X-rays
- B. β rays
- C. Gamma rays
- D. UV rays

21. Which is a written document or instruction detailing all steps and activities of a process or procedure?

- A. Work instructions
- B. Standard operating procedure
- C. GMP guidelines
- D. WHO instructions

22. If a parenteral product contains light sensitive ingredients, which of the following types of glass can be used as primary packaging material?

- A. Amber glass
- B. Transparent glass
- C. Type 1 glass
- D. Type 11 glass



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8. What are the adverse effects of permeation of gases, vapors or liquid through plastic containers on drug?

- A. It stabilizes the shelf life of drug
- B. It changes the color of the plastic container
- C. It can initiate hydrolysis and oxidation reactions
- D. It can cause leakage in the container

9. Which of the following is the biggest limitation associated with the glass containers?

- A. Does not deteriorate
- B. Heavy
- C. Protection from UV light
- D. Fragile

10. Which of the following is used as an antioxidant in pharmaceutical preparations?

- A. Methyl paraben
- B. Sodium propyl paraben
- C. Sodium acetate
- D. Vitamin C

11. Which of the following is the mirror to show actual image of any pharmaceutical company?

- A. SOPs
- B. Work instructions
- C. Quality forms
- D. Documentation

12. Which of the following is preferred pH in the preparation of ophthalmic products that avoids discomfort upon instillation into the eyes?

- A. 4.7
- B. 6.8
- C. 7.4
- D. 8.0

13. During the preparation of an extemporaneous preparation, you have been given some tablets to crush and mix them with a syrup. Which of the following ingredients can be added to reduce the sedimentation and increase the suspensibility of powder?

- A. Carboxymethyl cellulose sodium
- B. Sodium ascorbate
- C. Sodium metabisulfite
- D. Citric acid

14. Which of the following class of chemical agents are used to maintain the pH of the injections?

- A. Solvents
- B. Antioxidants
- C. Buffers
- D. Preservatives



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PHARMACEUTICS - INDUSTRIAL AND QUALITY CONTROL

1. Which of the following is an opaque, viscous, relatively soft, consistently spreadable, semisolid emulsion dosage forms that often comprise more than 20% water and volatiles and normally less than 50% hydrocarbons, waxes, or polyols as the vehicle for the drug substance?

- A. Ointment
- B. Cream
- C. Paste
- D. Gel

2. Which of the following can be used as a disintegrant during manufacturing of Paracetamol tablets by way of direct compression?

- A. Titanium dioxide
- B. Microcrystalline cellulose
- C. Sodium acetate
- D. Starch

3. What is the role of wet screening in wet granulation of tablets?

- A. Lubrication of tablets
- B. Disruption of lumps and wet mass into particles
- C. Converting large dry particles into smaller dry particles
- D. Proper mixing of granules

4. Which is the first step during the preparation of emulsion by dry gum method?

- A. One part of water and one part of acacia mixture is to be triturated
- B. Two parts of water and one parts of acacia mixture is to be triturated
- C. One part of water and two parts of acacia mixture is to be triturated
- D. The oil is mixed in acacia with mortar and pestle

5. Which of the following is an example of tonicity modifier in sterile preparation?

- A. Phenol
- B. Lactic acid
- C. Sodium hydroxide
- D. Sodium chloride

6. Which of the following equipment is used for slugging?

- A. ZP-19
- B. Roller compactor
- C. Dry granulator
- D. Wet granulator

7. How many types of glass containers are used to pack pharmaceutical products?

- A. 2
- B. 4
- C. 6
- D. 8



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