

Unit 11—Administration of Nonparenteral Medications

Part I—Matching

Directions. Using the answer sheet, place the letter of your choice in the appropriate space:

- | | |
|---|---------------|
| 1. may be calibrated in mL, minims, or drops | A. enema |
| 2. the angle at either end of the slit between the eyelids | B. 5 mL |
| 3. a deficient amount of oxygen in the blood | C. 15 mL |
| 4. the act of drawing breath, vapor, or gas into the lungs | D. canthus |
| 5. colorless, odorless, tasteless gas | E. hypoxemia |
| 6. means of delivering a solution or medication into the rectum | F. inhalation |
| 7. semisolid preparation of a drug combined with an oil or water-soluble base | H. dropper |
| 8. ready-to-use enema | G. oxygen |
| 9. 1 teaspoon | I. ointment |
| 10. 1 tablespoon | J. Fleet |

Part II—Completion

11. When using a unit dose solid medication, you would:
- a) _____
 - b) _____
 - c) _____
12. List five disadvantages associated with the oral route of drug administration.
- a) _____
 - b) _____
 - c) _____
 - d) _____
 - e) _____
13. _____ medications are administered by instillation or by application.

Part III—Multiple Choice

Directions. Select the best answer to each multiple-choice question, and write the appropriated letter on the answer sheet:

14. One fluid ounce is equal to _____.
- a) 20 mL
 - b) 15 mL
 - c) 25 mL
 - d) 30 mL
15. When pouring a liquid oral medication, it is important to _____.
- a) hold the measuring device at eye level
 - b) allow bottle to come in contact with measuring device
 - c) palm the label of the medication
 - d) a and c
16. To instill ear drops in an adult patient, one must pull the pinna of the ear _____.
- a) up and back
 - b) to the side
 - c) down and back
 - d) to the middle
17. Nasal medications are usually administered by _____.
- a) instillation
 - b) spray
 - c) irrigation
 - d) a and b
18. Rectal medications are usually administered by instillation or _____.
- a) irrigation
 - b) insertion
 - c) application
 - d) spray
19. A/an _____ is a small adhesive patch or disc that may be applied to the body near the treatment site.
- a) intradermal system
 - b) subcutaneous system
 - c) dermal system
 - d) transdermal system
20. The normal range for oxygen in the arterial blood is _____.
- a) 70 to 110 mm Hg
 - b) 80 to 100 mm Hg
 - c) 86 to 118 mm Hg
 - d) 90 to 120 mm Hg

21. Oxygen is ordered as _____.
- a) milliliters per minute
 - b) liters per minute
 - c) percentage of concentration
 - d) b and c
22. Oxygen must be humidified before delivery to the patient to prevent _____.
- a) an infection
 - b) combustion
 - c) drying of the respiratory mucosa
 - d) drying of the skin
23. Symptoms of oxygen toxicity are _____.
- a) substernal pain, nausea, vomiting, malaise, fatigue, numbness, and tachycardia
 - b) substernal pain, nausea, vomiting, malaise, and bradycardia
 - c) sternal pain, nausea, vomiting, dizziness, and fatigue
 - d) substernal pain, nausea, vomiting, malaise, fatigue, numbness, and tingling of the extremities
24. Ophthalmic medications can cause systemic symptoms if the medicine is allowed to _____.
- a) flow into the lacrimal sac
 - b) enter the canthus
 - c) flow out of the lacrimal sac
 - d) none of these
25. The average water cup holds _____.
- a) 3 ounces
 - b) 2 ounces
 - c) 4 ounces
 - d) 5 ounces

Unit 12—Parenteral Equipment and Supplies

Part I—Matching

Directions. Using the answer sheet, place the letter of your choice in the appropriate space:

- | | |
|--|---------------|
| 1. determined by the diameter of its lumen | A. 21 to 23 G |
| 2. usually contains a multiple dose of medicine | B. 25 to 27 G |
| 3. a small, sterile, prefilled glass container | C. 1 mL |
| 4. a movable cylinder | D. ampule |
| 5. part that holds the medication | E. vial |
| 6. end of the barrel where the needle is attached | F. gauge |
| 7. sharpened end of the needle | G. tip |
| 8. needle used for subcutaneous injection | H. plunger |
| 9. needle used for intramuscular injection | I. point |
| 10. size of syringe used for intradermal injection | J. barrel |

Part II—Completion

11. Name the three parts of a syringe that must remain sterile during the preparation and administration of a parenteral medication.
- a) _____
 - b) _____
 - c) _____
12. Name five advantages of using a disposable syringe.
- a) _____
 - b) _____
 - c) _____
 - d) _____
 - e) _____
13. The _____ syringe has a scale in which each small line represents 2 units and each longer line, 10 units.

Part III—Multiple Choice

Directions. Select the best answer to each multiple-choice question, and write the appropriate letter on the answer sheet:

14. Syringes are named according to _____.
- a) the manufacturer's choice
 - b) the inventor's name
 - c) their sizes and usages
 - d) color
15. A 3 mL hypodermic syringe is calibrated in _____.
- a) 0.1 mL
 - b) 0.3 mL
 - c) 0.2 mL
 - d) 0.5 mL
16. Insulin syringes are calibrated in _____.
- a) minims
 - b) units
 - c) cubic centimeters
 - d) milliliters
17. The _____ and _____ of the medication ordered determines the size of the syringe-needle unit to be selected.
- a) color, odor
 - b) color, amount
 - c) amount, viscosity
 - d) viscosity, odor
18. When giving a subcutaneous injection, you should not inject more than _____ into subcutaneous tissue.
- a) 3 mL
 - b) 2 mL
 - c) 1 mL
 - d) 1 1/2 mL
19. The 5 mL syringe is calibrated with a single metric scale. Each small line of this scale represents _____ of a mL.
- a) 0.5
 - b) 0.3
 - c) 0.2
 - d) 0.1
20. The tuberculin syringe has the metric scale on its barrel. Each small line of the metric scale represents _____ of a mL.
- a) 0.5
 - b) 0.1
 - c) 0.01
 - d) 0.02

21. The _____ is the sharpened end of the needle.
- a) hub
 - b) point
 - c) bevel
 - d) lumen
22. The point at which the shaft of the needle attaches to the hub is called the _____.
- a) lumen
 - b) shaft
 - c) hilt
 - d) flange
23. Used needles and syringes should be discarded in _____.
- a) the trash can
 - b) a rigid, puncture-proof container
 - c) a sharps collector
 - d) b and c
24. The _____ of a needle is determined by the diameter of its lumen.
- a) gauge
 - b) shaft
 - c) hub
 - d) bevel
25. When reading a syringe, one reads the calibrated scale that directly lines up with _____.
- a) the markings on the plunger
 - b) the smaller scale on the plunger
 - c) the slightly pointed edge of the black rubber tip
 - d) the larger scale on the plunger

Unit 13—Administration of Parenteral Medications

Part I—Matching

Directions. Using the answer sheet, place the letter of your choice in the appropriate space:

- | | |
|--------------------------------------|------------------|
| 1. to feel | A. keloid |
| 2. a blood tumor | B. intramuscular |
| 3. to remove by suction | C. subcutaneous |
| 4. pulled or drawn tight | D. intradermal |
| 5. a slight elevation of the skin | E. rapport |
| 6. a feeling of trust | F. taut |
| 7. scar tissue | G. wheal |
| 8. given at a 10- to 15-degree angle | H. hematoma |
| 9. given at a 45-degree angle | I. aspirate |
| 10. given at a 90-degree angle | J. palpate |

Part II—Completion

11. List three advantages of the parenteral route of drug administration.
- a) _____
 - b) _____
 - c) _____
12. Before administering any medication, carefully assess your patient's condition. An assessment should include:
- a) _____
 - b) _____
 - c) _____
 - d) _____
 - e) _____
13. The _____ method of injection is used for administering medications that can be irritating to or may stain subcutaneous tissue.

Part III—Multiple Choice

Directions. Select the best answer to each multiple-choice question, and write the appropriate letter on the answer sheet:

14. When administering a subcutaneous or intramuscular injection, you would gently pull back on the plunger to _____.
- a) reduce discomfort to the patient
 - b) ascertain that the needle is not in a blood vessel
 - c) make sure that you are in the right site
 - d) make sure that you have the right medicine
15. Body areas to avoid when choosing the site for an injection include _____.
- a) healthy muscle tissue
 - b) scar tissue
 - c) moles, birthmarks, warts, tumors, lumps, and bones
 - d) b and c
16. The body areas used for an intradermal injection are _____.
- a) the deltoid muscle or gluteal muscle
 - b) the inner forearm and the middle of the back
 - c) the outer forearm and the middle of the back
 - d) the thigh or the middle of the back
17. The _____ is the traditional location for giving most (adult) deep intramuscular injections:
- a) ventrogluteal site
 - b) deltoid muscle
 - c) dorsogluteal site
 - d) vastus lateralis
18. When administering an injection into the deltoid muscle, caution must be taken to avoid _____.
- a) the sciatic nerve
 - b) the brachial and axillary nerves
 - c) the acromion and the humerus
 - d) b and c
19. The _____ is the preferred site for intramuscular injections in infants and children.
- a) ventrogluteal site
 - b) deltoid muscle
 - c) dorsogluteal site
 - d) vastus lateralis
20. When administering insulin, you should _____.
- a) not massage the injection site
 - b) use any subcutaneous area for the injection
 - c) not rotate the site of injection
 - d) use a 30-degree angle

21. A correctly administered intradermal injection will produce _____.
- a) a wheal
 - b) a wheel
 - c) a wen
 - d) none of these
22. Examples of drugs that are administered subcutaneously are _____.
- a) antibiotics
 - b) insulin
 - c) certain vitamins
 - d) b and c
23. Insulin injection sites must be rotated to _____.
- a) prevent tissue damage
 - b) prevent accumulation of the unabsorbed medication
 - c) prevent tissue hypertrophy
 - d) all of these
24. When administering a Z-track injection, you would _____.
- a) change needles after drawing up the medication
 - b) massage the area after the injection
 - c) use the vastus lateralis site
 - d) wait 45 seconds before withdrawing the needle
25. Should an accidental stick occur after an injection, you would _____.
- a) thoroughly wash the site where the stick occurred
 - b) cleanse the skin with an antiseptic
 - c) report/document the incident; obtain medical attention
 - d) all of these

Unit 14—Allergy: An Overview

Part I—Matching

Directions. Using the answer sheet, place the letter of your choice in the appropriate space:

- | | |
|--|-----------------|
| 1. any substance that causes allergy | A. patch test |
| 2. occurs suddenly; can be life-threatening | B. intradermal |
| 3. genetic predisposition to an allergy | C. allergen |
| 4. radioallergosorbent test | D. RIA |
| 5. paper radioimmunosorbent test | E. RAST |
| 6. used for symptomatic relief of nasal congestion | F. PRIST |
| 7. epicutaneous | G. prick test |
| 8. placement of a suspected allergen onto the skin | H. anaphylaxis |
| 9. injection of a minute amount of allergen into the epidermal layer | I. atopy |
| 10. radioimmunoassay | J. decongestant |

Part II—Completion

11. List three of the allergens that cause the most common allergies.
- a) _____
 - b) _____
 - c) _____
12. Name five of the diagnostic tests that are used for allergy.
- a) _____
 - b) _____
 - c) _____
 - d) _____
 - e) _____
13. Allergic rhinitis is also known as _____.

Part III—Multiple Choice

Directions. Select the best answer to each multiple-choice question, and write the appropriate letter on the answer sheet:

14. The reaction between allergens and IgE antibodies causes the release of chemical substances such as _____.
- a) histamine, leukotrienes, and prostaglandins
 - b) histamine, leukocytes, and prostaglandins
 - c) histamine, reagin, and prostaglandins
 - d) histamine, basophils, and neutrophils
15. The classic symptoms of allergy are _____.
- a) pain, fever, and sore throat
 - b) sneezing, congestion, rhinorrhea, postnasal drip, and scratchy throat
 - c) nausea, vomiting, and diarrhea
 - d) headache, fever, and nausea
16. Before the initiation of allergy testing, the patient is _____.
- a) given written instructions about medications to stop taking
 - b) to sign a consent form
 - c) carefully evaluated by the physician
 - d) all of these
17. A skin test reaction of +2 indicates a reaction of _____.
- a) up to 5 mm in diameter
 - b) greater than 5 mm, and up to 10 mm in diameter
 - c) greater than 10 mm, and up to 15 mm in diameter
 - d) greater than 15 mm in diameter
18. The treatment of allergy may include _____.
- a) avoidance of allergens
 - b) drug therapy
 - c) immunotherapy
 - d) all of these
19. The presence of bacteria and neutrophils in a nasal smear may indicate _____.
- a) bacterial infection
 - b) IgE-mediated allergic rhinitis
 - c) viral infection
 - d) all of these
20. _____ is the treatment of a disease process by stimulating the body's immune system.
- a) Immunotherapy
 - b) Chemotherapy
 - c) Diet therapy
 - d) Drug therapy

21. When testing a patient for hypersensitivity to certain substances, which drugs should be available for emergency use?
- a) epinephrine and Tigan
 - b) epinephrine and Benadryl
 - c) epinephrine and heparin
 - d) epinephrine and insulin
22. According to the American Academy of Allergy and Immunology, the most common seasonal causes of hay fever in the United States are _____.
- a) grasses (in the early spring)
 - b) trees (in the late spring and summer)
 - c) weeds (in the fall)
 - d) trees (in the winter)
23. If you come into contact with stinging insects, you should _____.
- a) move away slowly
 - b) not slap at the insect
 - c) beat the air with your hands
 - d) a and b
24. One should seek medical help immediately after an insect sting if one experiences _____.
- a) nausea or vomiting
 - b) difficulty in breathing
 - c) dizziness, weakness, or hives
 - d) all of these
25. The patient should be observed for _____ minutes following the injection of an allergenic extract.
- a) 15 to 30
 - b) 15 to 45
 - c) 15 to 40
 - d) 15 to 60