



Test Bank

UNIT 1: GENERAL PRINCIPLES

CHAPTER 1: INTRODUCTION TO PHARMACOLOGY

1. Study of the drug that would be most or least appropriate to use for a specific disease is known as:
 - A. pharmacy
 - B. pharmacology
 - C. toxicology
 - D. pharmacodynamics
2. The fluid most commonly sampled to characterize the pharmacological actions of drugs is:
 - A. serum
 - B. urine
 - C. blood
 - D. mucus
3. Most receptors are located on the:
 - A. muscles
 - B. cell surface
 - C. skin
 - D. nerves
4. Most drug metabolism occurs in the:
 - A. liver
 - B. kidneys
 - C. bloodstream
 - D. lungs
5. During metabolism, before their conversion to metabolic derivatives, most drugs are acted upon by:
 - A. amino acids
 - B. receptors
 - C. enzymes
 - D. extracellular fluid
6. Pharmacy technicians should have a basic understanding of the factors that control drug concentration at the:
 - A. therapeutic level
 - B. toxic level
 - C. blood circulation
 - D. site of action

7. Important tools used to calculate the correct dosage of drugs for children include body weight and:
 - A. height
 - B. gender
 - C. body surface area
 - D. metabolism
8. An important mechanism that affects varying drug action and metabolism is the:
 - A. GI tract effect
 - B. intestinal effect
 - C. first-pass effect
 - D. toxic drug action
9. The initial rate of distribution of a drug is heavily dependent on the _____ to various organs.
 - A. blood flow
 - B. hepatic portal circulation
 - C. oxygen distribution
 - D. reactions
10. Drugs must _____ before being absorbed.
 - A. be diluted
 - B. circulate
 - C. be compounded
 - D. dissolve
11. Because they must pass through the _____, ionized drugs are poorly distributed.
 - A. intestinal wall
 - B. blood-brain barrier
 - C. liver
 - D. heart
12. Epinephrine is frequently injected to combat anaphylactic shock but must be administered:
 - A. after shock begins
 - B. after 24 hours
 - C. within the intensive care unit only
 - D. within a short period of time
13. Before administering a drug, knowledge of a patient's _____ is essential.
 - A. allergies
 - B. blood type
 - C. Rh factor
 - D. family history
14. An enzyme that has an essential role in drug metabolism is known as:
 - A. B1 adrenoreceptor
 - B. cytochrome P-450
 - C. B2 adrenoreceptor
 - D. T3 or T4
15. Any substance intended to be used to improve a physiologic or pathologic condition is known as a:
 - A. drug
 - B. dose
 - C. solution
 - D. compound
16. A "medicine" refers to a drug mixed with other ingredients that may improve its taste, physical form, or:
 - A. effectiveness
 - B. stability
 - C. color
 - D. odor
17. A sugar pill (which may be thought to be a drug by the patient) is also known as a(n):
 - A. diet pill
 - B. experimental dosage
 - C. placebo
 - D. energy pill
18. When the body develops resistance to the effects of a drug, requiring increased dosages, the body has become _____ to the drug.
 - A. addicted
 - B. allergic
 - C. toxic
 - D. tolerant
19. The speed of systemic availability depends on pharmaceutical factors and:
 - A. bloodstream absorption
 - B. gastrointestinal absorption
 - C. rate of excretion
 - D. cellular absorption
20. The stomach has a(n) _____ environment.
 - A. basic
 - B. acidic
 - C. alkaline
 - D. physiochemical
21. An empty stomach _____ the rate of absorption for some medications.
 - A. will always cause vomiting because of
 - B. decreases
 - C. increases
 - D. will always cause cramps because of
22. Orally administered drugs are usually absorbed in the:
 - A. lower GI tract
 - B. esophagus
 - C. pharynx
 - D. upper GI tract

23. _____ carries blood directly to the liver.
 - A. A biochemical pathway
 - B. Renal portal circulation
 - C. Hepatic portal circulation
 - D. Lymphatic portal circulation
24. Adverse drug reactions occur in people of all ages and are twice as common in:
 - A. women
 - B. men
 - C. young adults
 - D. elderly adults
25. _____ can occur when the body is not able to metabolize and excrete one dose of a drug before the next dose is given.
 - A. Idiosyncratic reactions
 - B. Tolerance
 - C. Cumulative effect
 - D. Cross-tolerance
26. Pharmacology deals with all the drugs used in society today, including prescription, legal, OTC, and _____ drugs.
 - A. generic
 - B. legend
 - C. illegal
 - D. experimental
27. A drug that does not require a prescription but often produces tolerance is:
 - A. codeine
 - B. morphine
 - C. methadone
 - D. alcohol
28. Alcohol potentiates the sedating effects of certain:
 - A. tranquilizers
 - B. stimulants
 - C. amphetamines
 - D. herbal supplements
29. Toxicology can be called the study of effects of _____ on living organisms.
 - A. stimulants
 - B. medicines
 - C. poisons
 - D. placebos
30. Intravenous drugs bypass the process of absorption and are:
 - A. sometimes excreted quickly
 - B. metabolized more slowly
 - C. distributed throughout the body
 - D. never required to be reconstituted

CHAPTER 2: LAW AND ETHICS OF MEDICATIONS

1. Amphetamines are most commonly classified as which type of scheduled drug?
 - A. Schedule I
 - B. Schedule II
 - C. Schedule III
 - D. Schedule IV
2. Certificates of registration for pharmacist licensure are granted in most states for a period of:
 - A. 1 to 2 years
 - B. 2 to 3 years
 - C. 3 to 4 years
 - D. 4 to 5 years
3. Medical facilities must comply with the Bloodborne Pathogens Standard and be able to prove their compliance to:
 - A. CDC inspectors
 - B. DEA inspectors
 - C. FDA inspectors
 - D. OSHA inspectors
4. In the United States, drug legislation began in the:
 - A. 1700s
 - B. 1800s
 - C. 1900s
 - D. 1950s
5. The Comprehensive Drug Abuse Prevention and Control Act of 1970 is concerned with certain drugs called:
 - A. OTC drugs
 - B. prescribed drugs
 - C. generic drugs
 - D. controlled substances
6. The first Pure Food and Drug Act was passed by Congress in:
 - A. 1806
 - B. 1851
 - C. 1906
 - D. 1951
7. Diethylene glycol, the poison that caused the sulfanilamide disaster of 1937, is used today as:
 - A. soap
 - B. antifreeze
 - C. gasoline
 - D. diesel fuel

8. Thalidomide was being sold as a sleeping pill outside the United States when it was discovered that the drug could harm:
 - A. elderly patients
 - B. female patients
 - C. fetuses during the first trimester of pregnancy
 - D. children allergic to penicillin
9. The nation's only legal drug enforcement agency is called the:
 - A. FDA
 - B. DEA
 - C. CDC
 - D. FTC
10. In the United States, drugs that treat diseases affecting 200,000 people or fewer are called:
 - A. orphan drugs
 - B. OTC drugs
 - C. scheduled drugs
 - D. controlled substances
11. Which act prohibits the reimportation of a drug into the United States by anyone but the manufacturer?
 - A. Safe Medical Devices Act of 1990
 - B. Prescription Drug Marketing Act of 1987
 - C. Orphan Drug Act of 1983
 - D. Drug Abuse Control Amendment of 1965
12. Anabolic steroids are derived from:
 - A. vitamins
 - B. minerals
 - C. hormones
 - D. enzymes
13. OSHA's mission is to ensure:
 - A. that drugs are not sold across international borders
 - B. that orphan drugs are regularly developed in the United States
 - C. compliance with the requirements of scheduled drugs
 - D. workplace safety and a healthy workplace environment
14. HIPAA stands for:
 - A. Health Insurance Protection Amendment Act
 - B. Hospital Intern/Physician Accountability Act
 - C. Health Insurance Portability and Accountability Act
 - D. Health Insurance Protection and Associated Amendments
15. All drug administration laws are initiated, implemented, and enforced by the:
 - A. DEA
 - B. FDA
 - C. CDC
 - D. HIPAA
16. The CDC's primary function is to issue:
 - A. infection-fighting drugs
 - B. regulations about drugs for specific diseases
 - C. infection control regulations
 - D. black box warnings
17. Pharmacy practice is primarily governed by:
 - A. pharmaceutical associations
 - B. federal law
 - C. poison control centers
 - D. state law
18. Standards of behavior and the concept of right and wrong beyond legal considerations are known as:
 - A. empathy
 - B. ethics
 - C. confidentiality
 - D. ordinances
19. Drug samples:
 - A. may be sold to any qualified person
 - B. traded between people for other drugs that they may require
 - C. may not be sold unless to another physician
 - D. may not be sold
20. Which type of drug cannot be sold without a prescription?
 - A. Legend
 - B. OTC
 - C. Aspirin
 - D. Acetaminophen
21. Which types of scheduled drugs have "high abuse potential"?
 - A. Schedules I and II
 - B. Schedules II and III
 - C. Schedules I and V
 - D. Schedules IV and V
22. Which governing agency approves the investigational use of drugs on humans?
 - A. HIPAA
 - B. CDC
 - C. DEA
 - D. FDA
23. Allied health professionals must use confidentiality in all areas that concern:
 - A. medications and their sale
 - B. medications and their adverse effects
 - C. medications and their administration
 - D. medications and their relationship to allergies

24. Which type of pharmacy requires special procedures because of the possible exposure to chemotherapy?
 - A. Investigational pharmacy
 - B. Compounding pharmacy
 - C. Institutional pharmacy
 - D. Nuclear pharmacy
25. Prescription pads must be used only for:
 - A. writing prescriptions for medications
 - B. writing down incoming calls from other physicians
 - C. writing instructions for patients on the use of free samples
 - D. writing directions to the pharmacy for patients
26. Which type of schedule drug is not approved for medical use in the United States?
 - A. Schedule IV
 - B. Schedule III
 - C. Schedule II
 - D. Schedule I
27. Why is heroin considered a Schedule I drug but cocaine is considered a Schedule II drug?
 - A. Because heroin only comes from overseas
 - B. Because cocaine is found in many food products
 - C. Because cocaine has accepted medical use in the United States but heroin does not
 - D. Because heroin comes from the poppy plant, which is illegal to grow
28. Today, federal regulations prohibit the use of drugs that would be:
 - A. detrimental to consumers
 - B. too expensive for some patients
 - C. not strong enough for the prescribed condition
 - D. too strong for the prescribed condition
29. Severe psychological or physical dependence may result from abuse of which of the following types of scheduled drugs?
 - A. Schedule II
 - B. Schedule III
 - C. Schedule IV
 - D. Schedule V
30. Which of the following types of agents are sometimes used by athletes to increase physical performance and require a prescription?
 - A. Catabolic steroids
 - B. Anabolic steroids
 - C. Sterols
 - D. Protein supplements

CHAPTER 3: TERMINOLOGY, ABBREVIATIONS, AND DISPENSING PRESCRIPTIONS

1. Most anatomic terms come from:
 - A. Latin origins
 - B. Greek origins
 - C. French origins
 - D. Arabic origins
2. The most common combining vowel is the letter:
 - A. "a"
 - B. "e"
 - C. "i"
 - D. "o"
3. Most tablets are intended to be swallowed whole for dissolution and absorption by the:
 - A. larynx
 - B. pharynx
 - C. gastrointestinal tract
 - D. bloodstream
4. The medications most commonly administered by means of troches include:
 - A. nitroglycerin
 - B. nicotine
 - C. glucose
 - D. cough suppressants
5. Most rectal drugs offer:
 - A. antitussive effects
 - B. localized effects
 - C. systemic effects
 - D. antipyretic effects
6. An important cardiac glycoside is:
 - A. digoxin
 - B. insulin
 - C. glucose
 - D. heparin
7. Enteric coatings may be used to keep a drug from dissolving in the:
 - A. esophagus
 - B. bloodstream
 - C. gallbladder
 - D. stomach
8. "Vital signs" are commonly abbreviated as:
 - A. Rx
 - B. Tx
 - C. VS
 - D. Vit

9. For rapid absorption, sublingual tablets must be dissolved:
 - A. underneath the skin
 - B. in the cheek
 - C. under the tongue
 - D. in the intestines
10. Preparations that must be shaken before being administered are known as mixtures or:
 - A. ointments
 - B. suspensions
 - C. powders
 - D. capsules
11. Ophthalmic drugs must be isotonic so they do not cause:
 - A. burning
 - B. itching
 - C. swelling
 - D. foaming
12. A prescription cannot be carried out if it is not:
 - A. phoned in
 - B. signed by the physician
 - C. signed by the pharmacist
 - D. signed by the pharmacy technician
13. Standing orders must be backed up later by:
 - A. a phone call
 - B. a faxed blank prescription form
 - C. a written confirmation by the doctor
 - D. the doctor personally visiting the pharmacy
14. Alkaloids are organic nitrogen-containing compounds that are alkaline and are usually:
 - A. acidic
 - B. bitter tasting
 - C. sweet tasting
 - D. sour tasting
15. Topical drugs are applied directly to the skin and usually offer:
 - A. a cooling action
 - B. a drying action
 - C. a local effect
 - D. a systemic effect
16. Prescriptions in hospitals are usually written on a drug chart or physician order sheet and then transcribed onto a:
 - A. prescription pad
 - B. medication administration record (MAR)
 - C. faxed prescription form
 - D. sticker placed on the patient's clothes
17. All elixirs contain:
 - A. ionized water
 - B. a bitter flavor
 - C. alcohol
 - D. isotonic solutions
18. In 1990, the first successful gene therapy was used to treat:
 - A. the common cold
 - B. pneumonia
 - C. cancer
 - D. an immune system defect in children
19. Pharmaceutics is the science of:
 - A. the history of medications
 - B. curing disease
 - C. poisonings
 - D. formulating drugs
20. Failure to administer a drug in the correct form results in a:
 - A. prescription error
 - B. pharmacist error
 - C. medication error
 - D. physician error
21. Liquid drugs are more rapidly available for GI absorption than solid drugs because they are:
 - A. more rapidly dissolved than solid drugs
 - B. injectable
 - C. able to be used topically
 - D. less rapidly dissolved than solid drugs
22. Sustained-release drugs should never be crushed or dissolved because:
 - A. this would negate their sustained-release action
 - B. this ruins their taste
 - C. they become liquid drugs
 - D. they will then have to be used topically
23. Lotions are intended for topical use and have a(n):
 - A. oil base
 - B. alcohol base
 - C. water base
 - D. powder base
24. An example of a drug commonly administered transdermally is:
 - A. warfarin
 - B. nicotine
 - C. insulin
 - D. heparin

25. Enteric coating prevents an irritating drug from causing a(n):
 - A. idiosyncratic reaction
 - B. ulcer of the stomach
 - C. burning of the skin
 - D. bitter flavor
26. A popular example of a drug that is available in the form of a cream is:
 - A. potassium chloride powder
 - B. zinc oxide
 - C. benzoyl peroxide
 - D. salicylic acid
27. Injectable (parenteral) forms of medication may be available as:
 - A. elixirs or solutions
 - B. powders or solutions
 - C. creams or solutions
 - D. ointments or solutions
28. An example of a pharmaceutical gas that may be inhaled is:
 - A. halothane
 - B. nitroglycerin
 - C. hydrogen
 - D. estrogen
29. Which of the following does not belong on a prescription label?
 - A. Address of the prescriber's office
 - B. Signa
 - C. Prescriber's DEA number
 - D. Signature of the pharmacist
30. Which of the following suffixes means "disease"?
 - A. -phobia
 - B. -pathy
 - C. -ectomy
 - D. -itis
3. Drug errors most often involve:
 - A. antitussives and analgesics
 - B. anti-inflammatories and antibiotics
 - C. antibiotics and analgesics
 - D. antipyretics and anti-inflammatories
4. Which of the following routes is the most common route by which medications are given?
 - A. Intravenous
 - B. Subcutaneous
 - C. Topical
 - D. Oral
5. Most needles are made of stainless steel and are:
 - A. reusable
 - B. disposable
 - C. dull until sharpened
 - D. tuberculin
6. Ampules are usually marked with ink and:
 - A. sealed with a rubber cap
 - B. opaque
 - C. prescored
 - D. must be filled with medication
7. The most common method of administering an intramuscular injection involves a:
 - A. 15-degree angle
 - B. 45-degree angle
 - C. 90-degree angle
 - D. 180-degree angle
8. How many times must the medication label be checked during its preparation to confirm the right drug, dose, and strength?
 - A. One
 - B. Two
 - C. Three
 - D. Four
9. After administering a medication, you must ensure that the patient:
 - A. is not allergic to the medication
 - B. does not have a reaction to the medication
 - C. lies still for at least 15 minutes without moving
 - D. does not drive a car for at least 15 minutes
10. Medication errors must be documented in the medical record with:
 - A. the initials of the physician in charge
 - B. a pen containing indelible ink
 - C. the signature of the individual who made the error
 - D. the initials of the medical office administrator

CHAPTER 4: ADMINISTRATION OF MEDICATIONS

1. In the ambulatory care setting, most medicines are ordered:
 - A. in tablet form
 - B. in liquid form
 - C. stat
 - D. asap
2. The most common medication error involves:
 - A. the dosage of the drug
 - B. the correct route of administration
 - C. the monitoring of side effects
 - D. not noticing drug information or warnings

11. Intradermal injections are usually given into the inner forearm or _____.
 - A. outer forearm
 - B. upper back
 - C. lower back
 - D. thigh
12. Because suppositories are designed to melt at body temperature, they are usually kept:
 - A. warm
 - B. at room temperature
 - C. in the refrigerator
 - D. in ice
13. The first time you should check a medication's label is when:
 - A. the medication is removed from its container
 - B. the medication is returned to the storage area
 - C. you are about to administer the medication
 - D. the medication is taken from the storage area
14. The first sulfa antimicrobial drug was:
 - A. glycol
 - B. sulfanilamide
 - C. sulfasalazine
 - D. sulfadiazine
15. The route that may be more dangerous than others because of the possibility of injecting a drug incorrectly into a vein is which of the following routes?
 - A. Intradermal route
 - B. Intramuscular route
 - C. Intravenous route
 - D. Anti-tick drugs
16. Aseptic technique is used when administering parenteral drugs because these drugs require which type of procedure?
 - A. Invasive
 - B. Infective
 - C. Isotonic
 - D. Iodized
17. The easiest way to make sure the drug is being given to the patient it was ordered for is to:
 - A. look at the patient's chart
 - B. ask the patient his or her name
 - C. ask a family member the patient's name
 - D. check the physician's order
18. Which of the following is an example of miscommunication?
 - A. Lack of patient information
 - B. Noise
 - C. Fatigue
 - D. Poor handwriting
19. Drugs that are absorbed through the gastrointestinal tract are known as:
 - A. intrathecal
 - B. enteral
 - C. percutaneous
 - D. parenteral
20. Which of the following is often used as a diluent in parenteral medications?
 - A. Cocoa butter
 - B. Alcohol
 - C. Powder
 - D. Sterile normal saline
21. The intramuscular route is commonly used for drugs that are irritating to:
 - A. subcutaneous tissue
 - B. muscles
 - C. the esophagus
 - D. the ears
22. Piggyback infusions are sometimes used as part of which type of injections?
 - A. Subcutaneous injections
 - B. Intravenous injections
 - C. Intramuscular injections
 - D. Intradermal injections
23. The legal document recording the medication's order and its administration is known as the:
 - A. wall chart
 - B. want book
 - C. *PDR*
 - D. medical record
24. Dull or damaged needles should:
 - A. be repaired
 - B. be sharpened
 - C. never be used
 - D. be used only once and then discarded
25. Commonly used needle shafts may range from:
 - A. 1 to 5 inches
 - B. 1/10 to 1 inch
 - C. 1/2 to 1 inch
 - D. 1/2 to 2 inches
26. "Wasting the medication" concerns the disposal of:
 - A. normal saline
 - B. OTC medications
 - C. controlled substances
 - D. only oral medications

27. Which type of tube is placed directly into the patient's stomach and used to feed the patient?
 - A. Gastrostomy
 - B. Nasopharynx
 - C. Nasogastric
 - D. Catheter
28. Two common socioeconomic problems for elderly adults are the lack of finances to purchase medications and:
 - A. proper housing
 - B. proper nutrition
 - C. the lack of transportation to obtain them
 - D. the lack of access to technology
29. The three most commonly used types of syringes are hypodermic, tuberculin, and:
 - A. IV
 - B. insulin
 - C. saline
 - D. butterfly
30. The most common nasal instillations are:
 - A. nasal decongestants
 - B. nasal blocks
 - C. for infections
 - D. cough suppressants
4. To divide by a decimal fraction, first move the decimal point in the divisor enough places:
 - A. right to make it a whole number
 - B. left to make it a whole number
 - C. right one place only
 - D. left two places
5. If you are required to cross-multiply the fractions $\frac{3}{4}$ and $\frac{1}{2}$, by which number would you multiply the "4" in the first fraction?
 - A. 1
 - B. 2
 - C. 3
 - D. 4
6. When working with numbers that range from 1 to 30, only three Roman numerals are required, used in various combinations. Which of the following choices of Roman numerals is correct?
 - A. I, X, L
 - B. I, V, X
 - C. I, V, C
 - D. V, X, M
7. In prescriptions, Roman numerals are commonly used to express units of the:
 - A. Avoirdupois system
 - B. English system
 - C. metric system
 - D. apothecary system

UNIT 2: MATHEMATICS AND DOSAGE CALCULATIONS

CHAPTER 5: BASIC MATHEMATICS

1. The Roman numeral system consists of letters that represent number values—most commonly of numbers between:
 - A. 0 and 50
 - B. 1 and 10
 - C. 1 and 100
 - D. 100 and 500
2. The fraction bar, which separates the numerator and denominator in a fraction, also means:
 - A. multiplied by
 - B. added to
 - C. divided by
 - D. subtracted from
3. To multiply fractions, you must:
 - A. first add the numerators and then multiply the denominators
 - B. first subtract the numerators and then multiply the denominators
 - C. first multiply the numerators and then multiply the denominators
 - D. invert the second fraction and then multiply
8. A common fraction represents:
 - A. a number that is greater than 1
 - B. equal parts of a whole
 - C. a percentage
 - D. a Roman numeral
9. When subtracting, if fractions do not have the same denominator, change the fractions so they have the:
 - A. greatest common denominator
 - B. smallest common denominator
 - C. equivalent of 1
 - D. number 100 as the denominator
10. Which of the following is the smallest (or "lowest") common denominator of 2, 5, and 7?
 - A. 10
 - B. 35
 - C. 56
 - D. 70

11. In Roman numerals, if a lower valued letter is placed before a higher valued letter:
- the equivalent is less than zero
 - the higher-valued letter is added to the lower-valued letter
 - the lower-valued letter is subtracted from the higher-valued letter
 - the lower-valued letter is divided by the higher-valued letter
12. Fractions are used in apothecary and household measures for:
- numbers that are less than zero
 - dosage calculations
 - numbers greater than 1 unit
 - ratios only
13. The numerator of an improper fraction is:
- always greater than its denominator
 - smaller than its denominator
 - greater than or equal to its denominator
 - either a whole number or another fraction
14. The value of a mixed fraction is always:
- less than 1
 - greater than 1
 - less than 0
 - between 0 and 1
15. You have added the fractions $\frac{2}{5}$ and $\frac{4}{10}$ by converting $\frac{2}{5}$ into $\frac{4}{10}$ so the denominators are the same. Your addition has given you the total of $\frac{8}{10}$. Now what must you do?
- You are finished; the answer is $\frac{8}{10}$.
 - You must convert $\frac{8}{10}$ into 80%.
 - You must divide 10 into 8.
 - You must reduce $\frac{8}{10}$ to lowest terms ($\frac{4}{5}$).
16. $\frac{10}{12}$ minus $\frac{12}{36}$ equals which of the following choices? Make sure your answer is in lowest terms.
- $\frac{1}{2}$
 - $\frac{15}{18}$
 - $\frac{1}{3}$
 - $\frac{2}{9}$
17. $\frac{10}{12}$ plus $\frac{12}{36}$ equals which of the following choices? Make sure your answer is in lowest terms.
- $\frac{42}{36}$
 - 1 and $\frac{6}{36}$
 - 1 and $\frac{1}{6}$
 - $\frac{11}{18}$
18. Multiply $\frac{2}{7}$ by $\frac{7}{10}$ and then reduce to lowest terms.
- $\frac{14}{70}$
 - $\frac{20}{49}$
 - $\frac{7}{35}$
 - $\frac{1}{5}$
19. Divide $\frac{8}{12}$ by $\frac{3}{12}$. Remember to invert the divisor and then to reduce to lowest terms.
- $\frac{96}{36}$
 - 2 and $\frac{16}{48}$
 - 2 and $\frac{2}{3}$
 - $\frac{24}{9}$
20. Decimal fractions, or decimals, are used within which of the following systems?
- Avoirdupois
 - Household
 - Metric
 - Apothecary
21. In writing a decimal fraction, always place a:
- one to the left of the decimal point
 - zero to the left of the decimal point
 - zero to the right of the decimal point
 - multiple of 10 as the numerator
22. The decimal fraction 0.763 is equivalent to:
- 76 and $\frac{3}{10}$
 - $\frac{763}{1,000}$
 - $\frac{1}{763}$
 - $\frac{7.63}{1,000}$
23. Add the following decimals: $1.763 + 0.29 + 12.4321$.
- 12.6113
 - 14.2241
 - 14.4851
 - 12.6374
24. Subtract the following decimals: $10.975 - 3.15 - 2.7$.
- 10.633
 - 5.125
 - 5.85
 - 7.125
25. If the multiplicand has three decimal places and the multiplier has two decimal places, how many decimal places will the product have?
- Five
 - Six
 - One
 - Three
26. The two quantities in a ratio are separated by a colon, which means:
- percentage
 - multiplication
 - equivalent
 - division

27. Proportions express the relationship of equality between two ratios. In the proportion $1:4 :: 3:12$, which terms are called the extremes and which are called the means?
- 1 and 12 are the extremes and 4 and 3 are the means
 - 1 and 12 are the means and 4 and 3 are the extremes
 - 1 and 3 are the means and 4 and 12 are the extremes
 - 1 and 4 are the means and 3 and 12 are the extremes
28. The term percent (%) means:
- tenths
 - hundredths
 - thousandths
 - hundreds
29. To change a percent to a decimal, move the decimal point:
- one place to the right
 - two places to the right
 - two places to the left
 - three places to the left
30. To change a fraction to a percent, divide the numerator by the denominator and then multiply the result by:
- 0.01
 - 0.1
 - 10
 - 100

CHAPTER 6: MEASUREMENT SYSTEMS AND THEIR EQUIVALENTS

- The most common, accurate, and safest system of measurement in all countries is the:
 - Avoirdupois system
 - household system
 - metric system
 - apothecary system
- Which of the following is the most used parameter and is essential as a dosage unit?
 - Weight
 - Length
 - Volume
 - Energy
- The basic unit of weight in the metric system is the:
 - kilogram
 - gram
 - liter
 - meter
- In the metric system, the basic unit of volume is the:
 - milliliter
 - milliequivalent
 - liter
 - ounce
- In the metric system, the basic unit of length is the:
 - kilometer
 - inch
 - centigram
 - meter
- The very old English system, which has been slowly replaced by the metric system, is known as the:
 - apothecary system
 - household system
 - Avoirdupois system
 - international system
- In the apothecary system, the basic unit of volume is the:
 - ounce
 - minim
 - dram
 - grain
- Drams are apothecary measures that are equivalent to:
 - $\frac{1}{8}$ of an ounce
 - 1 ounce
 - 1 minim
 - 1 grain
- The basic unit of weight in the apothecary system is the:
 - fluidram
 - dram
 - grain
 - minim
- In the household system, the only units of measurement used to measure drugs are units of:
 - weight
 - length
 - mass
 - volume
- Milliequivalents and international units indicate the:
 - masses of certain drugs
 - volumes of certain drugs
 - strengths of certain drugs
 - weights of certain drugs

12. Vitamins are measured in:
 - A. international units
 - B. minims
 - C. milliequivalents
 - D. milliliters
13. The international system was first developed for use throughout the world in 1960 by which country?
 - A. United States
 - B. England
 - C. France
 - D. Greece
14. Which of the following is not measured in units?
 - A. Aspirin
 - B. Insulin
 - C. Heparin
 - D. Penicillin
15. There are two common scales of temperature used throughout the world: Fahrenheit and:
 - A. Cirius
 - B. Kelvin
 - C. Celsius
 - D. Centigram
16. 32°F (freezing) is equivalent to:
 - A. 0°C
 - B. 23°C
 - C. 100°C
 - D. 212°C
17. 100°C (boiling) is equivalent to:
 - A. 0°F
 - B. 32°F
 - C. 100°F
 - D. 212°F
18. Each Celsius degree is:
 - A. 1.8 times greater than each Fahrenheit degree
 - B. equal to each Fahrenheit degree
 - C. 1.8 times less than each Fahrenheit degree
 - D. 9.5 times greater than each Fahrenheit degree
19. To convert Celsius into Fahrenheit, which equation is correct?
 - A. $5/9 \times ^\circ\text{C} - 32$
 - B. $1.8 \times ^\circ\text{C} + 32$
 - C. $1.8 \times ^\circ\text{C} - 32$
 - D. $5/9 \times ^\circ\text{C} + 32$
20. Household measurements are not precisely accurate, so they should never be used in the:
 - A. home
 - B. administration of liquid medications
 - C. medical setting
 - D. administration of medications to children
21. Milliequivalents are commonly used to measure:
 - A. temperatures
 - B. NSAIDs
 - C. vitamins
 - D. electrolytes
22. Most prescriptions and medication orders are written in the:
 - A. Roman numeral system
 - B. household system
 - C. Avoirdupois system
 - D. metric system
23. The temperature measurement scale most commonly used in the United States is:
 - A. centigrade
 - B. mercury
 - C. Fahrenheit
 - D. Celsius
24. Which of the following is the smallest unit of measurement?
 - A. Kilogram
 - B. Gram
 - C. Milligram
 - D. Microgram
25. Which of the following is the largest unit of measurement?
 - A. Liter
 - B. Kiloliter
 - C. Centiliter
 - D. Milliliter
26. Which of the following is not a unit of volume?
 - A. Ounce
 - B. Pound
 - C. Pint
 - D. Quart
27. An amount of medication required to produce a specific effect, the size of which varies for each drug, is a(n):
 - A. unit
 - B. milliequivalent
 - C. minim
 - D. grain
28. 1 milliliter (mL) is equivalent to 1:
 - A. pint
 - B. dram
 - C. cubic centimeter
 - D. ounce

29. 16 ounces are equivalent to 1:
 - A. tablespoon
 - B. cup
 - C. gallon
 - D. pound
30. For measuring medications at home, it is important to understand that 1 tablespoon equals:
 - A. 2 teaspoons
 - B. 1/2 cup
 - C. 3 teaspoons
 - D. 1 cup

CHAPTER 7: ADULT AND PEDIATRIC DOSAGE CALCULATIONS

1. The definition of the term *therapeutic* is:
 - A. causative
 - B. prophylactic
 - C. curative
 - D. toxic
2. The definition of the term *units* is:
 - A. milliequivalents
 - B. quantities
 - C. milligrams
 - D. milliliters
3. A dropper that is marked with graduated measurements is:
 - A. conical
 - B. a teaspoon
 - C. a syringe
 - D. calibrated
4. The amount to be administered at one time is known as the:
 - A. total amount
 - B. desired dose
 - C. dosage ordered
 - D. dose on hand
5. Changing the strengths of the drug ordered and the drug available into a single unit is known as:
 - A. compounding
 - B. formulation
 - C. conversion
 - D. computing
6. Less concentrated mixtures are known as:
 - A. elixirs
 - B. dilutions
 - C. solutions
 - D. suspensions
7. Tablets may be broken into parts only if they are notched or:
 - A. scored
 - B. ground
 - C. unscored
 - D. granulated
8. Injectable medications may be prescribed in units, grains, or:
 - A. suspensions
 - B. milligrams
 - C. diluents
 - D. ounces
9. A pancreatic hormone that stimulates glucose metabolism is known as:
 - A. heparin
 - B. warfarin
 - C. insulin
 - D. bilirubin
10. A numerical relationship chart that is used to determine body surface area is a:
 - A. formula
 - B. nomogram
 - C. BSA
 - D. pharmacopeia
11. The schedule of dosing for a drug is the:
 - A. intended dose
 - B. nomogram
 - C. dosing regimen
 - D. dose on hand
12. To produce an adequate blood level to yield the desired therapeutic effect, some drugs require:
 - A. a loading dose
 - B. a maintenance dose
 - C. a prophylactic dose
 - D. a therapeutic dose
13. The most common form of solid oral medication is the:
 - A. granule
 - B. lozenge
 - C. tablet
 - D. gelcap
14. Oval-shaped gelatin shells containing medication are known as:
 - A. pills
 - B. capsules
 - C. lozenges
 - D. granules