Test Bank For Gould\'s Pathophysiology for the Health Professions 7th Edition VanMeter and Hubert Chapter 1-28 | Complete Guide A+

Chapter 01: Introduction to Pathophysiology

VanMeter and Hubert: Gould's Pathophysiology for the Health Professions, 7th Edition

MULTIPLE CHOICE

- 1. Which of the following would be the most likely cause of an iatrogenic disease? a. An inherited disorder
 - b. A combination of specific etiological factors
 - c. An unwanted effect of a prescribed drug
 - d. Prolonged exposure to toxic chemicals in the environment ANS: C
- 2. The manifestations of a disease are best defined as the
 - a. subjective feelings of discomfort during a chronic illness.
 - b. signs and symptoms of a disease.
 - c. factors that precipitate an acute episode of a chronic illness.
 - d. early indicators of the prodromal stage of infection. ANS: B
- 3. The best definition of the term *prognosis* is the
 - a. precipitating factors causing an acute episode.
 - b. number of remissions to be expected during the course of a chronic illness.
 - c. predicted outcome or likelihood of recovery from a specific disease.
 - d. exacerbations occurring during chronic_illness. ANS: C
- 4. Which of the following is considered a systemic sign of disease?
 - a. Swelling of the knee
 - b. Fever
 - c. Pain in the neck
 - d. Red rash on the face ANS: B
- 5. Etiology is defined as the study of the
 - a. causes of a disease.

- b. course of a disease.
- c. expected complications of a disease.
- d. manifestations of a disease. ANS: A
- 6. A type of cellular adaptation in which there is a decrease in cell size is referred to as a. hypertrophy.
 - b. metaplasia.
 - c. anaplasia.
 - d. atrophy.

- 7. A change in a tissue marked by cells that vary in size and shape and show increased mitotic figures would be called
 - a. metaplasia.
 - b. atrophy.
 - c. dysplasia.
 - d. hypertrophy.

ANS: C

- 8. A deficit of oxygen in the cells usually due to respiratory or circulatory problems is called a. apoptosis.
 - b. ischemia.
 - c. hypertrophy.
 - d. necrosis. ANS: B
- 9. When a group of cells in the body dies, the change is called
 - a. ischemia.
 - b. gangrene.
 - c. hypoxia.
 - d. necrosis.

- 10. Rigorous weightlifting/body building regimens may result in the skeletal muscle cells undergoing a. hypertrophy. b. dysplasia.
 - c. atrophy.
 - d. regeneration. ANS: A
- 11. The term cancer refers to
 - a. dysplasia.

- b. hyperplasia.
- c. metaplasia.
- d. malignant neoplasm.

- 12. To which of the following does the term *apoptosis* refer?
 - a. Increased rate of mitosis by certain cells
 - b. Ischemic damage to cells
 - c. Liquefaction of necrotic tissue
 - d. Preprogrammed cell self-destruction ANS: D
- 13. Which of the following statements is TRUE?
 - a. Alteration of DNA does not change cell function.
 - b. Damaged cells may be able to repair themselves.
 - c. All types of cells die at the same rate.
 - d. Mild ischemia causes immediate cell death. ANS: B
- 14. Caseation necrosis refers to an area where
 - a. cell proteins have been denatured.
 - b. cells are liquefied by enzymes.
 - c. dead cells form a thick cheesy substance.
 - d. bacterial invasion has occurred. ANS: C
- 15. Routine application of sun block to skin would be an example of
 - a. an iatrogenic cause of cancer.
 - b. a preventive measure.
 - c. a precipitating factor.
 - d. a predisposing condition. ANS: B
- 16. A circumstance that causes a sudden acute episode of a chronic disease to occur is termed a. latent stage.
 - b. predisposing factor.
 - c. incidence.
 - d. precipitating factor. ANS: D
- 17. The term *homeostasis* refers to
 - a. the causative factors in a particular disease.
 - b. maintenance of a stable internal environment.
 - c. a condition that triggers an acute episode.
 - d. a collection of signs and symptoms. ANS: B
- 18. Which term is used to describe a new and secondary or additional problem that arises after the original disease has been established? a. Symptoms

- b. Occurrence
- c. Manifestations
- d. Complication

- 19. Pathophysiology involves the study of
 - a. the structure of the human body.
 - b. the functions of various organs in the body.
 - c. functional or structural changes resulting from disease processes.
 - d. various cell structures and related functions. ANS: C
- 20. Which of the following is the best definition of epidemiology?
 - a. The science of tracking the occurrence and distribution of diseases
 - b. The relative number of deaths resulting from a particular disease
 - c. Identification of a specific disease through evaluation of signs and symptoms
 - d. The global search for emerging diseases

ANS: A

- 21. Which of the following can cause cell injury or death?
 - 1. Hypoxia
 - 2. Exposure to excessive cold
 - 3. Excessive pressure on a tissue 4. Chemical toxins a. 1, 2
 - b. 2,4
 - c. 1, 3, 4
 - d. 1, 2, 3, 4

- 22. All of the following are part of the Seven Steps to Health EXCEPT:
 - a. Follow cancer screening guidelines.
 - b. Use sun block agents whenever exposed.
 - c. Participate in strenuous exercise on a regular daily basis.
 - d. Choose high fiber, lower fat foods. ANS: C
- 23. The term disease refers to
 - a. the period of recovery and return to a normal healthy state.
 - b. a deviation from the normal state of health and function.
 - c. the treatment measures used to promote recovery.
 - d. a basic collection of signs and symptoms. ANS: B
- 24. A collection of signs and symptoms, often affecting more than one organ or system, that usually occur together in response to a certain condition is referred to as a(an) a. acute disease.
 - b. multiorgan disorder.
 - c. syndrome.
 - d. manifestation. ANS: C
- 25. All of the following statements are correct about cell damage EXCEPT:
 - a. The initial stage of cell damage often causes an alteration in metabolic reactions.
 - b. If the factor causing the damage is removed quickly, the cell may be able to recover and return to its normal state.
 - c. If the noxious factor remains for an extended period of time, the damage becomes irreversible and the cell dies.
 - d. Initially, cell damage does not change cell metabolism, structure, or function. ANS: D
- 26. Which of the following conditions distinguishes double blind studies used in health research?
 - a. Neither the members of the control group or the experimental group nor the person administering the treatment knows who is receiving the experimental therapy.
 - b. Both groups of research subjects and the person administering the treatment know who is receiving the experimental therapy.
 - c. The research subjects do not know, but the person administering the treatment knows who is receiving placebo or standard therapy.

- d. Only members of the control group know they are receiving standard therapy. ANS: A
- 27. If the data collected from the research process confirm that the new treatment has increased effectiveness and is safe, this is called a. the placebo effect. b. evidence-based research.
 - c. blind research studies.
 - d. approval for immediate distribution. ANS: B
- 28. A short-term illness that develops very quickly with perhaps a high fever or severe pain is called
 - a. acute.
 - b. latent.
 - c. chronic.
 - d. manifestation. ANS: A
- 29. The term *prognosis* refers to the
 - a. period of recovery and return to a normal state.
 - b. expected outcome of the disease.
 - c. mortality and morbidity rates for a given population.
 - d. typical collection of signs and symptoms. ANS: B
- 30. When prolonged ischemia occurs to an area of the heart, the resulting damage is referred to as a. atrophy.
 - b. liquefactive necrosis.
 - c. apoptosis.
 - d. infarction.

- During the evaluation process for a new therapy's effectiveness and safety, a double blind study may be conducted during a. the first stage. b. the second stage.
 - c. the third stage.
 - d. any of these stages. ANS: C
- 32. Why are the predisposing factors for a specific disease important to health professionals? a. To predict the prognosis
 - b. To determine treatments
 - c. To develop preventive measures
 - d. To develop morbidity statistics ANS: C
- 33. Cell damage may be caused by exogenous sources such as
 - a. abnormal metabolic processes.
 - b. certain food additives.
 - c. genetic defects.
 - d. localized hypoxia. ANS: B

- 34. Which of the following is usually included in a medical history?
 - 1. Past illnesses or surgeries
 - 2. Current illnesses, acute and chronic
 - 3. Prescribed medication or other treatments
 - 4. Nonprescription drugs and herbal/remedies55Current allergies
 - a. 1,2
 - b. 2, 4, c. 1, 3, 4 6
 - d. 1, 2, 3, 4,
 - ANS:

- 35. A situation when there is a higher than expected number of cases of an infectious disease within a given area is called a/an a. epidemic. b. exacerbation.
 - c. morbidity.
 - d. pandemic. ANS: A
- 36. The term pathogenesis refers to
 - a. the development of a disease or sequence of events related to tissue changes involved in the disease process.
 - b. the determination of the cause(s) involved in the development of a malignant neoplasm.
 - c. the specific signs and symptoms involved in the change from an acute disease to a chronic disease.
 - d. the changes in cells of affected tissue that result in necrosis. ANS: A
- 37. A therapy that has been approved for use and may show additional potential to treat a different disease is termed "____" use. a. over-the-counter b. off-label
 - c. additional
 - d. conditional

ANS: B

- 38. A potential unwanted outcome of a primary condition, such as paralysis following the recovery from a stroke, is referred to as a. complication.
 - b. convalescence.
 - c. sequelae.
 - d. postcondition.

- 39. An infectious disease that spreads over wide regions of the globe is called a(an) a. pandemic.
 - b. endemic.
 - c. epidemic.
 - d. periodic.
 - ANS: A
- 40. The type of necrosis that occurs when cell proteins are altered or denatured is referred to as a. liquefaction necrosis.

- b. coagulative necrosis.
- c. degenerative necrosis.
- d. caseous necrosis. ANS: B

Chapter 02: Fluid, Electrolyte, and Acid-Base Imbalances VanMeter and Hubert: Gould's Pathophysiology for the Health Professions, 7th Edition

MULTIPLE CHOICE

- 1. Choose the correct proportion of water to body weight to be expected in a healthy male adult's body:
 - a. 30%
 - b. 45%
 - c. 60%
 - d. 70%

ANS: C

- Choose the correct proportion of blood (to body weight) in an adult male's body:
 - a. 30%
 - b. 20%
 - c. 10%
 - d. 4%
 - ANS: D
- 3. Which of the following is NOT part of the extracellular fluid compartment (ECF)?
 - a. Blood
 - b. Cytoplasm
 - c. Cerebrospinal fluid
 - d. Transcellular fluid ANS: B

4. Insensible fluid loss refers to water lost through

- a. perspiration only.
- b. feces only.
- c. perspiration and expiration.
- d. urine and feces.

- 5. The osmoreceptor cells controlling the thirst mechanism are located in the a. medulla oblongata.
 - b. thalamus.

c. epithalamus.

7.

8.

- d. hypothalamus. ANS: D
- 6. When the osmotic pressure of the blood is elevated above normal, water would shift from the a. blood into the cells.
 - b. interstitial compartment into the cells.
 - c. interstitial compartment into the blood.
 - d. cells into the interstitial compartment. ANS: C
 - Which of the following would result from a deficit of plasma proteins?
 - a. Increased osmotic pressure
 - b. Decreased osmotic pressure
 - c. Increased hydrostatic pressure
 - d. Decreased hydrostatic pressure ANS: B
 - Which of the following would cause edema?
 - a. Decreased capillary hydrostatic pressure
 - b. Increased capillary osmotic pressure
 - c. Decreased capillary permeability
 - d. Increased capillary permeability ANS: D
- 9. Which of the following would likely be related to an elevated hematocrit reading? a. Fluid excess
 - b. Fluid deficit
 - c. Increased sodium level
 - d. Decreased erythrocytes

ANS: B

10.

Which of the following is a typical sign of dehydration?

- a. Rapid, strong pulse
- b. Low hematocrit
- c. Increased urine output
- d. Rough oral mucosa ANS: D
- 11. Which of the following terms refers to a combination of decreased circulating blood volume combined with excess fluid in a body cavity? a. Dehydration
 - b. Third-spacing
 - c. Hypovolemia
 - d. Water retention ANS: B
- 12. Which of the following is the primary cation in the extracellular fluid? a. Sodium
 - b. Potassium

c. Calcium

13.

15.

- d. Iron ANS: A
- Which of the following is a common cause of hyponatremia?
- a. Loss of the thirst mechanism
- b. Excessive sweating
- c. Excessive aldosterone secretion
- d. Prolonged period of rapid, deep respirations ANS: B
- 14. Which of the following is a common effect of both hypokalemia and hyperkalemia?
 - a. Skeletal muscle twitch and cramps
 - b. Oliguria
 - c. Elevated serum pH
 - d. Cardiac arrhythmias ANS: D
 - Choose the correct effect of increased parathyroid hormone.
 - a. Increased movement of calcium ions into the bones
 - b. Increased activation of vitamin D
 - c. Increased absorption of calcium from the digestive tract
 - d. Decreased reabsorption of calcium in the kidneys ANS: C
- 16. Which of the following results from hypocalcemia?
 - 1. Low serum phosphate levels
 - 2. Nausea and constipation
 - 3. Skeletal muscle twitch and spasms 4. Weak cardiac contractions
 - a. 1,2
 - b. 1,4
 - c. 2, 3
 - d. 3, 4 ANS:
 - D
- 17. Which of the following causes tetany?
 - a. Increased permeability of nerve membranes due to low serum calcium
 - b. Excess calcium ions in skeletal muscle due to excess parathyroid hormone (PTH)
 - c. Excess calcium ions inside somatic nerves as a result of neoplasms
 - d. Increased stimulation of the nerves in the cerebral cortex ANS: A
- 18. Parestesia is an effect of
 - a. hyperkalemia.
 - b. hypokalemia.
 - c. hyponatremia.
 - d. hypernatremia. ANS: B

- 19. In which of the following processes is the phosphate ion NOT a major component?
 - a. Bone metabolism
 - b. Metabolic processes involving adenosine triphosphate (ATP)
 - c. Blood clotting
 - d. Acid-base balance ANS: C
- 20. Which of the following would be considered normal serum pH?
 - a. 4.5-8
 - b. 7.0
 - c. 7.4
 - d. 8

ANS: C

- 21. When many excess hydrogen ions accumulate in the blood, what happens to serum pH? The pH
 - a. decreases.
 - b. increases.
 - c. remains constant.
 - d. varies based on metabolism.

ANS: A

- 22. What is the slowest but most effective control for acid-base balance?
 - a. Respiratory system
 - b. Buffer systems in the blood
 - c. Kidneys
 - d. Brain

- 23. Which of the following is essential in order to maintain serum pH within normal range?
 - a. Carbonic acid and bicarbonate ion must be present in equal quantities.
 - b. All excess carbonic acid must be excreted by the kidneys.
 - c. The concentration of bicarbonate ion must remain constant.
 - d. The ratio of carbonic acid to bicarbonate ion must be 1:20. ANS: D
- 24. Which is the correct effect on the body of abnormally slow respirations?
 - a. Increased carbonic acid
 - b. Decreased carbonic acid
 - c. Increased bicarbonate ion
 - d. Decreased bicarbonate ion ANS: A
- 25. Which condition is likely to cause metabolic acidosis?
 - a. Slow, shallow respirations

- b. Prolonged diarrhea
- c. Mild vomiting
- d. Excessive fluid in the body ANS: B
- 26. What would a serum pH of 7.33 in a patient with kidney disease indicate?
 - a. Metabolic alkalosis
 - b. Metabolic acidosis
 - c. Respiratory alkalosis
 - d. Respiratory acidosis ANS: B
- 27. Which serum value indicates decompensated metabolic acidosis?
 - a. pH is below normal range.
 - b. pH is above normal range.
 - c. Bicarbonate level decreases.
 - d. Bicarbonate level increases. ANS: A
- 28. What is the effect on blood serum when excessive lactic acid accumulates in the body?
 - a. Bicarbonate ion levels decrease.
 - b. Bicarbonate ion levels increase.
 - c. Carbonic acid levels increase.
 - d. pH increases. ANS: A
- 29. The direct effects of acidosis are manifested primarily in the functioning of the
 - a. digestive system.
 - b. urinary system.
 - c. nervous system.
 - d. respiratory system. ANS: C
- 30. Compensation mechanisms in the body for dehydration would include
 - a. increased antidiuretic hormone (ADH).
 - b. decreased aldosterone.
 - c. slow, strong heart contraction.
 - d. peripheral vasodilation. ANS: A
- 31. Which acid-base imbalance results from impaired expiration due to emphysema? a. Metabolic acidosis
 - b. Metabolic alkalosis
 - c. Respiratory acidosis
 - d. Respiratory alkalosis ANS: C
- 32. In patients with impaired expiration associated with emphysema, effective compensation for the acid-base imbalance would be
 - a. increased rate and depth of respiration.

- b. decreased rate and depth of respiration.
- c. increased urine pH and decreased serum bicarbonate.
- d. decreased urine pH and increased serum bicarbonate. ANS: D
- 33. An anxiety attack often causes hyperventilation leading to
 - a. increased PCO₂.
 - b. decreased PCO₂.
 - c. respiratory acidosis.
 - d. metabolic acidosis. ANS: B
- 34. One of the factors involved in the increased need for water in infants is
 - a. proportionally smaller body surface area.
 - b. higher metabolic rate.
 - c. smaller respiratory capacity.
 - d. greater surface area of exposed mucous membranes.

ANS: B

- 35. Compensation for respiratory system depression due to anesthesia and sedation would be
 - a. decreased reabsorption of bicarbonate ions in the kidneys.
 - b. increased secretion of hydrogen ions into the filtrate.
 - c. increased respiratory rate and depth.
 - d. increased renin secretion. ANS: B
- 36. A prolonged state of metabolic acidosis often leads to
 - a. hypokalemia.
 - b. hyperkalemia.
 - c. hyponatremia.
 - d. hypercalcemia. ANS: B
- 37. Strenuous physical exercise on a hot day is likely to result in
 - a. hypokalemia.
 - b. hypernatremia.
 - c. hyperchloremia.
 - d. hypovolemia.

- 38. Place the following events in the correct sequence of events when ketoacids increase in the blood of a diabetic patient. Not all options are used in the answers.
 - 1. Serum pH decreases
 - 2. Serum bicarbonate decreases
 - 3. PCO_2 decreases
 - 4. Respiration decreases
 - 5. Respiration increases

6. Serum pH increases 7. Urine pH decreases

- a. 1, 3, 7, 4, 2, 6
- b. 5, 2, 7, 3, 4, 1
- c. 2, 1, 5, 3, 7, 6
- d. 3, 1, 2, 5, 7, 6 ANS: C
- 39. Which of the following is a manifestation of respiratory alkalosis?
 - a. Bradycardia and deep rapid breathing
 - b. Drowsiness and general lethargy
 - c. Increased nervous system irritability
 - d. Decreased urine pH ANS: C
- 40. Prolonged diarrhea results in
 - a. loss of fluid and bicarbonate ions, leading to metabolic acidosis.
 - b. increased fluid and serum bicarbonate ions, leading to metabolic acidosis.
 - c. loss of chloride ions only, leading to metabolic alkalosis.
 - d. surplus bicarbonate ions, leading to respiratory alkalosis. ANS: A
- 41. In the initial stage, vomiting results in
 - a. metabolic acidosis.
 - b. metabolic alkalosis.
 - c. respiratory alkalosis.
 - d. none of these. ANS: B
- 42. Which two ions are most important for acid-base balance in the body? a. K^+ , Na^+
 - b. Cl⁻ and HCO $_{3}^{-}$
 - c. Ca++, Na+
 - d. Na⁺, Cl[–]ANS: B
- 43. The bicarbonate-carbonic acid buffer system helps maintain serum pH. The balance of the carbonic acid and bicarbonate ion levels are controlled by the a. liver and pancreas.
 - b. lungs and kidneys.
 - c. lungs and plasma proteins.
 - d. kidneys and bone marrow. ANS: B
- 44. Alkalosis increases irritability and spontaneous stimulation of nerves by
 - a. blocking normal nerve conduction.
 - b. increasing the permeability of nerve membranes.
 - c. blocking movement of calcium ions.
 - d. decreasing phosphate ion levels. ANS: B
- 45. Hypocalcemia causes weak cardiac contractions because
 - a. permeability of nerve membranes increases.

- b. insufficient calcium ions are available for muscle contraction.
- c. low phosphate ion levels prevent muscle contraction.
- d. excessive amounts of calcium are stored in cardiac muscle. ANS: B
- 46. Serum potassium levels are affected by
 - 1. ADH.
 - 2. aldosterone.
 - 3. serum H⁺ levels.
 - 4. insulin levels.
 - a. 2 only
 - b. 1, 2
 - c. 1, 3
 - d. 2, 3, 4
 - e. 1, 2, 3

- 47. Which of the following is the primary control of serum Na⁺ levels?
 - a. ADH
 - b. Aldosterone
 - c. Serum H⁺ levels
 - d. Serum K⁺ levels ANS: B
- 48. The control center for thirst is located in the
 - a. kidneys.
 - b. thalamus.
 - c. medulla.
 - d. hypothalamus. ANS: D
- 49. Which statements apply to atrial natriuretic peptide?
 - 1. It is secreted by heart muscle cells.
 - 2. It is a hormone secreted by the kidneys.
 - 3. It helps to control water and sodium balance.
 - 4. It is released in response to low blood pressure.
 - a. 1,3
 - b. 1,4
 - c. 2, 3
 - d. 2,4

ANS: A

- 50. What are the three mechanisms that control or compensate for serum pH?
 - a. Hypothalamus, metabolic changes by digestive system, lymphatic system filtration

- b. Buffer pairs in blood, change in kidney excretion rate, change in respiration rate
- c. Neural feedback, increase in heart rate, decrease in calcium intake
- d. Modification of water intake, increased capillary permeability, decrease in blood volume ANS: B
- 51. Hypokalemia refers to a condition in which the serum has a very low level of which ion? a. Sodium
 - b. Phosphate
 - c. Calcium
 - d. Potassium ANS: D
- 52. In the blood and extracellular fluids, hypernatremia refers to
 - a. a deficient sodium level.
 - b. an excess phosphate level.
 - c. an excess sodium level.
 - d. an excessively low phosphate level. ANS: C
- 53. Increased milk and/or antacid intake can contribute to development of "milkalkali syndrome," which can cause which of the following? a. Hyponatremia b. Hyperkalemia
 - c. Hypercalcemia
 - d. Hypovolemia ANS: C
- 54. Ingested vitamin D must be activated in the
 - a. liver.
 - b. kidney.
 - c. pancreas.
 - d. lung. ANS: B
- 55. Neuromuscular hyperirritability may be a cause of
 - a. hypomagnesemia.
 - b. hypermagnesemia.
 - c. hypophosphatemia.
 - d. hyperphosphatemia.

ANS: A

Chapter 03: Introduction to Basic Pharmacology and Other Common Therapies VanMeter and Hubert: Gould's Pathophysiology for the Health Professions, 7th Edition

MULTIPLE CHOICE

- 1. Documenting drug-induced responses of physiologic and biochemical systems is part of a. pharmacokinetics.
 - b. pharmacodynamics.

- c. pharmacotherapeutics.
- d. toxicology.

ANS: B

- 2. The study of the body's response to drugs, harmful effects, mechanisms of actions, symptoms, treatment, and identification is the role of a. pharmacokinetics. b. pharmacodynamics.
 - c. pharmacotherapeutics.
 - d. toxicology. ANS: C
- 3. Which of the following are considered to be the toxic effects of a drug?
 - a. Additional, mild, unwanted effects
 - b. Unusual, unexpected mild effects
 - c. Serious, possibly life-threatening effects
 - d. Reduction of the allergic response ANS: C
- 4. Dry mouth and drowsiness after the administration of an antihistamine is considered to be a(n) a. adverse effect. b. toxic effect.
 - c. side effect.
 - d. hypersensitivity effect. ANS: C
- 5. An unexpected or unusual response to a drug is called a(n)
 - a. iatrogenic reaction.
 - b. teratogenic effect.
 - c. toxic effect.
 - d. idiosyncratic reaction. ANS: D
- 6. A drug dose refers to
 - a. the amount of a drug given at a single time.
 - b. the total amount of a drug given over a period of time.
 - c. the daily amount of a drug given.
 - d. the weekly amount of a drug administered. ANS: A
- 7. A study of the toxicity of a drug includes all of the following EXCEPT:
 - a. Physiochemical properties
 - b. Genetics
 - c. Routes of administration
 - d. Rates of absorption ANS: B
- 8. What is the unique, simple, and official name assigned to a specific drug for worldwide use? a. Trade name b. Chemical name
 - c. Proprietary name
 - d. Generic name

- 9. Which is the route of administration by which the largest proportion of the drug dose is likely lost before reaching the site of action? a. Oral
 - b. Intramuscular
 - c. Sublingual
 - d. Intravenous ANS: A
- 10. Ingesting a drug with a large meal may be likely to
 - a. immediately increase the blood level of the drug.
 - b. prevent gastric irritation.
 - c. ensure that the total dose is absorbed into the blood.
 - d. cause more rapid excretion of the drug. ANS: B
- 11. What is the reaction called when two drugs interact to produce a result much greater than the sum of individual effects? a. Antagonism b. Beneficial
 - c. Synergism
 - d. Potentiation ANS: C
- 12. At which site are most drugs metabolized and prepared for excretion? a. Liver
 - b. Kidneys
 - c. Circulating blood
 - d. Lymphoid tissue ANS: A
- 13. In traditional Asian medicine, acupoints are usually located
 - a. over pain or other sensory receptors.
 - b. where blood vessels branch.
 - c. over joints.
 - d. on designated meridians. ANS: D
- 14. Traditional drug or surgical therapy is incorporated with nontraditional methods by a. chiropractors. b. naturopaths.
 - c. homeopaths.
 - d. osteopaths.
 - ANS: D
- 15. Contraindications printed on the label of a drug identify
 - a. those circumstances under which the drug should probably not be used.
 - b. those typical side effects associated with this drug.
 - c. the dosage limits associated with the use of the drug.
 - d. the maximum shelf life of the medication. ANS: A
- 16. After they are metabolized, most drugs are excreted through the

- a. lungs.
- b. pancreas.
- c. kidneys.
- d. large intestine. ANS: C
- 17. A drug that binds with selected specific cell receptors may
 - 1. stimulate activity in those cells.
 - 2. inhibit activity in those cells.
 - 3. change specificity and attach to other cells.
 - 4. be disabled by macrophages.
 - a. 1, 2
 - b. 2, 3
 - c. 3, 4
 - d. 1, 3, 4 ANS: A
- 18. A placebo may be described as a tablet or capsule
 - a. that does not contain an active drug.
 - b. that contains a small amount of active drug for use in clinical trials.
 - c. that contains a different drug to be used for its psychological effect.
 - d. that contains high amounts of a drug to determine the maximum dose allowed. ANS:
 A
- 19. The form of therapy that involves assessment of physical function and works to restore any problems and prevent any further dysfunction using methods such as appropriate exercises and ultrasound is referred to as a. registered massage therapy.
 - b. naturopathy.
 - c. physiotherapy.
 - d. reflexology. ANS: C
- 20. A medical history should include all
 - 1. legally prescribed drugs.
 - 2. vitamin or mineral supplements.
 - 3. any medication not requiring a prescription (over-the-counter items).
 - 4. herbal treatments.
 - a. 1 only
 - b. 1, 3
 - c. 1, 2, 4
 - d. 1, 2, 3, 4 ANS: D
- 21. Antagonistic drugs may be used to
 - a. increase the effectiveness of selected drugs.
 - b. prolong the action of a drug.
 - c. act as an antidote when necessary.

- d. speed up the excretion of a drug. ANS: C
- 22. The full course of a prescribed antimicrobial drug should be completed so as to prevent
 - a. undesirable side effects.
 - b. development of resistant microbes.
 - c. an allergic response.
 - d. proper metabolism and excretion of drug. ANS: B
- 23. Transcutaneous electrical nerve stimulation (TENS) is a technology often used in
 - a. chemotherapy.
 - b. physiotherapy.
 - c. occupational therapy.
 - d. massage therapy. ANS: B
- 24. Which of the following therapies is considered an alternative therapy?
 - a. Acupuncture
 - b. Chiropractic therapy
 - c. Osteopathy
 - d. Speech therapy

ANS: A

Chapter 04: Pain VanMeter and Hubert: Gould's Pathophysiology for the Health Professions, 7th Edition

MULTIPLE CHOICE

- 1. The impulses related to acute pain are usually transmitted by
 - a. nociceptors.
 - b. myelinated A delta fibers.
 - c. unmyelinated C fibers.
 - d. any sensory fiber with a low pain threshold. ANS: B
- 2. In which structure do pain impulses ascend the spinal cord?
 - a. Reticular formation
 - b. Corticospinal tract
 - c. Spinothalamic tract
 - d. Relevant dermatome

- 3. According to the gate-control theory, passage of pain impulses may be naturally blocked
 - a. at the synapse by entry of other sensory impulses.
 - b. by the stress response.
 - c. by administration of morphine directly into the spinal cord.
 - d. by referring the pain to other parts of the body. ANS: A
- 4. What is the term used to describe the degree of pain that is endured before an individual takes action?
 - a. Pain threshold
 - b. Referred pain
 - c. Phantom pain
 - d. Pain tolerance ANS: D
- 5. What is the definition of endorphins?
 - a. Neurotransmitters at the nociceptors
 - b. Transmitters for sensory impulses
 - c. Opiate-like blocking agents in the central nervous system
 - d. Pain-causing chemical mediators ANS: C
- 6. Pain perceived in the left arm during the course of a heart attack is an example of a. referred pain. b. phantom pain.
 - c. chronic pain.
 - d. subjective pain response. ANS: A