

Test Bank for Roach's Introductory Clinical Pharmacology 11th Ford

Chapter 01, General Principles of Pharmacology

MULTIPLE CHOICE

1. After teaching a group of students about the basics of pharmacology, the students will be able to choose which aspect as the most critical to remember?

A) Drug name
B) Drug class
C) Drug action
D) Drug source

ANS: C

Feedback: Pharmacology is the study of drugs and their action on living organisms. Thus, an essential aspect of pharmacology is drug action. An understanding of the drug name, drug class, and drug source is important, but the most critical aspect related to pharmacology is how the drug acts in the body.

PTS: 1 DIF: Easy REF: Header: Introduction | Page: 3

OBJ: 1

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning

BLM: Cognitive Level: Apply

2. A nurse suspects the client had an adverse reaction to a prescribed medication due to an interaction with an unreported over-the-counter supplement. Which action by the nurse will **best** assist in preventing future similar incidents?

A) File a report with MedWatch
B) File a report with the State Board of Nursing
C) Instruct the client to avoid combining medications in the future
D) Document the incident and report to the health care provider

ANS: A

Feedback: Nurses play an important role in monitoring for adverse reactions. Therefore, it is important to submit reports, even if there is uncertainty about the cause-effect relationship. The FDA protects the identity of those who voluntarily report adverse reactions.

PTS: 1 DIF: Moderate REF: Header: Box 1.1 | Page: 7

OBJ: 10

NAT: Client Needs: Safe and Effective Care Environment: Safety and Infection Control

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Comprehension

3. A nurse is assessing a client and notes the client has developed swelling of the eyelids and lips after administration of a prescribed medication. What does the nurse interpret this finding to specifically indicate?

A) Mild allergic reaction
B) Anaphylactic shock
C) Angioedema

D) Drug idiosyncrasy

ANS: C

Feedback: Angioedema is a type of allergic drug reaction manifested by the collection of fluid in the subcutaneous tissues, most commonly affecting the eyelids, lips, mouth, and throat. Allergic reactions can be manifested by a wide range of signs and symptoms such as itching, rashes, and hives. Anaphylactic shock is a serious allergic reaction that requires immediate medical attention. Drug idiosyncrasy describes any unusual or abnormal reaction to a drug, one that is different from the one normally expected.

PTS: 1

DIF: Moderate

REF: Header: Allergic Drug Reactions | Page: 11

OBJ: 5

NAT: Client Needs: Physiological Integrity: Reduction of Risk Potential

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

4. The nurse is preparing to teach a client about a new drug which is in the fourth phase of development. Which activity will the nurse explain as **best** illustrates this phase?
- A) Health care providers report adverse effects to FDA.
 - B) Healthy volunteers are involved in the test.
 - C) In vitro tests are performed using human cells.
 - D) The drug is given to clients with the disease.

ANS: A

Feedback: The postmarketing surveillance phase of drug development encourages health care professionals to report adverse effects of drugs to the FDA using MedWatch. Phase 1 of clinical testing involves 20 to 100 healthy volunteers. In vitro testing of the drug on human or animal cells is done in the pre-FDA phase. In Phase 2 of clinical testing, the drug is given to clients with the disease for which the drug is manufactured.

PTS: 1

DIF: Moderate

REF: Header: Drug Development | Page: 6

OBJ: 4

NAT: Client Needs: Health Promotion and Maintenance

TOP: Chapter 1

KEY: Integrated Process: Teaching/Learning

BLM: Cognitive Level: Apply

5. A nurse is assessing a pregnant client who admits to a cocaine addiction. Which condition of the baby should the nurse explain and prepare the client for after the child is born?
- A) Diabetes.
 - B) Hypertension.
 - C) Addiction to drugs.
 - D) CNS defects.

ANS: C

Feedback: The nurse informs the client that children born to mothers using addictive drugs are often born with an addiction to the drug. Children born to mothers who are addicted to cocaine are not known to be born with diabetes, CNS defects, or hypertension.

PTS: 1

DIF: Moderate

REF: Header: Drug Use, Pregnancy, and Lactation | Page: 10

OBJ: 5

NAT: Client Needs: Health Promotion and Maintenance

TOP: Chapter 1

KEY: Integrated Process: Teaching/Learning

BLM: Cognitive Level: Apply

6. A client arrives at the health care clinic and reports that he has been taking several pills for a headache and severe cough without relief. Which adverse effect should the nurse be aware may develop from this combination?

A) Gastrointestinal bleeding
B) Breathing difficulties
C) Liver damage
D) Anaphylaxis

ANS: C

Feedback: Consumers should be urged to carefully read the directions before taking OTC drugs, as these drugs are not without risks. For example, acetaminophen, commonly used for pain relief, is also found in many OTC products, such as cough and cold remedies. When taken for both pain and in a cold remedy, this accumulative amount of the drug can potentially harm a person's liver. Aspirin presents the potential adverse reaction of gastrointestinal bleeding. An allergic reaction could result in breathing difficulties and anaphylaxis.

PTS: 1

DIF: Moderate

REF: Header: Nonprescription Drugs | Page: 5

OBJ: 5

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

7. The nurse notes on assessment after administration of a drug the client has developed itching and a skin rash. The nurse interprets these findings as indicating which possible reaction?

A) Toxicity
B) Allergic reaction
C) Angioedema
D) Crystalluria

ANS: B

Feedback: Allergic reactions are manifested by a variety of signs and symptoms including itching, skin rashes, and hives. Swollen eyelids, lips, and mouth are some of the symptoms of angioedema, an allergic drug reaction that may block the airway, causing asphyxia. Toxicity or toxic reactions are caused when blood concentration levels exceed the therapeutic level of drugs. Reduced blood pressure is called hypotension. Crystals in the urine are symptoms of crystalluria.

PTS: 1

DIF: Moderate

REF: Header: Allergic Drug Reactions | Page: 11

OBJ: 5

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

8. The nurse is monitoring a client with heart failure for effectiveness of the digoxin therapy. Which factor should the nurse closely monitor for potential signs of toxicity?
- A) Seizure activity
 - B) Drug blood level
 - C) Urinary output
 - D) Blood pressure

ANS: B

Feedback: The nurse should monitor the client's blood level of the drug to ensure that the level remains within the therapeutic range. Monitoring seizure activity, urination frequency, and blood pressure will not prevent toxicity. Seizure activity is unrelated to digoxin or heart failure.

PTS: 1 DIF: Difficult REF: Header: Toxic Reactions | Page: 13
OBJ: 9
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

9. The nurse is assessing a client's response to sleeping pills and notes continued restlessness and inability to sleep. After an increased dose leads to sleep, which factor should the nurse investigate first?
- A) Is this related to a genetic deficiency?
 - B) Is the drug accumulating in the client's body?
 - C) Is the client now tolerant to the drug?
 - D) Is this a toxic reaction?

ANS: C

Feedback: The client has developed drug tolerance and has to be administered an increased dosage of the drug to achieve the desired effect. Cumulative drug effect occurs when the body is unable to metabolize and excrete one (normal) dose of a drug before the next dose is given. Drug idiosyncrasy is a term used to describe any unusual or abnormal reaction to a drug, which can be related to genetics. Toxic reactions are caused when blood concentration levels exceed the therapeutic levels of a drug.

PTS: 1 DIF: Difficult REF: Header: Drug Tolerance | Page: 12
OBJ: 7
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Analyze

10. An unconscious client is brought to the emergency department via ambulance after family members were unable to wake up the client after coming home drunk, taking a sleeping pill, and went to bed. The nurse will explain to the family the client is most likely experiencing which type of drug reaction?
- A) Additive
 - B) Synergistic

- C) Antagonistic
- D) Toxic

ANS: B

Feedback: A synergistic drug reaction occurs when drugs interact with each other and produce a sum greater than the sum of their separate actions. An additive drug reaction occurs when the combined effect of two drugs is equal to the sum of each drug given alone. An antagonistic drug reaction occurs when one drug interferes with the action of another, causing neutralization or a decrease in the effect of one drug. Toxic drug reactions are caused when blood concentration levels exceed the therapeutic levels of a drug.

PTS: 1

DIF: Moderate

REF: Header: Synergistic Drug Reaction | Page: 13

OBJ: 8

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning

BLM: Cognitive Level: Apply

11. A nurse has administered drugs to a client as per the health care provider's orders. Which activity should the nurse perform after administering the prescribed drugs?
- A) Record symptoms of the condition.
 - B) Perform a culture and sensitivity test.
 - C) Obtain history of drug allergy.
 - D) Check for adverse drug reactions.

ANS: D

Feedback: After administering the drug to the client, the nurse should observe the client for adverse drug reactions. Recording symptoms of infection, performing a culture and sensitivity test, and obtaining a history of drug allergy are typically performed by the nurse in the preadministration assessment stage.

PTS: 1

DIF: Moderate

REF: Header: Nursing Implications With Drug Actions | Page: 15

OBJ: 9

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

12. The nurse is teaching a client about a newly prescribed medication which is an enteric-coated tablet. Which statement by the nurse **best** explains this form of medication?
- A) "The medication dissolves directly from the stomach into the body."
 - B) "The drug breaks up into pieces as it moves through the stomach."
 - C) "The medication bypasses the GI tract and goes quickly into the bloodstream."
 - D) "The drug dissolves into fragments after it reaches your small intestine."

ANS: D

Feedback: Enteric-coated tablets disintegrate or fragment after reaching the alkaline medium of the small intestine. Tablets and capsules break up into small particles and dissolve into body fluids in the gastrointestinal tract. Liquids and parenteral drugs are quickly absorbed into the body system.

PTS: 1 DIF: Difficult REF: Header: Pharmaceutic Phase | Page: 8
OBJ: 5
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Apply

13. After teaching a group of nursing students about pharmacokinetics, the instructor determines that the teaching was successful when the students identify which phase as first?
- A) Body changes drug for excretion
 - B) Drug is made available for use in the body
 - C) Drug is transported throughout the body
 - D) Drug is eliminated from the body

ANS: B

Feedback: Pharmacokinetics refers to the transportation activity of drugs in the body after administration. The first component is absorption. This is followed by distribution, metabolism, and finally excretion.

PTS: 1 DIF: Easy
REF: Header: Pharmacokinetic Phase | Page: 8 OBJ: 5
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Analyze

14. A client is considering using herbal supplements and asks the nurse about them. Which response by the nurse would be **most** appropriate?
- A) "Herbal supplements are safe to use because they are regulated closely."
 - B) "Herbal supplements can affect the way other medications will act."
 - C) "Taking more than the recommended amount usually is not harmful because they are natural."
 - D) "The risk of the supplement interacting with any prescription medications is extremely low."

ANS: B

Feedback: The nurse needs to explain to the client that just because an herbal supplement is labeled "natural" does not mean the supplement is safe or without harmful effects. Herbal supplements can act the same way as drugs and can cause medical problems if not used correctly or if taken in large amounts. Herbal supplements are not regulated by the FDA, so products lack standardization in relation to purity and potency. In addition, the client should be warned not to take more than the recommended dose of any herbal health product or supplement. The problems that these products can cause are much more likely to occur if the client takes too much or takes them for too long.

PTS: 1 DIF: Moderate REF: Header: Box 1.2 | Page: 16
OBJ: 10
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Apply

15. A nurse is reading a journal article about seasonal allergies and comes across the name of the drug loratadine. The nurse determines this drug name as which type?
- A) Chemical
 - B) Generic
 - C) Trade
 - D) Brand

ANS: B

Feedback: The generic name is the name given to a drug that can be made or marketed by any company and is the name given to the drug by the FDA. The chemical name is the scientific term that describes the molecular structure of the drugs, typically the chemical components. The trade or brand name of the drug is the name selected by a specific company for marketing purposes and is followed by a trademark symbol or registered trademark symbol.

PTS: 1 DIF: Easy REF: Header: Table 1.1 | Page: 4
OBJ: 2
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

16. A nursing instructor determines a class on drug development is successful when the students correctly choose which test group as involved in the initial process?
- A) Small group of healthy volunteers
 - B) People who have the disease
 - C) Live animals
 - D) Large numbers of clients

ANS: C

Feedback: Initially, drug testing begins with testing in an artificial environment such as a test tube, and then this testing is followed by testing on live animals. Next, clinical testing occurs with each phase involving a larger number of people. First, a small group of 20 to 100 healthy volunteers are tested; then testing is performed on people who have the disease or condition. Last, the drug is given to large numbers of clients in medical research centers.

PTS: 1 DIF: Difficult REF: Header: Drug Development | Page: 6
OBJ: 4
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Analyze

17. After a class on pharmacokinetics, the nursing students can correctly choose which site for the metabolism of most drugs?
- A) Liver
 - B) Lungs
 - C) Kidneys
 - D) Intestinal mucosa

ANS: A

Feedback: Although the kidneys, lungs, plasma, and intestinal mucosa may aid in the metabolism of drugs, most drugs are metabolized by the liver.

PTS: 1 DIF: Moderate REF: Header: Metabolism | Page: 9
OBJ: 5
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Apply

MULTIPLE RESPONSE

18. A nursing student reviews information about a drug and its action before preparing and administering the drug to a client. Which resources are the **best** choice for this student to consult? Select all that apply.
- A) Nursing instructor
 - B) Nurse assigned to the client
 - C) Clinical drug reference
 - D) Prescribing health care provider
 - E) Clinical pharmacist

ANS: C, E

Feedback: Although the nursing student can ask the nursing instructor, the nurse assigned to the client, and the prescribing health care provider for information about the drug, the best choices for drug information would include an appropriate drug reference and the clinical pharmacist.

PTS: 1 DIF: Moderate
REF: Header: Nursing Implications With Drug Actions | Page: 15
OBJ: 9
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

19. The nursing instructor is preparing to teach about various sources used for developing medication. Which sources should the instructor include in the discussion? Select all that apply.
- A) Plants
 - B) Synthetic sources
 - C) Mold
 - D) Minerals
 - E) Animals

ANS: A, B, D

Feedback: Medications are derived from natural sources, for example, plants and minerals, as well as created synthetically in a laboratory.

PTS: 1 DIF: Moderate REF: Header: Introduction | Page: 3
OBJ: 1

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning

BLM: Cognitive Level: Apply

20. The nursing instructor determines the class discussion about the various names a drug will have was successful when the students correct choose which categories of names? Select all that apply.
- A) Chemical name
 - B) Official name
 - C) Pharmacologic name
 - D) Trade name
 - E) Nonproprietary name

ANS: A, B, D, E

Feedback: Throughout the process of development, drugs may have several names assigned to them including a chemical name, a generic (nonproprietary) name, an official name, and a trade or brand name.

PTS: 1

DIF: Easy

REF: Header: Drug Names | Page: 4

OBJ: 2

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

21. The nursing student is aware that the action of a drug can be predicted by its classification; which is determined by which factors? Select all that apply.
- A) The chemical type of the drug's active ingredient
 - B) The way the drug is used to treat a specific condition
 - C) The generic name of the drug
 - D) The trade name of the drug
 - E) The nonproprietary name of the drug

ANS: A, B

Feedback: A drug may be classified by the chemical type of the active ingredient or by the way it is used to treat a particular condition. Each drug can be classified into one or more drug classes. Generic, trade, and nonproprietary refer to how a drug is named, not classified.

PTS: 1

DIF: Easy

REF: Header: Drug Classes and Categories | Page: 4

OBJ: 3

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

22. A group of nursing students are learning to categorize drugs into the various Food and Drug Administration (FDA) categories. Which categories are established by the FDA? Select all that apply.
- A) Metabolite
 - B) Noncontrolled substance

- C) Prescription
- D) Nonprescription
- E) Controlled substance

ANS: C, D, E

Feedback: Once drugs are approved for use, the FDA assigns the drug to one of the following categories: prescription, nonprescription, or controlled substance. Metabolite refers to the inactive form of the drug. Noncontrolled substance is a term that is not used.

PTS: 1 DIF: Moderate
REF: Header: Drug Classes and Categories | Page: 4 OBJ: 4
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Analyze

23. The nursing instructor is explaining the safe use of prescription drugs. After the discussion, the students correctly choose which actions as being the **most** important? Select all that apply.
- A) Administering drugs
 - B) Monitoring clients for drug effects
 - C) Prescribing drugs
 - D) Evaluating clients for toxic effects
 - E) Educating clients/caregivers about drugs

ANS: A, B, D, E

Feedback: In the institutional setting, the nurse's role to ensure safe use of prescription drugs includes administering drugs, monitoring drug effects, evaluating for toxic effects, and educating clients and caregivers about drugs.

PTS: 1 DIF: Moderate REF: Header: Prescription Drugs | Page: 5
OBJ: 9
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

24. The nurse is preparing to teach a client about a new drug the health care provider has prescribed. Which information does the nurse expect to find on the prescription? Select all that apply.
- A) Name of the drug
 - B) Dosage of the drug
 - C) Route of drug administration
 - D) Times of drug administration
 - E) Licensed prescriber's signature

ANS: A, B, C, D, E

Feedback: The prescription must contain the client's name, the name of the drug, the dosage, the method and times of administration, and the signature of the licensed health care provider prescribing the drug.

PTS: 1 DIF: Moderate REF: Header: Prescription Drugs | Page: 5
OBJ: 3
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

25. After a class discussion, a group of nursing students are able to point out which factors apply to nonprescription medications? Select all that apply.
- A) Require a licensed health care provider's signature
 - B) Are referred to as over-the-counter drugs
 - C) Can be taken without risk to the client
 - D) Have certain labeling requirements
 - E) Should be taken only as directed on the label

ANS: B, D, E

Feedback: Nonprescription drugs are often referred to as over-the-counter (OTC) drugs. They do not require a prescription (a licensed health care provider's signature) but do not come without risk to the client. The federal government has imposed labeling requirements of OTC drugs and they should only be taken as directed on the label unless under the supervision of a health care provider.

PTS: 1 DIF: Moderate REF: Header: Nonprescription Drugs | Page: 5
OBJ: 3
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Analyze

26. A nursing student is preparing information about the Controlled Substances Act of 1970. The student can correctly teach a client which factors are regulated by the Act? Select all that apply.
- A) Manufacturing
 - B) Elimination
 - C) Distribution
 - D) Formulation
 - E) Dispensing

ANS: A, C, E

Feedback: The Controlled Substances Act of 1970 regulates the manufacture, distribution, and dispensing of drugs classified as controlled substances. Elimination refers to the excretion of drugs from the body, a pharmacokinetic activity. The act does not address formulation of the drug.

PTS: 1 DIF: Moderate REF: Header: Controlled Substances | Page: 5
OBJ: 3
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

27. A nursing instructor is preparing to teach a group of students about the Orphan Drug Program. The instructor determines the class is successful after the students choose which points as relating to the program? Select all that apply.
- A) Encourages the development and marketing of products to treat rare diseases.
 - B) Grants provisional approval with a written commitment from the drug company to formally demonstrate client benefits.
 - C) Provides for incentives, such as research grants, protocol assistance, and special tax credits, to develop products to treat rare diseases.
 - D) Grants 7 years of exclusive marketing rights to the manufacturer if approved.
 - E) Accelerates approval of drugs based on preliminary evidence before formal demonstration of client benefits.

ANS: A, C, D

Feedback: The Orphan Drug Program encourages the development and marketing of products used to treat rare diseases. The program provides incentives to encourage manufacturers to develop orphan drugs, and if approved, the manufacturer has 7 years of exclusive marketing rights. Accelerated programs involve provisional approval and approval based on preliminary evidence.

PTS: 1 DIF: Moderate REF: Header: Orphan Drug Program | Page: 7
OBJ: 4
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

28. After teaching a group of nursing students about pharmacokinetics, the instructor determines that the teaching was successful when the students identify which actions as a phase? Select all that apply.
- A) Absorption
 - B) Distribution
 - C) Administration
 - D) Metabolism
 - E) Excretion

ANS: A, B, D, E

Feedback: The pharmacokinetic phases are absorption, distribution, metabolism, and excretion. The acronym ADME is a helpful way to remember the pharmacokinetic phases.

PTS: 1 DIF: Moderate
REF: Header: Pharmacokinetic Phase | Page: 8 OBJ: 5
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Apply

29. A nurse is preparing a teaching plan for a client who is prescribed an oral medication. Which mechanisms for absorption will the nurse illustrate in the teaching? Select all that apply.
- A) Active transport
 - B) Transposition

- C) Passive transport
- D) Endocytosis
- E) Pinocytosis

ANS: A, C, E

Feedback: During absorption, the drug particles in the GI tract are moved into the body fluids via active transport, passive transport, and pinocytosis.

PTS: 1 DIF: Moderate REF: Header: Absorption | Page: 8
OBJ: 5
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1 KEY: Integrated Process: Teaching/Learning
BLM: Cognitive Level: Apply

30. After a discussion about the half-life of a drug, a nursing instructor concludes further teaching is necessary when nursing students choose which facts as true? Select all that apply:
- A) Can be decreased in clients with renal disease.
 - B) Can help determine dosing frequency.
 - C) Does not change throughout a client's life.
 - D) Liver disease can increase.
 - E) Is the measure of the rate at which drugs are removed from the body.

ANS: A, C

Feedback: Half-life refers to the time required for the body to eliminate 50% of the drug. Although half-life is fairly stable, clients with liver or kidney disease may have problems excreting a drug. Difficulty in excreting a drug increases the half-life and increases the risk of toxicity, because these organs do not remove the substances and the drug remains in the body longer. Older clients or clients with impaired kidney or liver function require frequent diagnostic tests measuring renal or hepatic function.

PTS: 1 DIF: Moderate REF: Header: Excretion | Page: 9
OBJ: 5
NAT: Client Needs: Physiological Integrity: Pharmacological Therapies
TOP: Chapter 1
KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)
BLM: Cognitive Level: Apply

31. After receiving a prescribed medication, the nurse notes on assessment: heart rate 58 and thready, blood pressure 142/96, respirations 28 with wheezing and gasping, scratching at small red splotches on the arms and legs, and swollen eyelids, lips, and mouth. Which findings should the nurse prioritize for treatment? Select all that apply.
- A) Heart rate 58 and thready
 - B) Blood pressure 142/96
 - C) Respirations 28, gasping and wheezing
 - D) Small red splotches on arms and legs
 - E) Swollen eyelids, lips, and mouth

ANS: C, D, E

Feedback: The symptoms of anaphylactic shock are dyspnea, feeling of fullness in the throat, cough, wheezing, extremely low blood pressure, tachycardia (heart rate >100 bpm), palpitations, syncope, cardiac arrest, urticaria, angioedema, pruritus, sweating, nausea, vomiting, and abdominal pain.

PTS: 1 DIF: Moderate REF: Header: Table 1.2 | Page: 12

OBJ: 5

NAT: Client Needs: Physiological Integrity: Reduction of Risk Potential

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

32. The nursing instructor determines a group of nursing students are prepared to administer medications to pediatric clients when they correctly articulate which factors will alter a drugs response in these clients? Select all that apply.

- A) Slower gastric emptying
- B) Greater surface area
- C) Less protein binding
- D) Decreased body water content
- E) Less cutaneous fat

ANS: A, B, C, E

Feedback: Children and infants are not small adults; therefore, they have altered pharmacokinetics. Factors that alter pharmacokinetics in children include slower gastric emptying, less cutaneous fat, greater surface area, increased body water content, less protein binding, and immature hepatic and renal function.

PTS: 1 DIF: Moderate REF: Header: Table 1.3 | Page: 14

OBJ: 6

NAT: Client Needs: Physiological Integrity: Reduction of Risk Potential

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

33. A nurse is preparing to administer a prescribed IM medication to a 72-year-old, 98 lb. female client. The nurse integrates knowledge of which factors that could influence the drug response? Select all that apply.

- A) Age
- B) Polypharmacy
- C) Weight
- D) Sex
- E) Disease

ANS: A, C, D

Feedback: Drug response can be influenced by the following factors: age, weight, sex, disease, and route of administration.

PTS: 1 DIF: Moderate

REF: Header: Factors Influencing Drug Response | Page: 14 OBJ: 6

NAT: Client Needs: Physiological Integrity: Reduction of Risk Potential

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply

34. A nurse is preparing to lead a community discussion related to the Dietary Supplement Health and Education Act (DSHEA). Which factors concerning the Act should the nurse be prepared to include in the discussion? Select all that apply.
- A) Allows for DEA enforcement of the act.
 - B) Gives the FDA power to enforce the laws governed by the act.
 - C) Permits general health claims.
 - D) Permits curative health claims.
 - E) Defines specific substances as “dietary supplements.”

ANS: B, C, E

Feedback: The DSHEA defines substances such as herbs, vitamins, minerals, amino acids, and other natural substances as “dietary supplements” and permits general health claims as long as the label also has a disclaimer stating that the supplements are not approved by the FDA and are not intended to diagnose, treat, cure, or prevent any disease. The act gives the FDA the power to enforce the laws governed by the act.

PTS: 1

DIF: Moderate

REF: Header: Dietary Supplement Health and Education Act | Page: 15

OBJ: 10

NAT: Client Needs: Physiological Integrity: Pharmacological Therapies

TOP: Chapter 1

KEY: Integrated Process: Clinical Problem-solving Process (Nursing Process)

BLM: Cognitive Level: Apply