Test Bank Questions
Chapter 1: Introduction to Drugs

1. A nurse working in radiology administers iodine to a client who is having a computed tomography (CT) scan. The nurse working on the oncology unit administers chemotherapy to clients who have cancer. At the Public Health Department, a nurse administers a measles–mumps–rubella (MMR) vaccine to a 14-month-old child as a routine immunization. Which branch of pharmacology **best** describes the actions of all three nurses?
    A) pharmacoeconomics
    B) pharmacotherapeutics
    C) pharmacodynamics
    D) pharmacokinetics

2. What concept is **prioritized** when a health care provider is considering the substitution of a brand-name drug with a generic drug?
    A) bioequivalency
    B) critical concentration
    C) distribution
    D) half-life

3. A nurse is unfamiliar with a drug that a client in the community has recently been prescribed. What information source should the nurse consult?
    A) *Drug Facts and Comparisons*
    B) a nurse's drug guide
    C) the website www.drugs.com
    D) the *Physicians' Drug Reference* (PDR)

4. When involved in phase III drug evaluation studies, what action should the nurse perform?
    A) Work with animals which are given experimental drugs.
    B) Select appropriate clients to be involved in the drug study.
    C) Monitor and observe clients closely for adverse effects.
    D) Make decisions that will determine effectiveness of the drug.

5. The nurse is caring for an older adult who needs to know that drugs, even when taken correctly, can produce negative or unexpected effects. The nurse should address what topic during health education?
    A) teratogenic effects
    B) toxic effects
    C) adverse effects
    D) paradoxical effects

6. The nurse has just administered a client's medication. What action should the nurse perform **next**?
    A) Assess for drug effects.
    B) Perform a comprehensive health assessment.

C) Educate the client about the purpose of the drug.
D) Assess for preexisting conditions.

7. The nurse receives an order to administer an unfamiliar medication and obtains a nurse's drug guide published 4 years earlier. What is the nurse's **most** prudent action?
   A) Find a more recent reference source.
   B) Use the guide if the drug is listed.
   C) Use the guide because it is less than 6 years old.
   D) Verify the information in the guide with the pharmacist.

8. The nurse is preparing a client for discharge knowing the client will be self-administering medication at home. What is the nurse's **most** appropriate action?
   A) Provide the client with the nurse's contact information for when the client has questions.
   B) Provide thorough medication teaching about drugs and the drug regimen.
   C) Advise the use of over-the-counter medication to treat potential adverse effects.
   D) Provide a 2-day supply of medication to take home until prescription is filled.

9. In response to the client's question about whether drugs are safe, the nurse explains that all medications in the United States undergo rigorous testing controlled by what organization?
   A) Food and Drug Administration (FDA)
   B) Drug Enforcement Agency (DEA)
   C) Centers for Disease Control and Prevention (CDC)
   D) Joint Commission on Accreditation of Healthcare Organizations (JCAHO)

10. The nurse is assisting with a phase I drug study. What potential participant would be **most** appropriate?
   A) 22-year-old male with an unremarkable health history
   B) 24-year-old female who takes oral contraceptives
   C) 49-year-old female who has completed menopause
   D) 17-year-old male who is in good health

11. The nurse is preparing to move to another state. The nurse should complete which action?
   A) Become familiar with local policies and procedures for controlled substance administration.
   B) Obtain local providers' Drug Enforcement Agency (DEA) number for prescribing controlled substances.
   C) Become familiar with pregnancy drug categorization system used in the new state.
   D) Learn about the particular OTC drugs that are for sale in the new state.

12. The client looks at the prescription provided by the health care provider and asks the nurse about the notation "DAW." What implication of this notation should the nurse explain?
   A) The prescription will be filled once the pharmacy is informed of the prescriber's DEA number.
   B) The pharmacy where the client fills the prescription will not substitute a generic drug.
   C) The drug falls under the purview of the DEA's Drug Action Watch program.
   D) The drug is associated with a high risk of adverse effects.

13. The client is prescribed a medication that was just approved by the FDA. The client tells the nurse, "This medication is too expensive. Could the health care provider order a generic form of this medication?" What is the nurse's **best** response?
    A) "New medications are patented by the manufacturers. A generic is not available."
    B) "You can request the generic form but the binder used may make the drug less effective for this medication."
    C) "The generic form of the medication would not be any less expensive because this is a relatively new medication."
    D) "Generic medications are lower-quality drugs, and that would mean you would not be getting the best treatment available."

14. While collecting a medication history, the client admits to doubling the recommended dosage of acetaminophen, saying "It's harmless or they would require a prescription." What is the nurse's **best** response?
    A) "OTC drugs are serious medications and carry serious risks if not taken as directed."
    B) "Taking medications like that is careless and you could cause yourself serious harm if you keep doing it."
    C) "Sometimes you need to take more than the package directs to treat the symptoms. It's important not to do this frequently."
    D) "Did you notify your health care provider of the increased dosage you were taking?"

15. The nurse explains that what drug resource book is compiled from package inserts?
    A) *Nurses' Drug Guide*
    B) *Physicians' Desk Reference (PDR)*
    C) *Drug Facts and Comparisons*
    D) *AMA Drug Evaluations*

16. The nurse explains the Drug Enforcement Agency's (DEA's) schedule of controlled substances to the unlicensed assistive personnel (UAP) who asks, "Do you ever get a prescription for schedule I medications?" What is the nurse's **best** response?
    A) "Schedule I medications have no medical use so they are not prescribed."
    B) "Schedule I medications have the lowest risk for misuse and do not require a prescription."
    C) "Schedule I medications are only prescribed in monitored units for client safety."
    D) "Schedule I medications are found in antitussives and antidiarrheals sold over the counter."

17. The client tells the nurse about a new drug being tested to treat the disease they are diagnosed with and asks the nurse whether the health care provider can prescribe a medication still in the preclinical phase of testing. What is the nurse's **best** response?
    A) "The health care provider would have to complete a great deal of paperwork to get approval to prescribe that drug."
    B) "Sometimes pharmaceutical companies are looking for volunteers to test a new drug, and the health care provider could give them your name."
    C) "Drugs in the preclinical phase of testing are tested on animals and have not received approval from the FDA to be prescribed yet."

D) "Drugs in the preclinical phase of testing are given only to healthy young males and so would not be available to you."

18. A nurse is assessing the client's home medication use. After listening to the client list current medications, the nurse asks what **priority** question?
    A) "Do you take any over-the-counter medications?"
    B) "Do you take any generic medications?"
    C) "Are any of these medications orphan drugs?"
    D) "Are these medications safe to take during pregnancy?"

19. What goal should a nurse set when beginning a course on pharmacology for nurses?
    A) At the completion of the course, the nurse will know general drug information because the nurse can consult a drug guide for specific drug information.
    B) At the completion of the course, the nurse will know everything necessary for safe and effective medication administration.
    C) At the completion of the course, the nurse will know current pharmacologic therapy and will not require ongoing education for 5 years.
    D) At the completion of the course, the nurse will understand each drug action that is associated with each classification of medication.

20. A client asks the nurse, "What is a Drug Enforcement Agency (DEA) number?" What is the nurse's **best** response?
    A) "DEA numbers are given to health care providers and pharmacists when they register with the DEA to prescribe and dispense controlled substances."
    B) "Health care providers must have a DEA number in order to prescribe any type of medication for clients."
    C) "DEA numbers are case numbers given when someone breaks the law involving a controlled substance."
    D) "DEA numbers the standardized codes for each drug that is on the market in the United States."

21. A client has been prescribed a new medication but is skeptical to begin taking it after reading about potential risks in an online discussion forum. What is the nurse's **best** response?
    A) "It's excellent that you're investigating your medications. Can I recommend some useful websites for you?"
    B) "Just remember that there is a lot of highly inaccurate information on the internet. A lot of the time it's best to just avoid it."
    C) "How did you find that particular discussion forum?"
    D) "Knowledge is power. The more information you can get about something as important as your health, the better."

22. The nurse is caring for a client who had a severe, acute, previously unseen adverse effect of a drug in phase III testing. The client asks, "After all the testing done on this drug, didn't they know this adverse effect could occur?" What are the appropriate response(s) by the nurse? **Select all that apply.**
    A) "Pharmaceutical companies sometimes underreport problems to make more money."

B) "Your response to this medication will be reviewed very closely to address possible adverse effects."
C) "Adverse effects are studied to determine whether the disease or the drug was the cause."
D) "The pharmaceutical company weighs the benefits of the drug with the severity of adverse effects."
E) "After a drug reaches phase III testing, it is considered an accepted drug and will not be recalled."

23. Before administering a prescription medication, the nurse should confirm what information is on the drug label? **Select all that apply.**
A) brand name
B) generic name
C) drug dosage
D) expiration date
E) adverse effects
F) therapeutic effects

24. Discharge planning for clients leaving the hospital should include instructions on the use of over-the-counter (OTC) drugs. Which comment(s) by the client should prompt the nurse to provide additional health education? **Select all that apply.**
A) "OTC drugs are safe and do not cause adverse effects if taken properly."
B) "OTC drugs have been around for years and have not been tested by the Food and Drug Administration (FDA)."
C) "OTC drugs are different from any drugs available by prescription and cost less."
D) "OTC drugs could cause serious harm if not taken according to directions."
E) "OTC drugs can often be used as a cost-effective substitute for prescribed drugs."

25. A nursing student is preparing to begin a pharmacology course. The student should anticipate what area(s) of study? **Select all that apply.**
A) impact of drugs on the body
B) the body's response to a drug
C) unexpected drug effects
D) chemical pharmacology
E) molecular pharmacology

Test Bank Answer Key
Chapter 1: Introduction to Drugs

1. **B.** Pharmacology is the study of the biologic effects of chemicals. Nurses are involved with clinical pharmacology or pharmacotherapeutics, which is a branch of pharmacology that deals with the uses of drugs to treat, prevent, and diagnose disease. The radiology nurse is administering a drug to help diagnose a disease. The oncology nurse is administering a drug to help treat a disease. Pharmacoeconomics includes any costs involved in drug therapy. Pharmacodynamics involves how a drug affects the body, and pharmacokinetics is how the body acts on the body.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Analyze
   Integrated Process: Nursing Process (Clinical Problem-solving Process)
   Page and Header: 3, Introduction

2. **A.** The goal is that generic medication is bioequivalent (has the same effect on the body) to the brand name medication. Binders used in a generic drug may not be the same as those used in the brand name drug. Therefore, the way the body breaks down and uses the drug may differ, which may eliminate a generic drug substitution. Critical concentration is the amount of a drug that is needed to cause a therapeutic effect and should not differ between generic and brand-name medications. Distribution is the phase of pharmacokinetics, which involves the movement of a drug to the body's tissues and is the same in generic and brand-name drugs. A drug's half-life is the time it takes for the amount of the drug to decrease to half the peak level, which should not change when substituting a generic medication.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Analyze
   Integrated Process: Nursing Process (Clinical Problem-solving Process)
   Page and Header: 14, Generic Drugs

3. **B.** A nurse's drug guide provides nursing implications and client teaching points that are most useful to nurses in addiction to need-to-know drug information in a very user-friendly organizational style. *Lippincott's Pocket Drug Guide* (*LNDG*) for Nurses has drug monographs organized alphabetically and includes nursing implications and client teaching points. Numerous other drug handbooks are also on the market and readily available for nurses to use. Although other drug reference books such as *Drug Facts and Comparisons* and *PDR* can all provide essential drug information, they will not contain nursing information and teaching points. They can also be more difficult to use than nurse's drug guides. A reputable drug guide is a better source than a consumer website.

Format: Multiple Choice
Chapter 1: Introduction to Drugs
Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Apply
Integrated Process: Teaching/Learning
Page and Header: 15, Reference Books

4. **C.** Phase III studies involve the use of a drug in a larger sample of the population. The purpose is to determine the treatment benefit and to monitor side effects that may not have been apparent in earlier studies. Phase I studies involve healthy human volunteers who are usually paid for their participation. Nurses may observe for adverse effects and toxicity. Nurses may be responsible for helping collect and analyze the information to be shared with the Food and Drug Administration (FDA) but would not conduct research independently because nurses do not prescribe medications. The use of animals in drug testing is done in preclinical trials. Select clients who are involved in phase II studies have the disease the drug is intended to treat. These clients are monitored closely for drug action and adverse effects.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Apply
   Integrated Process: Nursing Process (Clinical Problem-solving Process)
   Page and Header: 10, Phase Iii Studies

5. **C.** Negative or unexpected effects are known as adverse or side effects. Teratogenic effects are adverse effects on the fetus and not a likely concern for an older adult. Toxic effects occur when medication is taken in larger than recommended dosages caused by an increase in serum drug levels. Paradoxical effects are drug effects that are the opposite of what is intended.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Apply
   Integrated Process: Teaching/Learning
   Page and Header: 4, Introduction

6. **A.** After the medication is administered, the nurse assesses the client for drug effects, both therapeutic and adverse. The nurse would assess the client for allergies, and preexisting conditions before administering a medication. Assessing for drug effects does not normally necessitate a comprehensive health assessment.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Apply
   Integrated Process: Nursing Process (Clinical Problem-solving Process)
   Page and Header: 4, Introduction

7. **A.** The nurse is responsible for all medications administered and must find a recent reference source to ensure the information learned about the medication is correct and current. Using an older drug guide could be dangerous because it would not contain the most up-to-date information. Asking the pharmacist does not guarantee accurate information will be obtained and could harm the client if the information is wrong.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Apply
   Integrated Process: Nursing Process (Clinical Problem-solving Process)
   Page and Header: 4, Introduction

8. **B.** The nurse is responsible for providing thorough medication teaching about drugs and the drug regimen to ensure the client knows how to take the medication and when to notify the provider. The nurse never provides personal contact information to a client. If adverse effects arise, the client is taught to call the health care provider and should not self-medicate with over-the-counter drugs, which could mask serious symptoms. The nurse never dispenses medication because it must be properly labeled for home use; this is done by the pharmacy.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Apply
   Integrated Process:
   Page and Header: 4, Introduction

9. **A.** The FDA is responsible for controlling and regulating the development and sale of drugs in the United States, allowing new drugs to enter the market only after being subjected to rigorous scientific testing. The DEA regulates and controls the use of controlled substances. The CDC monitors and responds to infectious diseases. The JCAHO is an accrediting body that inspects acute care facilities to ensure minimum standards are met.

   Format: Multiple Choice
   Chapter 1: Introduction to Drugs
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Understand
   Integrated Process: Communication and Documentation
   Page and Header: 9, Drug Evaluation

10. **A.** Phase I drug trials usually involve healthy male volunteers because chemicals may exert an unknown and harmful effect on ova in females, which could result in fetal damage when the female becomes pregnant. Drugs are tested on both males and females, but females must be fully informed of risks and sign a consent stating they understand the potential for birth defects. A 17-year-old would normally be too young to participate.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs

Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Analyze
Integrated Process: Nursing Process (Clinical Problem-solving Process)
Page and Header: 9, Phase I Studies

11. **A.** The nurse needs to learn the rules and regulations in the Nurse Practice Act of the new state they are moving to because regulating of the nurses practice is done by state and they are not all the same. Some are more rigorous than others. Nurses do not memorize a provider's DEA numbers. The DEA is a federal agency that monitors controlled substances in all states. Pregnancy drug categories are standardized nationwide and there is minimal variation on the availability of OTC drugs.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Apply
    Integrated Process: Nursing Process (Clinical Problem-solving Process)
    Page and Header: 13-14, Controlled Substances

12. **B.** DAW stands for "dispense as written" and means that the health care provider does not want a generic substituted for the prescribed medication. This is unrelated to the prescriber's DEA number and there is no "Drug Action Watch Program." The drug is not necessarily associated with a high risk of adverse effects.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Apply
    Integrated Process: Teaching/Learning
    Page and Header: 14, Generic Drugs

13. **A.** When a new drug enters the market, it is given a time-limited patent; generic forms of the medication cannot be produced until the patent expires. Because no generic version of this drug will exist because it is so new, it is impossible to predict what binder will be used or what the cost would be.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Apply
    Integrated Process: Teaching/Learning
    Page and Header: 14, Generic Drugs

14. **A.** OTC drugs are no less a medication than prescription drugs and carry the same types of risks for overdosage and toxicity if directions are not followed. Although increasing the dosage is careless and dangerous, it is important to use the information as a teaching opportunity rather than scolding the client. Agreeing with the clients or asking them if they talked to the health care provider misses the teaching opportunity, which could be harmful for the client.

Format: Multiple Choice
Chapter 1: Introduction to Drugs
Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Apply
Integrated Process: Teaching/Learning
Page and Header: 14, Over-The-Counter Drugs: Over-The-Counter (Otc) Drugs

15. **B.** The *Physicians' Desk Reference* (PDR) is a compilation of information found on package inserts. The *Nurses' Drug Guide* uses more easily understood language and incorporates nursing considerations and client teaching points. *Drug Facts and Comparisons* includes cost comparison, often not found in other drug resource guides. The *AMA Drug Evaluations* is far less biased than the PDR and includes drugs that are still in the research stage of development.

Format: Multiple Choice
Chapter 1: Introduction to Drugs
Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Remember
Integrated Process: Nursing Process (Clinical Problem-solving Process)
Page and Header: 15, Reference Books

16. **A.** Schedule I medications have no medical use and are never prescribed. Schedule II have high misuse potential with severe dependence liability. Schedule III have less misuse potential than schedule II drugs and moderate dependence liability. Schedule IV have less misuse potential than schedule III and limited dependence liability. Schedule V medications have the lowest risk for misuse and are found mostly in antitussives and antidiarrheals, but they are not sold over the counter.

Format: Multiple Choice
Chapter 1: Introduction to Drugs
Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Apply
Integrated Process: Teaching/Learning
Page and Header: 13-14, Controlled Substances

17. **C.** During the preclinical phase of testing, drugs are tested on animals and are not available to clients. In phase I, the drug is tested on volunteers who are usually healthy young males. It is only in phase III studies that the drug is made available to prescribers who agree to closely monitor clients getting the medication.

Format: Multiple Choice
Chapter 1: Introduction to Drugs
Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Apply
Integrated Process: Teaching/Learning
Page and Header: 9, Preclinical Trials

18. **A.** It is important for the nurse to specifically question use of over-the-counter medications because clients may not consider them important. The client is unlikely to know the meaning of "orphan drugs" unless they are a health care provider. Safety during pregnancy, use of a generic medication, or classification of orphan drugs are things the client would be unable to answer but could be found in reference books if the nurse wishes to research them.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Apply
    Integrated Process: Nursing Process (Clinical Problem-solving Process)
    Page and Header: 14, Over-The-Counter Drugs: Over-The-Counter (Otc) Drugs

19. **A.** After completing a pharmacology course, nurses will have general drug information needed for safe and effective medication administration but will need to consult a drug guide for specific drug information before administering any medication. Pharmacology is constantly changing, with new drugs entering the market and new uses for existing drugs identified. Continuing education in pharmacology is essential to safe practice. Nurses tend to become familiar with the medications they administer most often, but there will always be a need to research new drugs and also those the nurse is not familiar with because no nurse knows all medications.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Understand
    Integrated Process: Teaching/Learning
    Page and Header: 4, Introduction

20. **A.** All pharmacists and health care providers must register with the DEA. They are given numbers that are required before they can dispense or prescribe controlled substances. DEA numbers are only needed when prescribing controlled substances. A DEA number is neither a case number nor a drug code.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Understand
    Integrated Process: Teaching/Learning
    Page and Header: 13-14, Controlled Substances

21. **A.** The nurse can promote a therapeutic dialogue by commending the client's efforts and hopefully directing the client to valid and reliable information sources. The nurse must avoid reprimanding the client. The method by which the client found the discussion forum is not important. The nurse should not suggest that any, and all, information is beneficial or equally valid.

    Format: Multiple Choice
    Chapter 1: Introduction to Drugs

Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Apply
Integrated Process: Teaching/Learning
Page and Header: 16, Internet Information

22. **B, C.** Researchers observe clients very closely, monitoring them for any adverse effects. Often, participants are asked to keep journals and record any symptoms they experience. Researchers then evaluate the reported effects to determine whether they are caused by the disease or by the drug. It would be both unprofessional and inaccurate to imply that pharmaceutical companies put profit ahead of client concern because lawsuits would remove any potential profit if a drug proves harmful. The FDA is responsible for weighing risk versus benefit in deciding whether to allow the drug to move to the next phase of testing. Drugs found to have serious adverse effects can be removed from the market at any time.

    Format: Multiple Selection
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Apply
    Integrated Process: Communication and Documentation
    Page and Header: 10, Phase Iii Studies

23. **A, B, C, D.** Prescription drug labels will contain the brand name, generic name, drug dosage, and expiration date. Adverse effects and therapeutic uses will not be listed on drug labels.

    Format: Multiple Selection
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Understand
    Integrated Process: Nursing Process (Clinical Problem-solving Process)
    Page and Header: 15, Drug Labels

24. **A, B, C, E.** It is important to follow package directions because OTCs are medications that can cause serious harm if not taken properly. OTCs are drugs that have been determined to be safe when taken as directed; however, all drugs can produce adverse effects even when taken properly. They may have originally been prescription drugs that were tested by the FDA or they may have been grandfathered in when the FDA laws changed. OTC education should always be included as a part of the hospital discharge instructions. The client should not view OTC drugs as substitutes for prescribed drugs.

    Format: Multiple Selection
    Chapter 1: Introduction to Drugs
    Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
    Cognitive Level: Apply
    Integrated Process: Teaching/Learning
    Page and Header: 14, Over-The-Counter Drugs: Over-The-Counter (Otc) Drugs

25. **A, B, C.** Nurses study pharmacology from a pharmacotherapeutic level, which includes the effect of drugs on the body, the body's response to drugs, and both expected and unexpected drug

effects. Chemical and molecular pharmacology are not included in nursing pharmacology courses.

Format: Multiple Selection
Chapter 1: Introduction to Drugs
Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
Cognitive Level: Understand
Integrated Process: Teaching/Learning
Page and Header: 3-4, Introduction

Test Bank Answer Key
Chapter 2: Pharmacodynamics and Pharmacokinetics

1. **C.** The liver is the most important site of drug metabolism. If the liver is not functioning effectively, as in clients with cirrhosis, drugs will not metabolize normally so that toxic levels could develop unless dosage is reduced. A client with cervical cancer or kidney stones would not be expected to have altered ability to metabolize drugs so long as no liver damage existed. Infections such as urosepsis would not have a direct impact on metabolism.

   Format: Multiple Choice
   Chapter 2: Pharmacodynamics and Pharmacokinetics
   Client Needs: Physiological Integrity: Pharmacological and Parenteral Therapies
   Cognitive Level: Analyze
   Integrated Process: Nursing Process (Clinical Problem-solving Process)
   Page and Header: 26-27, Biotransformation (Metabolism)

2. **D.** The first-pass effect involves drugs that are absorbed from the small intestine directly into the portal venous system, which delivers the drug molecules to the liver. Once in the liver, enzymes break the drug into metabolites, which may become active or may be deactivated and readily excreted from the body. A large percentage of the oral dose is usually destroyed and never reaches tissues. Oral dosages account for the phenomenon to ensure an appropriate amount of the drug in the body to produce a therapeutic action. Passive diffusion is the major process through which drugs are absorbed into the body. Active transport is a process that uses energy to actively move a molecule across a cell membrane and is often involved in drug excretion in the kidney. Glomerular filtration is the passage of water and water-soluble components from the plasma into the renal tubule.

   Format: Multiple Choice