# Holland/Adams/Brice, *Core Concepts in Pharmacology* 4th Edition Test Bank Chapter 3

### Question 1

Type: MCMA

What does the nurse need to determine prior to administering a medication to a client? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. Contraindications for this medication
- 2. What drug is ordered
- 3. The generic and trade name of the medication
- 4. The manufacturer of the medication
- 5. The drug classification

**Correct Answer:** 1, 2, 3, 5

**Rationale 1**: The nurse needs to understand the contraindications for this medication prior to administering to the client.

Rationale 2: The nurse needs to know which drug has been ordered for the client.

**Rationale 3**: The nurse needs to know the name (generic and trade) for the ordered medication. **Rationale 4**: The manufacturer of the medication is incorrect because the active ingredients are the same for all generic medications.

Rationale 5: The nurse needs to know the drug classification for the ordered medication.

**Global Rationale:** Prior to administering a medication the nurse needs to determine the name of the medication (generic and trade), the drug classification, why it is ordered, and the contraindications. The manufacturer of the medication does not need to be determined prior to administration.

Cognitive Level: Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome:** 3-1 Discuss drug administration as a component of safe and effective health care.

**Question 2 Type:** MCSA

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After administering a medication, the nurse notes that the client has itching and a runny nose. What is the nursing priority?

- 1. Document the findings.
- 2. Assess vital signs.
- 3. Notify the charge nurse.
- 4. Monitor the client closely.

### **Correct Answer: 3**

**Rationale 1**: Document the findings is incorrect because on discovering that a client is allergic to a product, it is the nurse's responsibility to first alert the charge nurse and patient's physician. Documentation is next as well as to apply labels to the chart and medication administration record to alert all healthcare personnel of the allergy. The client should be given an agency-approved allergy bracelet, and the pharmacist should also be told.

**Rationale 2**: Assess vital signs is incorrect because vital signs may or may not be assessed in this situation, and it would not be the next action of the nurse.

**Rationale 3**: On discovering that a client is allergic to a product, it is the nurse's responsibility to first alert the charge nurse and patient's physician.

**Rationale 4**: Monitor the client closely is incorrect because in this situation the client is stable; however, the client would be monitored after notifying the charge nurse, physician, pharmacist, and documenting information in the client's medical record.

**Global Rationale:** On discovering that a client is allergic to a product, it is the nurse's responsibility to first alert the charge nurse and patient's physician. Document the findings is incorrect because on discovering that a client is allergic to a product, it is the nurse's responsibility to first alert the charge nurse and patient's physician. Documentation is next as well as to apply labels to the chart and medication administration record to alert all healthcare personnel of the allergy. The client should be given an agency-approved allergy bracelet, and the pharmacist should also be told. Assess vital signs is incorrect because vital signs may or may not be assessed in this situation, and it would not be the next action of the nurse. Monitor the client closely is incorrect because in this situation the client is stable, however, the client would be monitored after notifying the charge nurse, physician, pharmacist and documenting information in the client's medical record.

## Cognitive Level: Applying

Client Need: Safe Effective Care Environment

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome:** 3-1 Discuss drug administration as a component of safe and effective health care.

**Question 3 Type:** MCSA Following administration of a drug to a client, who has the greatest responsibility for monitoring the client for adverse reactions?

- 1. The nurse.
- 2. The nursing assistant.
- 3. The family of the client.
- 4. The physical therapist.

### Correct Answer: 1

**Rationale 1**: The nurse is correct because the nurse is responsible for the care of the client. Other staff members may assist the nurse in obtaining information, but the nurse will need to evaluate the client and report to the physician as necessary.

**Rationale 2**: The nursing assistant is incorrect because the nurse is responsible for the care of the client. The nursing assistant can notify the nurse of any unusual behaviors or new symptoms for the nurse to evaluate.

**Rationale 3**: The family of the client is incorrect because the nurse is responsible for the care of the client. The family can notify the nurse of any unusual behaviors or new symptoms for the nurse to evaluate.

**Rationale 4**: The physical therapist is incorrect because the nurse is responsible for the care of the client. The physical therapist can notify the nurse of any unusual behaviors or new symptoms for the nurse to evaluate.

**Global Rationale:** The nurse is correct because the nurse is responsible for the care of the client. Other staff members may assist the nurse in obtaining information but the nurse will need to evaluate the client and reporting to the physician as necessary. The nursing assistant is incorrect because the nurse is responsible for the care of the client. The nursing assistant can notify the nurse of any unusual behaviors or new symptoms for the nurse to evaluate. The family of the client is incorrect because the nurse is responsible for the care of the client. The family can notify the nurse of any unusual behaviors or new symptoms for the nurse to evaluate. The family can notify the nurse of any unusual behaviors or new symptoms for the nurse to evaluate. The physical therapist is incorrect because the nurse is responsible for the care of the client. The physical therapist can notify the nurse of any unusual behaviors or new symptoms for the nurse to for the care of the client. The physical therapist can notify the nurse of any unusual behaviors or new symptoms for the nurse to evaluate.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-2 Describe the roles and responsibilities of

**Learning Outcome:** 3-2 Describe the roles and responsibilities of nurses, nursing assistants, therapists, and technicians regarding drug administration.

**Question 4** 

## Type: MCMA

The nurse is preparing to administer a medication. Which six rights of drug administration should the nurse assess for prior to administering the prescribed medication? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. Right client
- 2. Right route of administration
- 3. Right dose
- 4. Right time of preparation
- 5. Right documentation

**Correct Answer:** 1, 2

Rationale 1: Right client is one of the six rights of medication administration.

**Rationale 2**: The right route of administration is one of the six rights of medication administration.

**Rationale 3**: Right dose is one of the six rights of medication administration.

Rationale 4: The right time of preparation is not one of the six rights of medication administration. The right time of delivery is one of the six rights of medication administration.Rationale 5: Right documentation is one of the six rights of medication administration.

**Global Rationale:** The six rights are right client, right medication, right dose, right route of administration, right time of delivery, and right documentation. Right time of preparation is not one of the six rights of medication administration.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-3 Explain how the six rights of drug administration affect patient safety.

**Question 5 Type:** MCMA

The nurse is preparing to administer a medication to a client. What are the checks that must occur prior to medication administration? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. Checking the drug after administering it to the patient
- 2. Checking the drug when preparing it, pouring it, taking it out of the unit dose container, or connecting the IV tubing to the bag

- 3. Checking the drug with the medication administration record (MAR) or medication information system when removing it from the medication drawer, refrigerator, or controlled substance locker
- 4. Checking the drug before administering it to the patient
- 5. Checking the drug prior to documenting

## **Correct Answer:** 2, 3, 5

**Rationale 1**: Checking the drug after administering it to the patient is not one of the three checks for drug administration.

**Rationale 2**: Checking the drug when preparing it, pouring it, taking it out of the unit dose container, or connecting the IV tubing to the bag is correct because it is one of the three checks of drug administration.

**Rationale 3**: Checking the drug with the medication administration record (MAR) or medication information system when removing it from the medication drawer, refrigerator, or controlled substance locker is correct because it is one of the three checks of drug administration.

**Rationale 4**: Checking the drug before administering it to the patient is correct because it is one of the three checks of drug administration.

**Rationale 5**: Checking the drug prior to documenting in incorrect because it is not one of the three checks of drug administration.

**Global Rationale:** Checking the drug when preparing it, pouring it, taking it out of the unit dose container, or connecting the IV tubing to the bag is correct because it is one of the three checks of drug administration. Checking the drug with the medication administration record (MAR) or medication information system when removing it from the medication drawer, refrigerator, or controlled substance locker is correct because it is one of the three checks of drug administration. Checking the drug before administering it to the patient is correct because it is one of the three checks of drug administration. Checking the drug administration. Checking the drug administration administering it to the patient is correct because it is one of the three checks of drug administration. Checking the drug administration. Checking the drug after administering it to the patient and check it prior to documenting are not one of the three checks for drug administration.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-3 Explain how the six rights of drug administration affect patient safety.

## Question 6 Type: MCMA

The nurse is speaking with a client regarding current medications. The client states she does not always take the medications as prescribed. What are the potential reasons for this client's

noncompliance? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. Patients sometimes forget doses of medications.
- 2. The drug may be too expensive or may not be approved by the patient's health insurance plan.
- 3. Adverse effects such as headache, dizziness, nausea, diarrhea, or impotence often cause noncompliance.
- 4. The client always takes medications as prescribed.
- 5. The client may not understand the reason for the medication.

**Correct Answer:** 1, 2, 3, 5

**Rationale 1**: Patients sometimes forget doses of medications is one reason a client may not be compliant with medication.

**Rationale 2**: The drug may be too expensive or may not be approved by the patient's health insurance plan is one reason a client may not be compliant with medication.

**Rationale 3**: Adverse effects such as headache, dizziness, nausea, diarrhea, or impotence often cause noncompliance is one reason a client may not be compliant with medication.

**Rationale 4**: The client always takes medications as prescribed is incorrect because clients often do not take medications as orders due to side effects, multiple daily doses, or expense of medication.

**Rationale 5**: When a client does not understand the reason, or importance, of the medication it can lead to noncompliance.

**Global Rationale:** Noncompliance may be caused by forgetting to take a medication, the expense of the drug, adverse effects, or not understanding the importance of taking the drug. Taking the medication as prescribed is not a reason for noncompliance.

Cognitive Level: Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome:** 3-4 Give specific examples of how the healthcare provider can increase patient compliance in taking medications.

## **Question 7 Type:** MCSA

What type of medication order should be given immediately or only once?

- 1. A single order
- 2. An ASAP order
- 3. A prn order
- 4. A STAT order

**Rationale 1**: A single order is incorrect because a single order is for a drug that is to be given only once and at a specific time. An example is a preoperative order.

**Rationale 2**: An ASAP order is incorrect because an ASAP order (as soon as possible) should be available for administration to the patient within 30 minutes of the written order.

**Rationale 3**: A prn order is incorrect because a prn order is administered as required by the patient's condition. The nurse makes the judgment, based on patient assessment, as to when the medication should be administered.

**Rationale 4**: A STAT order refers to a medication that should be given immediately and only once. This order is often used with emergency medications that are needed for life-threatening situations. The physician normally notifies the nurse of any STAT order, so it can be obtained from the pharmacy and administered immediately.

**Global Rationale:** A STAT order refers to a medication that should be given immediately and only once. This order is often used with emergency medications that are needed for life-threatening situations. The physician normally notifies the nurse of any STAT order, so it can be obtained from the pharmacy and administered immediately. A single order is incorrect because a single order is for a drug that is to be given only once and at a specific time. An example is a preoperative order. An ASAP order is incorrect because an ASAP order s (as soon as possible) should be available for administration to the patient within 30 minutes of the written order. (The exact time frame is usually defined by individual facilities). A prn order is incorrect because a prn order is administered as required by the patient's condition. The nurse makes the judgment, based on patient assessment, as to when the medication should be administered.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-5 Interpret abbreviations used in drug administration practices.

## **Question 8 Type:** MCSA

The nurse is caring for a client who has medications ordered to be given PO. The client asks the nurse what PO means. What is the best response by the nurse?

- 1. PO medications are given orally.
- 2. PO medications are given rectally.
- 3. PO medications are given intramuscularly.
- 4. PO medications are given vaginally.

Rationale 1: PO is the medical abbreviation for by mouth (oral).
Rationale 2: Rectal is incorrect because PO is the medical abbreviation for by mouth (oral).
Rationale 3: Intramuscular is incorrect because PO is the medical abbreviation for by mouth (oral). The abbreviation for intramuscular is IM.
Rationale 4: Vaginal is incorrect because PO is the medical abbreviation for by mouth (oral).

**Global Rationale:** PO is the medical abbreviation for by mouth or by the oral route. These meds are not given rectally, intramuscularly, or vaginally.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-5 Interpret abbreviations used in drug administration practices.

### **Question 9 Type:** MCSA

The physician ordered amlodipine (Norvasc) 5mg tab PO bid. How should the nurse administer the medication?

- 1. One tablet orally four times per day.
- 2. One tablet orally three times per day.
- 3. One tablet orally once per day.
- 4. One tablet orally twice per day.

## **Correct Answer:** 4

**Rationale 1**: One tablet orally four times per day is incorrect because bid is the medical abbreviation for twice per day and qid would be the abbreviation for four times per day. The Norvasc has been ordered as one tablet orally twice per day.

**Rationale 2**: One tablet orally three times per day is incorrect because the medical abbreviation for three times per day is tid and the order is for bid, which is twice per day.

**Rationale 3**: One tablet orally once per day is incorrect because once per day would be written as qd and bid is the medical abbreviation for twice per day.

Rationale 4: One tablet orally once per day is the correct interpretation of the physician's order.

**Global Rationale:** One tablet orally once per day is the correct interpretation of the physician's order. One tablet orally four times per day is incorrect because bid is the medical abbreviation for twice per day and qid would be the abbreviation for four times per day. The Norvasc has been ordered as one tablet orally twice per day. One tablet orally three times per day is incorrect because the medical abbreviation for three times per day is tid and the order is for bid which is

twice per day. One tablet orally once per day is incorrect because once per day would be written as qd and bid is the medical abbreviation for twice per day.
Cognitive Level: Applying
Client Need: Physiological Integrity
Client Need Sub:
Nursing/Integrated Concepts: Nursing Process: Implementation
Learning Outcome: 3-5 Interpret abbreviations used in drug administration practices.

### **Question 10 Type:** MCSA

The physician writes an order for a medication to be given SL tid. How should the nurse administer the prescribed medication order to the client?

- 1. Subcutaneous three times per day
- 2. Subcutaneous four times per day
- 3. Sublingual three times per day
- 4. Sublingual four times per day

### **Correct Answer: 3**

Rationale 1: Subcutaneous three times per day is incorrect because sublingual three times per day is the correct interpretation of this order. A medication ordered subcutaneous would be SQ.
Rationale 2: Subcutaneous four times per day is incorrect because sublingual three times per day is the correct interpretation of this order. A medication ordered subcutaneous would be SQ.
Rationale 3: Sublingual three times per day is the correct interpretation of this order.
Rationale 4: Sublingual four times per day is incorrect because sublingual three times per day is the correct interpretation of this order. A medication ordered four times per day is the correct interpretation of this order.

**Global Rationale:** Sublingual three times per day is the correct interpretation of this order. Subcutaneous three times per day is incorrect because sublingual three times per day is the correct interpretation of this order. A medication ordered subcutaneous would be SQ. Subcutaneous four times per day is incorrect because sublingual three times per day is the correct interpretation of this order. A medication ordered subcutaneous would be SQ. Subcutaneous four times per day is incorrect because sublingual three times per day is the correct interpretation of this order. A medication ordered subcutaneous would be SQ. Sublingual four times per day is incorrect because sublingual three times per day is the correct interpretation of this order. A medication ordered four times per day would be qid.

### Cognitive Level: Applying

Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-5 Interpret abbreviations used in drug administration practices. **Question 11 Type:** MCMA

The nurse is reviewing some medication administration orders for her clients. Which drug administration abbreviations are matched correctly with their definitions? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. hs- hour of sleep/bedtime
- 2. ac- after meals; after eating
- 3. prn- when needed/necessary
- 4. qid- three times per day
- 5. pc-before meals

Correct Answer: 1, 3

**Rationale 1**: hs- hour of sleep/bedtime is correctly matched.

Rationale 2: ac- after meals; after eating is incorrect because ac means before meals.

Rationale 3: qid- three times per day is incorrect because qid stands for four times per day.

Rationale 4: pc- before meals is incorrect because pc means after meals.

**Global Rationale:** hs- hour of sleep/bedtime is correctly matched. prn- when needed/necessary is correctly matched. ac- after meals; after eating is incorrect because ac means before meals. qid- three times per day is incorrect because qid stands for four times per day. pc – before meal is incorrect because pc means after meals.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-5 Interpret abbreviations used in drug administration practices.

Question 12 Type: MCMA

Which drug administration abbreviations are matched correctly with their definitions? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. PO- pills only
- 2. gtt- drop

- 3. no-number
- 4. qh- every hour
- 5. qid- three times a day

Correct Answer: 2, 3, 4

Rationale 1: PO- pills only is incorrect because PO stands for by mouth.
Rationale 2: gtt- drop is correctly matched.
Rationale 3: no- number is correctly matched.
Rationale 4: qh- every hour is correctly matched.
Rationale 5: qid- three times a day is incorrect because qid stands for four times a day.

**Global Rationale:** gtt- drop is correctly matched. no- number is correctly matched. qh- every hour is correctly matched. PO- pills only is incorrect because PO stands for by mouth. qid-three times a day is incorrect because qid stands for four times a day.

Cognitive Level: Remembering

Client Need: Physiological Integrity

Client Need Sub:

Nursing/Integrated Concepts: Nursing Process: Implementation

Learning Outcome: 3-5 Interpret abbreviations used in drug administration practices.

**Question 13 Type:** MCSA

The nurse is reviewing orders for a newly admitted client with a student. Which statement by the student indicates that the student understands the meaning of a standing order?

- 1. It is to be given only once and at a specific time.
- 2. It is written in advance of a situation, and should be carried out under specific circumstances.
- 3. It is usually carried out within 2 hours of the time the order is written by the physician, but the exact timing is defined by each facility.
- 4. It is administered as required by the patient's condition.

## **Correct Answer: 2**

**Rationale 1**: It is to be given only once and at a specific time is incorrect because this is the definition of a single order.

**Rationale 2**: A standing order is written in advance of a situation, and should be carried out under specific circumstances.

**Rationale 3**: It is usually carried out within 2 hours of the time the order is written by the physician, but the exact timing is defined by each facility is incorrect because this is the definition of a routine order.

**Rationale 4**: It is administered as required by the patient's condition is incorrect because this is the definition of a prn order.

**Global Rationale:** A standing order is written in advance of a situation, and should be carried out under specific circumstances. It is to be given only once and at a specific time is incorrect because this is the definition of a single order. It is usually carried out within 2 hours of the time the order is written by the physician, but the exact timing is defined by each facility is incorrect because this is the definition of a routine order. It is administered as required by the patient's condition is incorrect because this is the definition of a prn order.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-5 Interpret abbreviations used in drug administration practices.

Question 14 Type: FIB

The medication is ordered as follows: Give 5 ml by mouth four times per day. How many teaspoons will the nurse administer to the client? \_\_\_\_\_ (units) \_\_\_\_\_

Correct Answer: One, Teaspoon

Global Rationale: Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-6 Compare and contrast the three systems of measurement used in pharmacology.

**Question 15 Type:** MCSA

The nurse is recording intake for a client. The nurse must document the client's intake in milliliters. What is the conversion between cups and milliliters?

1. 1 cup equals 15 mL.

- 2. 240 ml or 8 ounces
- 3. One cup equals 30 mL.
- 4. One cup equals 500 mL.

Rationale 1: 15 mL is incorrect because this equals 1 tablespoon.

Rationale 2: One cup equals 240 mL.

Rationale 3: 30 ml is incorrect because this equals 2 tablespoons.

Rationale 4: 500 ml is incorrect because this equals 2 cups.

**Global Rationale:** One cup equals 240 mL. 15 ml is incorrect because this equals 1 tablespoon. 30 ml is incorrect because this equals 2 tablespoons. 500 ml is incorrect because this equals 2 cups.

Cognitive Level: Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome:** 3-6 Compare and contrast the three systems of measurement used in pharmacology.

## Question 16

Type: MCSA

The nurse is weighing an infant during a well-care visit. The nurse weighs the child in kilograms but the client's parents ask what the weight is in pounds and ounces. The nurse calculates the weight based on which conversion?

- 1. One kilogram equals 2.2 pounds.
- 2. One kilogram equals 3.2 pounds.
- 3. One kilogram equals 1.2 pounds.
- 4. One kilogram equals 0.45 pounds.

### Correct Answer: 1

Rationale 1: One kilogram equals 2.2 pounds.

Rationale 2: 3.2 pounds is incorrect because one kilogram equals 2.2 pounds.

Rationale 3: 1.2 pounds is incorrect because one kilogram equals 2.2 pounds.

Rationale 4: 0.45 pounds is incorrect because one kilogram equals 2.2 pounds.

**Global Rationale:** One kilogram is equal to 2.2 pounds. All other answer choices are incorrect conversions.

Cognitive Level: Remembering Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-6 Compare and contrast the three systems of measurement used in pharmacology.

### **Question 17 Type:** MCSA

A client has been prescribed a liquid medication to be taken 15 ml tid. How should the nurse instruct the client to take this medication?

- 1. Carefully measure the medication using any teaspoon and take one teaspoon three times per day.
- 2. Carefully measure the medication using any tablespoon available and take one tablespoon 3 times per day.
- 3. Carefully measure using a medical dosing device and take 15 ml, which equals one tablespoon three times per day.
- 4. Carefully measure using a medical dosing device and take 15 ml, which equals one teaspoon three times per day.

## **Correct Answer: 3**

**Rationale 1**: Carefully measure the medication using any teaspoon and take one teaspoon three times per day is incorrect because the client needs to use an accurate medical dosing device and take 15 ml, which equals one tablespoon three times per day.

**Rationale 2**: Carefully measure the medication using any tablespoon available and take one tablespoon 3 times per day is incorrect because the client needs to use an accurate medical dosing device to measure medication. Eating utensils vary in size.

**Rationale 3**: Carefully measure using a medical dosing device and take 15 ml, which equals one tablespoon three times per day is the correct dosing instructions.

**Rationale 4**: Carefully measure using a medical dosing device and take 15 ml, which equals one teaspoon three times per day is incorrect because 15 ml equals one tablespoon or 3 teaspoons.

**Global Rationale:** Carefully measure using a medical dosing device and take 15 ml which equals one tablespoon three times per day is the correct dosing instructions. Carefully measure the medication using any teaspoon and take one teaspoon three times per day is incorrect because the client needs to use and accurate medical dosing device and take 15 ml which equals one tablespoon three times per day. Carefully measure the medication using any tablespoon available and take one tablespoon 3 times per day is incorrect because the client needs to use an accurate medication. Eating utensils vary in size. Carefully

measure using a medical dosing device and take 15 ml which equals one teaspoon three times per day is incorrect because 15 ml equals one tablespoon or 3 teaspoons.

Cognitive Level: Applying

Client Need: Physiological Integrity

Client Need Sub:

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome:** 3-6 Compare and contrast the three systems of measurement used in pharmacology.

## Question 18

Type: MCSA

A client is being discharged with an order to drink 2400 ml of fluid per day. The client asks the nurse how many cups this equals. Which nursing response is the most appropriate?

- 1. You should drink five 8 ounce glasses of fluid per day.
- 2. You should drink ten 8 ounce glasses of fluid per day.
- 3. You should drink 1 pint of fluid per day.
- 4. You should drink 2 pints of fluid per day.

## **Correct Answer:** 2

**Rationale 1**: You should drink five 8 ounce glasses of fluid per day is incorrect because 8 ounces equals 240 ml and 5 glasses would equal 1200 ml.

**Rationale 2**: You should drink ten 8 ounce glasses of fluid per day is correct because 8 ounces equals 240 ml and ten glasses would equal 2400 ml.

**Rationale 3**: You should drink 1 pint of fluid per day is incorrect because 1 pint equals 2 glasses and each glass equals 240 ml so 1 pint would equal 480 ml.

**Rationale 4**: You should drink 2 pints of fluid per day is incorrect because 2 pints equals 4 glasses and each glass equals 240 ml so 2 pints would equal 960 ml.

**Global Rationale:** You should drink ten 8 ounce glasses of fluid per day is correct because 8 ounces equals 240 ml and ten glasses would equal 2400 ml. You should drink five 8 ounce glasses of fluid per day is incorrect because 8 ounces equals 240 ml and 5 glasses would equal 1200 ml. You should drink 1 pint of fluid per day is incorrect because 1 pint equals 2 glasses and each glass equals 240 ml so 1 pint would equal 480 ml. You should drink 2 pints of fluid per day is incorrect because 2 pints equals 4 glasses and each glass equals 240 ml so 2 pints would equal 960 ml.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation **Learning Outcome:** 3-6 Compare and contrast the three systems of measurement used in pharmacology.

**Question 19 Type:** MCMA

Which routes are appropriate for the nurse to use when administering enteral medications? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. Medications given subcutaneously
- 2. Medications given orally
- 3. Medications given via gastrostomy tubes
- 4. Medications given via nasogastric tube
- 5. Medications given via intravenous tube are not delivered by the enteral route. Medications given intravenously are given via the parenteral route.

## **Correct Answer:** 2, 3, 4

**Rationale 1**: Medications given subcutaneously is incorrect because medications given the enteral route include drugs given orally and those administered through nasogastric (NG) or gastrostomy tubes. Medications given subcutaneously are given via parenteral administration. **Rationale 2**: The enteral route includes drugs given orally and those administered through nasogastric (NG) or gastrostomy tubes.

**Rationale 3**: The enteral route includes drugs given orally and those administered through nasogastric (NG) or gastrostomy tubes.

**Rationale 4**: The enteral route includes drugs given orally and those administered through nasogastric (NG) or gastrostomy tubes.

**Rationale 5**: Medications given via intravenous tube are not administered through the enteral route. Medications given subcutaneously and intravenously are given via the parenteral route.

**Global Rationale:** Medications given orally, via gastrostomy tubes, and via nasogastric tubes are administered through the enteral route. Medications given subcutaneously and intravenously are given via the parenteral route.

Cognitive Level: Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome:** 3-7 Explain the proper methods to administer enteral, topical, and parenteral drugs.

## **Question 20 Type:** MCSA

The nurse is preparing to administer medications to a client by nasogastric (NG) tube. Which type of medication should not be given by this route?

- 1. All medications can be given via NG tube.
- 2. Tablets
- 3. Sustained-release medications
- 4. Liquid medications

## **Correct Answer: 3**

**Rationale 1**: All medications can be given via NG tube is incorrect because drugs administered through these tubes are usually in liquid form. Although solid drugs can be crushed or dissolved, they tend to clog the tubes. Sustained-release drugs should not be crushed and administered through NG or G tubes.

**Rationale 2**: Tablets is incorrect because drugs administered through these tubes are usually in liquid form. Although solid drugs can be crushed or dissolved, they tend to clog the tubes. Sustained-release drugs should not be crushed and administered through NG or G tubes. **Rationale 3**: Sustained-release drugs should not be crushed and administered through NG or G tubes.

**Rationale 4**: Liquid medications is incorrect because drugs administered through these tubes are usually in liquid form. Although solid drugs can be crushed or dissolved, they tend to clog the tubes. Sustained-release drugs should not be crushed and administered through NG or G tubes.

**Global Rationale:** Sustained-release medications should not be crushed or administered through NG or G tubes. Not all medications can be given via NG tube, but crushed tablets and liquids can both be given by NG or G tube.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-7 Explain the proper methods to administer enteral, topical, and parenteral drugs.

**Question 21 Type:** MCSA

The physician orders a medication to be given via the buccal route. What instructions should the nurse provide to the client prior to taking the medication?

1. The tablet should be crushed and given in either pudding or applesauce.

- 2. The tablet is placed in the oral cavity between the gum and the cheek.
- 3. The tablet is placed under the tongue and allowed to dissolve slowly.
- 4. This drug should be applied directly to the skin.

**Rationale 1**: The tablet should be crushed and given in either pudding or applesauce is incorrect because this method of medication administration is often used to help a client who has difficulty swallowing pills. The buccal route would have the nurse place the tablet between the cheek and gum.

**Rationale 2**: A medication that is given via the buccal route would have the tablet, capsule, lozenge, or troche placed in the oral cavity between the gum and the cheek.

**Rationale 3**: The tablet is placed under the tongue and allowed to dissolve slowly is incorrect because this describes the sublingual route.

**Rationale 4**: This drug should be applied directly to the skin is incorrect because this describes a dermatological preparation.

**Global Rationale:** A medication that is given via the buccal route would have the tablet, capsule, lozenge, or troche is placed in the oral cavity between the gum and the cheek. The tablet should be crushed and given in either pudding or applesauce is incorrect because this method of medication administration is often used to help a client who has difficulty swallowing pills. The buccal route would have the nurse place the tablet between the cheek and gum. The tablet is placed under the tongue and allowed to dissolve slowly is incorrect because this describes the sublingual route. This drug should be applied directly to the skin is incorrect because this describes a dermatological preparation.

Cognitive Level: Applying

Client Need: Physiological Integrity

Client Need Sub:

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome:** 3-7 Explain the proper methods to administer enteral, topical, and parenteral drugs.

Question 22 Type: MCMA

The nurse is teaching a client about parenteral medication administration. Which routes of administration should the nurse include in the teaching? (Select all that apply.) Note: Credit will be given only if all correct choices and no incorrect choices are selected.

- 1. Oral
- 2. Intravenous infusion
- 3. Intramuscular injection

- 4. Vaginal
- 5. Sublingual

Rationale 1: Oral is incorrect because this is the enteral route.

**Rationale 2**: Intravenous infusion is given directly into the vein and is the parenteral route. **Rationale 3**: Intramuscular injection is given directly into the muscle and is the parenteral route.

**Rationale 4**: Vaginal is incorrect because this is the topical route.

**Rationale 5**: Sublingual is incorrect because this is administered under the tongue and not through the parenteral route.

**Global Rationale:** Intravenous infusion is given directly into the vein and is the parenteral route. Intramuscular injection is given directly into the muscle and is the pareteral route. Oral is incorrect because this is the enteral route. Vaginal is incorrect because this is the topical route. Sublingual is incorrect because this is administered under the tongue and not through the parenteral route.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-7 Explain the proper methods to administer enteral, topical, and parenteral drugs.

## Question 23

Type: MCSA

The nurse is preparing to administer an IM injection to a client. Which site is not appropriate for an IM injection?

- 1. Ventrogluteal site
- 2. Vastus lateralis site
- 3. Subscapular areas of the upper back
- 4. Deltoid site

## **Correct Answer: 3**

Rationale 1: Ventrogluteal site is an appropriate site for IM injection.

Rationale 2: Vastus lateralis site is an appropriate site for IM injection.

**Rationale 3**: Subscapular areas of the upper back is incorrect because this site is for subcutaneous injections.

**Rationale 4**: Deltoid site is an appropriate site for IM injection.

**Global Rationale:** Subscapular areas of the upper back is incorrect because this site if for subcutaneous injections. Ventrogluteal site, vastus lateralis, and deltoid sites are all appropriate for IM injection.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-7 Explain the proper methods to administer enteral, topical, and parenteral drugs.

Question 24

Type: MCSA

The nurse is preparing a syringe for an intramuscular injection. The nurse plans to administer the injection in the deltoid muscle. What is the maximum amount of medication that the nurse can administer in this site?

- 1. 1 ml
- 2. 4 ml
- 3. 3 ml
- 4. 2 ml

Correct Answer: 1

Rationale 1: The deltoid muscle should receive a maximum of 1 ml.

**Rationale 2**: 4 ml is incorrect because the deltoid muscle should receive a maximum of 1 ml. **Rationale 3**: 3 ml is incorrect because the deltoid muscle should receive a maximum of 1 ml. **Rationale 4**: 2 ml is incorrect because the deltoid muscle should receive a maximum of 1 ml.

**Global Rationale:** The deltoid muscle should receive a maximum of 1 ml. All other volumes are inappropriate for an IM injection to the deltoid muscle.

Cognitive Level: Applying Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-7 Explain the proper methods to administer enteral, topical, and parenteral drugs.

**Question 25 Type:** MCSA What is a disadvantage of administering medication via the subcutaneous or intramuscular route?

- 1. This route allows medications to avoid digestive enzymes.
- 2. This route allows medications to avoid the first-pass effect in the liver.
- 3. This route allows only small volumes to be administered.
- 4. This route can be used in clients who are unable to take medications orally.

### **Correct Answer: 3**

**Rationale 1**: This route allows medications to avoid digestive enzymes is incorrect because this is an advantage for intramuscular or subcutaneous medication administration.

**Rationale 2**: This route allows medications to avoid the first-pass effect in the liver is incorrect because this is an advantage for intramuscular or subcutaneous medication administration. **Rationale 3**: This route allows only small volumes to be administered is a disadvantage of intramuscular or subcutaneous route of administration.

**Rationale 4**: This route can be used in clients who are unable to take medications orally is incorrect because this is an advantage for intramuscular or subcutaneous medication administration.

**Global Rationale:** This route allows only small volumes can be administered is a disadvantage of intramuscular or subcutaneous route of administration. This route allows medications to avoid digestive enzymes is incorrect because this is an advantage for intramuscular or subcutaneous medication administration. This route allows medications to avoid the first-pass effect in the liver is incorrect because this is an advantage for intramuscular or subcutaneous medication. This route can be used in clients who are unable to take medications orally is incorrect because this is an advantage for intramuscular or subcutaneous medication.

Cognitive Level: Remembering Client Need: Physiological Integrity Client Need Sub: Nursing/Integrated Concepts: Nursing Process: Implementation Learning Outcome: 3-8 Compare and contrast the advantages and disadvantages of each route of drug administration.

## **Question 26**

Type: MCSA

Which statement made by the nurse regarding topical medications is the most appropriate when referring to the desired reaction?

1. The desired reaction is absorption of the medication into the circulation.

- 2. The desired reaction is a specified rate of delivery.
- 3. The desired reaction is fewer side effects.
- 4. The desired reaction is systemic absorption through the skin.

**Rationale 1**: Absorption of the medication into the circulation is incorrect because topical drugs intended to produce a local effect are absorbed very slowly and only small amounts reach the general circulation. Topical delivery also produces fewer side effects. Systemic absorption occurs with slow release and absorption into the general circulation to produce a systemic (systemwide) effect. Transdermal patches contain a specific amount of drug with a specific rate of delivery.

**Rationale 2**: A specified rate of delivery is incorrect because topical drugs intended to produce a local effect are absorbed very slowly and only small amounts reach the general circulation. Topical delivery also produces fewer side effects. Systemic absorption occurs with slow release and absorption into the general circulation to produce a systemic (systemwide) effect. Transdermal patches contain a specific amount of drug with a specific rate of delivery.

Rationale 3: Fewer side effects is one of the desired reaction of a topical drug.

**Rationale 4**: Systemic absorption through the skin is incorrect because topical drugs intended to produce a local effect are absorbed very slowly and only small amounts reach the general circulation. Topical delivery also produces fewer side effects. Systemic absorption occurs with slow release and absorption into the general circulation to produce a systemic (systemwide) effect. Transdermal patches contain a specific amount of drug with a specific rate of delivery.

**Global Rationale:** Fewer side effects is one of the desired reaction of a topical drug. Absorption of the medication into the circulation is incorrect because topical drugs intended to produce a local effect are absorbed very slowly and only small amounts reach the general circulation. A specified rate of delivery is incorrect because topical drugs intended to produce a local effect are absorbed very slowly and only small amounts reach the general circulation. Systemic absorption through the skin is incorrect because topical drugs intended to produce a local effect are absorbed very slowly and only small amounts reach the general circulation.

### Cognitive Level: Applying

Client Need: Physiological Integrity

Client Need Sub:

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome:** 3-8 Compare and contrast the advantages and disadvantages of each route of drug administration.

Holland/Adams/Brice, Core Concepts in Pharmacology, 4<sup>th</sup> edition