

Test Bank for Pharmacology Clear and Simple 4th Watkins

Chapter 02

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ____ 1. Which of the following is the process of a substance moving from where it was administered into the bloodstream?
 - a. Absorption
 - b. Distribution
 - c. Excretion
 - d. Metabolism

- ____ 2. Which of the following routes has the quickest absorption into the bloodstream?
 - a. Inhalation
 - b. Oral
 - c. Intravenous
 - d. Intramuscular
 - e. Subcutaneous

- ____ 3. Drugs that cross the blood–brain barrier are called which of the following?
 - a. OTC
 - b. Psychotropic
 - c. Teratogenic
 - d. Controlled
 - e. Prescription

- ____ 4. Which organ(s) metabolize(s) medications?
 - a. Liver
 - b. Kidneys
 - c. Intestines
 - d. Stomach
 - e. Liver, kidneys, and intestines

- ____ 5. The process by which the liver metabolizes drugs to change them is called which of the following?
 - a. Absorption
 - b. Distribution
 - c. Biotransformation
 - d. Excretion
 - e. Cirrhosis

- ____ 6. Which of the following organs excrete(s) drugs?
 - a. Mouth
 - b. Stomach
 - c. Breasts
 - d. Pancreas
 - e. Liver

- ____ 7. Ototoxicity is damage to which of the following?
- a. Liver
 - b. Eye
 - c. Ear
 - d. Pancreas
 - e. Stomach
- ____ 8. A unique reaction to a drug is called which of the following?
- a. Side effect
 - b. Idiosyncrasy
 - c. Ototoxicity
 - d. Teratogen
 - e. Oncogene
- ____ 9. Which of the following refers to not excreting drugs effectively?
- a. Teratogenic
 - b. Oncogenic
 - c. Antagonistic
 - d. Agonistic
 - e. Cumulation
- ____ 10. A drug that is given orally but acts in another area is called which of the following?
- a. Systemic
 - b. Synthetic
 - c. Synergistic
 - d. Toxic
 - e. Efficacious
- ____ 11. Which of the following has an intended action of delayed clotting?
- a. Coumadin
 - b. Ritalin
 - c. Valproic acid
 - d. Lithium
 - e. OxyContin
- ____ 12. Which of the following is not a stage of the drug cycle?
- a. Absorption
 - b. Distribution
 - c. Isolation
 - d. Metabolism
 - e. Excretion

- ____ 13. The rate of medication absorption is affected by which of the following?
- a. Amount of food in the stomach
 - b. Age of the patient
 - c. Concentration of the medication
 - d. pH of the medication
 - e. Amount of food in the stomach, age of the patient, concentration of the medication, and pH of the medication.
- ____ 14. Medications with which pH are more easily absorbed in the stomach?
- a. Acidic
 - b. Alkalotic
 - c. Neutral
 - d. All are absorbed equally
- ____ 15. Drugs that can pass through the blood–placental barrier to harm the fetus include which of the following?
- a. Alcohol
 - b. Cocaine
 - c. Tylenol
 - d. Alcohol and cocaine
- ____ 16. Metabolism is also known as which of the following?
- a. Biotransformation
 - b. Biometabolism
 - c. Breakdown
 - d. Fusion
- ____ 17. Lexiva is a drug given in its inactive form that is activated through metabolism to treat HIV. This type of drug is known as which of the following?
- a. An inactive drug
 - b. A prodrug
 - c. A change drug
 - d. None of the above
- ____ 18. Routes through which medications are excreted from the body include which of the following?
- a. Kidneys
 - b. Lungs
 - c. Bile
 - d. Breast milk
 - e. Kidneys, lungs, bile, and breast milk
- ____ 19. What organ is most commonly responsible for the excretion of medication from the body?
- a. Kidney
 - b. Liver
 - c. Pancreas
 - d. Intestine
- ____ 20. Which organ is affected when a medication is nephrotoxic?
- a. Kidney
 - b. Liver
 - c. Pancreas
 - d. Intestine
- ____ 21. The effect of two medications that is more powerful than if each were taken separately is known as which of the following?
- a. Antagonism
 - b. Synergism
 - c. Adverse reactions
 - d. Building blocks
- ____ 22. The administration route with the least risk of side effects is which of the following?
- a. Systemic
 - b. Transdermal
 - c. Topical
 - d. Systemic, transdermal, and topical

- ____ 23. One symptom of liver damage caused by the effect of medication is which of the following?
- a. Jaundice
 - b. Tremors
 - c. Headaches
 - d. Jaundice, tremors, and headaches
- ____ 24. One way to counteract the gastrointestinal (GI) side effect of diarrhea is to eat which of the following?
- a. Cheese
 - b. Crackers
 - c. Yogurt
 - d. Fiber
- ____ 25. One way to counteract the GI side effect of constipation is to add what to your diet?
- a. Cheese
 - b. Crackers
 - c. Yogurt
 - d. Fiber

Matching

Match the following terms with their definitions.

- a. Blood–placental barrier
 - b. Blood–brain barrier
 - c. Blood–testicular barrier
- ____ 26. Barrier that keeps most medications from reaching the central nervous system
- ____ 27. Barrier that protects the fetus during pregnancy
- ____ 28. Barrier that protects the sperm in males

Match the following terms with their definitions.

- a. Agonist
 - b. Antagonist
 - c. Adverse reaction
 - d. Side effects
 - e. Receptors
- ____ 29. Two drugs taken together that can make a drug less powerful
- ____ 30. Mild reactions to medications, such as nausea and constipation
- ____ 31. Two drugs taken together to make each work more effectively than when taken alone
- ____ 32. Sites where medications bind to create a physiologic effect
- ____ 33. Severe reaction to a medication that may cause a prescriber to change the medication being taken

Match the following drug resources with their definitions.

- a. United States Pharmacopeia/National Formulary (USP/NF)
- b. United States Pharmacopeia/Dispensing Information (USP/DI)
- c. *Physician's Desk Reference*
- d. Drug handbook
- e. Medication package insert

- ____ 34. A user-friendly resource that indicates how to administer medications as well as appropriate dose, indications, contraindications, and patient education items
- ____ 35. A comprehensive resource divided into six sections, including a full color product identification guide
- ____ 36. A resource printed by the federal government every 5 years that is the official source of medication information for drugs approved by the Food and Drug Administration (FDA)
- ____ 37. The written information that accompanies every medication from the manufacturer
- ____ 38. A resource printed by the federal government every 5 years that is composed of two volumes: one for the prescriber and one for the layperson

Chapter 02

Answer Section

MULTIPLE CHOICE

1. ANS: A

Rationale: Absorption is the process by which a substance moves from the site where it was administered into the bloodstream.

PTS: 1 DIF: Easy TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Drug cycle

2. ANS: C

Rationale: Intravenous medications are absorbed into the bloodstream most quickly because they are injected directly into the bloodstream.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

3. ANS: B

Rationale: Psychotropic medications are those that can cross the blood–brain barrier and are known as mind-altering drugs.

PTS: 1 DIF: Basic TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

4. ANS: E

Rationale: In the phase following distribution, drugs are metabolized by the liver, kidneys, and intestines.

PTS: 1 DIF: Basic TOP: Unit I: Introduction to Pharmacology
KEY: Pharmacology

5. ANS: C

Rationale: Biotransformation, which is also known as metabolism, is the process by which a medication is gradually transformed into a less active or inactive form of the drug.

PTS: 1 DIF: Basic TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

6. ANS: C

Rationale: The breasts excrete drug metabolites through breast milk.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

7. ANS: C

Rationale: Ototoxicity refers to the risk of damage to a patient's hearing that is posed by a medication.

PTS: 1 DIF: Basic TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

8. ANS: B

Rationale: Idiosyncrasy refers to a reaction or side effect that is unique and uncommon.

PTS: 1 DIF: Basic TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

9. ANS: E

Rationale: Cumulation refers to waste products (including less active forms of medication) not being effectively excreted from the body and building up, potentially making the patient very ill.

PTS: 1 DIF: Basic TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

10. ANS: A

Rationale: Systemic medications are those that affect multiple body systems, not just the system in which they were administered. Such medications are taken by mouth or administered intravenously or intramuscularly and circulate throughout the body and its systems.

PTS: 1 DIF: Basic TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

11. ANS: A

Rationale: Coumadin is a medication that decreases clotting to avoid the formation of undesirable blood clots.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology

12. ANS: C

Rationale: The four stages of the drug cycle are absorption, distribution, metabolism, and excretion.

PTS: 1 DIF: Easy TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Drug cycle

13. ANS: E

Rationale: Many things affect the rate of medication absorption, including large amounts of food in the stomach, which slows absorption of systemic medications; medication concentration because the higher the concentration of a medication the easier it is absorbed; the patient's age because the skin of young and old patients absorbs more medication than the skin of a healthy adult; and pH values because medications with low pH values are easily absorbed in the stomach, whereas those with higher pH values are less likely to be absorbed effectively.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Absorption | Drug cycle

14. ANS: A

Rationale: Medications with a low pH (acidic) are easily absorbed in the stomach, whereas those with a higher pH (alkalotic) are less likely to be absorbed effectively.

PTS: 1 DIF: Easy TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Absorption | Drug Cycle

15. ANS: D

Rationale: Teratogenic medications that can cross the blood-placental barrier include alcohol, cocaine, and some over-the-counter drugs and can cause harm to the fetus.

PTS: 1 DIF: Easy TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology | Blood-placental barrier

16. ANS: A

Rationale: Metabolism also known as biotransformation and means that the medication is gradually transformed to a different form.

PTS: 1 DIF: Easy TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology | Drug cycle | Metabolism

17. ANS: B

Rationale: This type of medication is known as a prodrug. The drug is administered in an inactive form and becomes active through the process of metabolism. It is this metabolite that provides the desired treatment.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology | metabolism | HIV

18. ANS: E

Rationale: Although the kidneys are the main organs of excretion, smaller amounts of metabolites can be excreted through the lungs, bile, and breast milk.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology | excretion

19. ANS: A

Rationale: The kidney is the main organ responsible for the excretion of medication metabolites.

PTS: 1 DIF: Easy TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology | Excretion

20. ANS: A

Rationale: Nephrotoxic refers to a medication that has a known risk of effects that are toxic to the kidneys.

PTS: 1 DIF: Easy TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology

21. ANS: B

Rationale: Synergism refers to the effect of a drug combination that is more powerful than if each drug had been taken separately.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology | Synergism

22. ANS: C

Rationale: Topical medications have fewer side effects than systemic and transdermal medications because they do not enter the bloodstream and stay at the administration site.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology

KEY: Pharmacology | Side effects

23. ANS: A

Rationale: Jaundice is one of the major symptoms of liver damage. Early damage is detected by the presence of elevated liver enzymes in the blood prior to this symptom.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Liver

24. ANS: C

Rationale: Yogurt is recommended for preventing the diarrhea that accompanies certain medications, such as antibiotics.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Side effects

25. ANS: D

Rationale: Increasing fiber in the diet is recommended to prevent constipation caused by certain medications, such as narcotics and diuretics.

PTS: 1 DIF: Intermediate TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Side effects

MATCHING

26. ANS: B PTS: 1 DIF: Intermediate
TOP: Unit I: Introduction to Pharmacology
KEY: Pharmacology | Side effects | Psychotropic

27. ANS: A PTS: 1 DIF: Intermediate
TOP: Unit I: Introduction to Pharmacology
KEY: Pharmacology | Side effects | Teratogenic

28. ANS: C PTS: 1 DIF: Intermediate
TOP: Unit I: Introduction to Pharmacology
KEY: Pharmacology | Side effects

29. ANS: B PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Side effects

30. ANS: D PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Side effects

31. ANS: A PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Side effects

32. ANS: E PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Side effects

33. ANS: C PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Side effects

34. ANS: D PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Drug resources

35. ANS: C PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Drug resources

36. ANS: A PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Drug resources

37. ANS: E PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Drug resources

38. ANS: B PTS: 1 DIF: Intermediate
TOP: Unit 1: Introduction to Pharmacology
KEY: Pharmacology | Drug resources