

1. A woman has been prescribed paroxetine hydrochloride, which is an antidepressant agent administered in pill form. The medication is administered for her obsessive-compulsive disorder. This medication will produce which of the following effects?

- A) Curative
- B) Systemic
- C) Local
- D) Parenteral

2. A patient has been prescribed an antibiotic. This medication is a naturally occurring substance that has been chemically modified. What is another name for this type of medication?

- A) Synthetic drug
- B) Semisynthetic drug
- C) Biotechnology drug
- D) Prototype drug

3. A patient is administered morphine. Morphine is a prototypical drug that can be classified in different ways. Which of the following classifications applies to morphine?

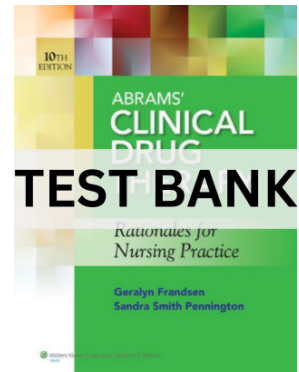
- A) Central nervous system depressant
- B) Central nervous system stimulant
- C) Anti-inflammatory
- D) Antihypertensive

4. A patient is administered amoxicillin (Amoxil). The generic name of this medication indicates that it belongs to which drug group?

- A) Selective serotonin reuptake inhibitors
- B) Diuretics
- C) Penicillins
- D) ACE inhibitors

5. The administration of diphenhydramine (Benadryl), which is an over-the-counter medication, is regulated by which government agency?

- A) Public Health Service
- B) Federal Trade Commission
- C) Occupational Safety and Health Administration
- D) Food and Drug Administration



6. The administration of anabolic steroids is regulated by which of the following laws?
 - A) The Food, Drug, and Cosmetic Act of 1938
 - B) The Comprehensive Drug Abuse Prevention and Control Act
 - C) The Harrison Narcotic Act
 - D) The Shirley Amendment

7. A nurse is responsible for maintaining an accurate count and record of the controlled substances on the nursing unit. This nursing action is regulated by which of the following laws or agencies?
 - A) Food, Drug, and Cosmetic Act of 1938
 - B) Public Health Service
 - C) Drug Enforcement Administration
 - D) Shirley Amendment

8. In Phase I clinical trials, the potential uses and effects of a new drug are determined by which of the following methods?
 - A) Administering doses to healthy volunteers
 - B) Administering doses to people with the disease
 - C) Administering in placebo-controlled design
 - D) Calculating the risk-to-benefit ratio

9. A new medication for the treatment of Alzheimer's disease is being administered to a group of subjects with the disease. The subjects receiving this medication are unaware of whether they are being administered the medication or whether they are receiving a placebo. This testing occurs in which phase of the drug approval process?
 - A) Phase I
 - B) Phase II
 - C) Phase III
 - D) Phase IV

10. Which organization is responsible for approving new drugs in the United States?
 - A) American Medical Association
 - B) American Pharmaceutical Association
 - C) Food and Drug Administration
 - D) United States Pharmacopeia

11. Which of the following reference books provides information from the drug manufacturers' inserts?
 - A) *American Formulary Service*
 - B) *Drug Facts and Comparisons*
 - C) *Physicians' Desk Reference*
 - D) *Lippincott's Nursing Drug Guide*

12. A nursing student in a pharmacology class should be encouraged to study the medications according to which categorization?
- A) Prototype
 - B) Controlled substance
 - C) Drug use
 - D) Generic names
13. A patient with a long-standing dermatological health problem has been advised to use a drug with a local effect. The nurse should recognize what characteristic of this drug?
- A) It affects only the organ system in which it is metabolized.
 - B) The drug requires application at multiple sites.
 - C) It is effective only as long as it is in contact with skin.
 - D) The drug acts primarily at the site where it is applied.
14. A patient with an autoimmune disorder has just been prescribed a synthetic drug. Which of the following characteristics is a noted advantage of synthetic drugs?
- A) Synthetic drugs are less likely to cause an allergic reaction than naturally occurring substances.
 - B) Synthetic drugs typically require less frequent dosing than naturally occurring substances.
 - C) Synthetic drugs are normally available on an over-the-counter basis.
 - D) Synthetic drugs are available in a wider variety of administration routes than naturally occurring substances.
15. A patient is confused about her care provider's advice and has stated to the nurse, "I wasn't sure whether he recommended Tylenol or whether he recommended acetaminophen." The nurse should include which of the following information in an explanation of generic and trade names?
- A) Prescribers should refer solely to generic names in their recommendations and written prescriptions.
 - B) A generic name is independent of any particular drug manufacturer.
 - C) Generic names change frequently, but trade names are more consistent.
 - D) Prescribers should refer solely to trade names in their recommendations and written prescriptions.
16. A nurse is aware that American drug laws have a long and complex history, with numerous jurisdictions being involved. What is the primary purpose of drug laws in the United States?
- A) To ensure maximum choice for consumers
 - B) To expedite the workload of care providers
 - C) To protect the safety of the public
 - D) To enhance the efficient delivery of health care

17. A nurse who provides care on a postsurgical unit frequently administers Schedule II drugs to patients. Which of the following aspects of administering these drugs falls under the auspices of the Drug Enforcement Agency?
- A) Performing a thorough patient assessment prior to administration
 - B) Recording each dose administration on an agency narcotic sheet
 - C) Informing patients of the potential risks and benefits of Schedule II drugs prior to the first dose
 - D) Assessing the patient shortly after administration to ensure therapeutic effect
18. Trials of a new drug are scheduled to soon begin and the testing methodology will integrate the stipulations of the National Institutes of Health (NIH) Revitalization Act. According to this act, the manufacturer must
- A) independently fund the entire testing process.
 - B) make the results of the testing process publicly available.
 - C) include women and minorities in the testing process.
 - D) exclude any potential for financial gain during the testing process.
19. A hospital nurse is vigilant in ensuring the safe use of medications and consistently applies the rights of medication administration. Which of the following is one of the traditional rights of medication administration?
- A) Right to refuse
 - B) Right route
 - C) Right education
 - D) Right evaluation
20. A patient's current medication administration record includes a drug that the nurse recognizes as an Institute for Safe Medication Practices (ISMP) high-alert medication. This designation signals the nurse to what characteristic of the drug?
- A) It can only be administered by a physician or advanced practice nurse.
 - B) Administration must be cosigned by a second registered nurse or practical/vocational nurse.
 - C) It is currently undergoing Phase IV testing and is pending full FDA approval.
 - D) Administration errors carry a heightened risk of causing significant patient harm.

Answer Key

1. B
2. B
3. A
4. C
5. D
6. B
7. C
8. A
9. C
10. C
11. C
12. A
13. D
14. A
15. B
16. C
17. B
18. C
19. B
20. D

1. Which cellular structure stores hormones and other substances and packages these substances into secretory granules?
 - A) Golgi apparatus
 - B) Endoplasmic reticulum
 - C) Mitochondria
 - D) Lysosome

2. A patient is suffering from a cough associated with an upper respiratory infection. Which oral medication will likely produce the most therapeutic effect?
 - A) A tablet
 - B) An expectorant
 - C) A topical spray
 - D) A timed-release tablet

3. A patient is administered an oral contraceptive. Which of the following is the process that occurs between the time the drug enters the body and the time that it enters the bloodstream?
 - A) Absorption
 - B) Distribution
 - C) Metabolism
 - D) Excretion

4. Which of the following sites of drug absorption is considered to have an exceptionally large surface area for drug absorption?
 - A) Rectum
 - B) Fundus of the stomach
 - C) Esophagus
 - D) Lungs

5. A nurse is aware of the importance of adhering to the intended route of a medication. Which of the following drugs are formulated to be absorbed through the skin?
 - A) Amoxicillin, tetracycline, and penicillin
 - B) Clonidine, fentanyl, and nitroglycerin
 - C) Digoxin, lidocaine, and propranolol
 - D) Insulin, heparin, and morphine

6. An 85-year-old patient has an elevated serum creatinine level, indicating impaired kidney function. When the patient is administered a medication, this patient is at risk for which of the following medication-related effects?
 - A) Toxicity
 - B) Increased absorption
 - C) Delayed gastric emptying
 - D) Idiosyncratic effects

7. Protein binding is an important aspect of pharmacokinetics. Protein binding ultimately has which of the following effects on drug action?
 - A) Increases the drug's speed of action
 - B) Decreases the drug's speed of action
 - C) Increases the rate of excretion
 - D) Averts adverse effects

8. A patient is taking a medication that is metabolized by the CYP enzymes. Which of the following medications inhibits several of the CYP enzymes?
 - A) Cisplatin
 - B) Acebutolol hydrochloride
 - C) Cimetidine
 - D) Dicloxacillin sodium

9. A nurse is aware that the dosing scheduling of a patient's new medication takes into account the serum half-life of the drug. What is the serum half-life of a medication?
 - A) The time required for IV medications to penetrate the brain tissue
 - B) The time needed for the serum level to fall by 50%
 - C) The safest margin to prevent toxicity
 - D) The dose adjustment that reduces the risk of adverse effects by one half

10. A patient has increased intracranial pressure and is ordered to receive a diuretic. Which of the following diuretics does not act on receptor sites to produce diuresis?
 - A) Furosemide (Lasix)
 - B) Hydrochlorothiazide (HCTZ)
 - C) Spironolactone (Aldactone)
 - D) Mannitol (Osmitrol)

11. A patient older than 65 years is more likely to experience drug reaction than a much younger patient. Which of the following factors accounts for this variation?
 - A) Drugs more readily crossing the blood–brain barrier in older people
 - B) Age-related physiologic changes
 - C) Increased drug-metabolizing enzymes in older people
 - D) Diminished immune response

12. A patient who is 6 feet tall and weighs 280 pounds will require which of the following doses?
 - A) Higher dose than a patient who weighs 180 pounds
 - B) Lower dose than a patient who weighs 180 pounds
 - C) Same dose as a patient who weighs 180 pounds
 - D) A parenteral rather than oral dose

13. A nurse has provided an oral dose of morphine, an opioid agonist, to a woman in early labor. The nurse should be aware of what characteristic of agonists?
 - A) Agonists alter the normal processes of distribution and metabolism.
 - B) Agonists counteract the action of specific neurotransmitters.
 - C) Agonists block the action of specific neurotransmitters.
 - D) Agonists bind to receptors and cause a physiological effect.

14. A nurse is preparing to simultaneously administer two drugs to a patient. The nurse knows that the drugs have been ordered to be given together because of their synergistic effect. This means that
 - A) the adverse effects of one of the drugs are nullified by the other drug.
 - B) the combined effects are greater than the effects of either one of the drugs alone.
 - C) one of the drugs enhances metabolism, while the other drug enhances either distribution or absorption.
 - D) both drugs are toxic in isolation but therapeutic when administered together.

15. A patient has been brought to the emergency department by ambulance, and his friend states that he has overdosed on methadone, a long-acting opioid. The care team is preparing to administer the appropriate antidote, naloxone, which has a shorter half-life than methadone. What are the implications of this aspect of pharmacokinetics?
 - A) Repeated doses of naloxone will likely be necessary.
 - B) A different antidote will be required after the serum level of naloxone decreases.
 - C) An increased dose of naloxone will be required.
 - D) The antidote is unlikely to have a therapeutic effect on the patient's symptoms.