Fulcher: Pharmacology, 3rd Edition

Chapter 02: Basics of Pharmacology

Test Bank

MULTIPLE CHOICE

1. Component(s) of medications include all of the following EXCEPT
a. active chemical ingredient
b. inactive medicinal ingredient
c. inert ingredients
d. flavorings
e. preservatives

ANS: B REF: 22

2. Drugs may be found from all of the following sources EXCEPT
a. plants
b. minerals
c. gene splicing
d. gums
e. air

ANS: E REF: 23

3. Factors concerning drug absorption that are important in patient teaching are
a. maintaining the proper acidity of the stomach for absorption
b. whether food is present in the stomach or not
c. formula and milk products with the infant and small child
d. all of the above
e. a and b

ANS: D REF: 25-27

4. Factors concerned with percutaneous absorption include the
a. length of time the medication is in contact with the skin
b. moisture level of the skin
c. depth of respirations
d. blood supply to the area
e. all of the above

ANS: E REF: 25-26

5. The amount of drug circulating in the body is called the drug's
a. half-life

b. distribution rate
c. blood level
d. accumulation point

ANS: C REF: 27

6. Drug distribution is affected by
a. the blood-brain barrier
b. the lipid solubility of the drug
c. the protein binding of the drug
d. placental barriers
e. all of the above

ANS: E REF: 27

7. Metabolism is
a. also called biotransformation where the drug is detoxified
b. a series of reactions to chemically change the medication
c. necessary to prevent eventual harm to the person
d. all of the above
e. a and c

ANS: D REF: 27

8. Which of the following is NOT necessary in patient teaching concerning the excretion of medications?
a. Exercise has no effect on the excretion of medications.
b. Increased fluid intake assists with the excretion of drugs.
c. A poor diet slows the excretion of medications.
d. Laxatives may increase the excretion of medications.
e. Pregnant and nursing mothers should discuss any medications, including OTC drugs, with their physician before taking.

ANS: A REF: 27

9. Which of the following are considered the major drug actions?
a. depression, stimulation, irritation, demulcence
b. depression, stimulation, demulcence
c. depression, stimulation, irritation
d. depression and stimulation
e. stimulation

ANS: A REF: 29

10. Absorption rates of oral medications from fastest to slowest are
a. liquids, capsules, coated tablets, tablets

b. capsules, tablets, suspensions, liquids
c. liquids, capsules, suspensions, tablets
d. liquids, suspensions, capsules, tablets

ANS: D REF: 25

11. All of the following are true about pharmacotherapeutics EXCEPT drugs are used to
a. cure a disease
b. diagnose a disease
c. prevent diseases
d. always produce the desired effects
e. decrease symptoms of diseases

ANS: D REF: 29

12. Adverse reactions should be charted in
a. red ink
b. black ink
c. an obvious place on the patient record
d. a and c
e. b and c

ANS: D REF: 30

13. Drug interactions may occur in the form of _____ interactions.
a. drug-drug
b. nutrient-drug
c. disease drug
d. a and c
e. a, b, and c

ANS: E REF: 32

14. Which of the following statements are true about medications?
1. Drugs are aids in maintaining the highest degree of homeostasis following a decline in optimal body function.
2. Drugs are dangerous when used unwisely and with unnecessary dependence.
3. Drugs may cause irreversible harm if used unwisely.
4. Mental states of the patient do not influence the use of medications.

a. 1, 2, 4
b. 1, 3, 4
c. 2, 3, 4
d. 1, 2, 3

ANS: D REF: 22

TRUE/FALSE

1. A drug is a chemical that is used for therapeutic application.

ANS: T REF: 29

2. The solubility of a drug has nothing to do with the rate of its absorption.

ANS: T REF: 29

3. The amount of blood flow to an area is important in drug absorption.

ANS: T REF: 29

4. Substances that are lipid soluble are slowly absorbed by the patient.

ANS: F REF: 29

5. Food may serve as a buffer for medications that tend to irritate the stomach.

ANS: T REF: 29

6. Drugs may have selective distribution to only certain organs.

ANS: T REF: 29

7. The speed of metabolism is not considered when prescribing medications.

ANS: F REF: 29

8. The half-life of a drug is the time needed for half of the drug to be inactivated by the body.

ANS: T REF: 29

9. Drugs will usually affect only one body tissue or target organ.

ANS: F REF: 29

10. Anaphylaxis is a possible allergic response with any medication and may be fatal.

ANS: T REF: 29

11. The pH in the stomach affects the solubility absorption of a medication.

ANS: T REF: 29

12. A drug can be distributed throughout the body prior to entering the bloodstream.

ANS: F REF: 30

13. Inhalation is one of the most rapid forms of medication administration and absorption.

ANS: T REF: 30

14. Initial doses of medication may be increased to assist with a more rapid and therapeutic effect of the drug.

ANS: T REF: 30

15. Lipid soluble medications are more rapidly absorbed into and excreted from the body.

ANS: F REF: 30

16. Side effects of medications are reasons for not prescribing medications for all medical conditions.

ANS: F REF: 30

17. Adverse reactions to medications may be harmful and must always be evaluated to maintain patient safety with medication administration.

ANS: T REF: 32

18. Drugs have no single action but are prescribed for a desired effect or expected action.

ANS: T REF: 32

19. Recombinant DNA technology uses artificially manipulated DNA segments for transfer from a cell of one species to a host cell of the same species.

ANS: F REF: 32

20. All medications should be taken on an empty stomach.

ANS: F REF: 32

21. A free or unbound drug is the amount of the medication that has not attached to a receptor site.

ANS: T REF: 32

22. A drug half-life is the time needed for the body to metabolize half the drug.

ANS: F REF: 32

23. Nutrient-drug interactions will prevent the absorption of medications so patient education on these interactions, especially with grapefruit, is important.

ANS: T REF: 32

MATCHING

Match the following terms with their descriptions below. (Terms will be used more than once.)
a. usage
b. indications

1. Manifestations of illnesses that present signs and symptoms for medication use

2. Prescribing and practicing application of medication for a given purpose

3. Prescribing diuretics for blood pressure and edema

4. Taking ibuprofen for arthritis-type pain

1. ANS: B REF: 32

2. ANS: A REF: 32

3. ANS: B REF: 32

4. ANS: A REF: 22-23

Match the following terms with their descriptions below. (Some terms will be used more than once.)
a. therapeutic
b. diagnostic
c. destructive
d. pharmacodynamic
e. prophylactic

5. Prevents illness or disease from occurring

6. Used to help in patient examination or to find the nature or extent of a condition

7. Alters body function in some way

8. Relieves symptoms, fights illness, reverses disease processes

9. Used to destroy bacteria or cells

10. Agents used for normal growth and body function, including regulation of metabolism

11. Germicides, antiseptics, and immunizing agents

5. ANS: E REF: 22-23

6. ANS: B REF: 22-23

7. ANS: D REF: 22-23

8. ANS: A REF: 22-23

9. ANS: C REF: 22

10. ANS: A REF: 23

11. ANS: C REF: 23

Match the following terms with their descriptions below.
a. replacement
b. supplemental
c. maintenance
d. supportive
e. palliative

12. Prescribed to maintain homeostasis

13. Use of hormones for homeostasis, such as thyroid extracts and estrogens in menopause

14. Medications to keep the body in homeostasis with chronic conditions or with surgical removal of organs

15. Drugs prescribed to avoid deficiencies or to reinforce body chemicals

16. Drugs that reduce the severity of a condition but do not provide a cure

12. ANS: D REF: 23

13. ANS: A REF: 23

14. ANS: C REF: 22

15. ANS: B REF: 22

16. ANS: E REF: 33

Match the following terms with their descriptions below.
a. agonists
b. antagonists
c. chelators
d. local action
e. systemic action

17. Medications that have a site of action throughout the body and not at the site of administration

18. Drugs that stimulate the receptor site and work with the body to mimic its function

19. Drugs that are used to treat metal poisoning

20. Drugs that work at the place of administration

21. Drugs that attach strongly and do not produce a chemical reaction but prevent other drugs from attaching to the receptor site

17. ANS: E REF: 33

18. ANS: A REF: 33

19. ANS: C REF: 33

20. ANS: D REF: 33

21. ANS: B REF: 22

Match the following terms with their descriptions below.
a. synergism
b. potentiation
c. antagonism
d. drug idiosyncrasies
e. cumulative effect

22. Two or more drugs that cancel or decrease the effects of each

23. Two or more drugs that work together to increase the effects of another or make a stronger effect

24. The inability of the body to metabolize or excrete a drug dose before another dose is given

25. A drug that multiplies the effects or prolongs the effects of another

26. An unexpected response to a medication

22. ANS: C REF: 23

23. ANS: A REF: 23

24. ANS: E REF: 28

25. ANS: B REF: 30

26. ANS: D REF: 35

Match the following terms with their descriptions below.
a. ideal drug
b. safe drug
c. recombinant DNA technology
d. synthetic drugs
e. alkaloids

27. Genetic engineering used to produce drugs

28. A drug that causes no harmful effects

29. A drug that has all of the qualities of effectiveness and safety

30. Organic compounds that are alkaline in nature and combined with acids to make salts

31. Drugs produced by chemists from living or nonliving materials

27. ANS: C REF: 25

28. ANS: B REF: 25

29. ANS: A REF: 26

30. ANS: E REF: 26

31. ANS: D REF: 27

Match the following terms with their descriptions below.
a. pharmacognosy
b. pharmacokinetics
c. pharmacotherapeutics
d. pharmacodynamics
e. toxicology
f. clinical pharmacology
g. therapeutics

32. The action of drugs on the body

33. The effects of drugs on the body

34. The origin of drugs

35. The poisonous effects of drugs on the body

36. How drugs are processed by the body

37. Use of drugs to diagnose, prevent, and treat diseases or to prevent pregnancy

38. Study of drugs in humans

32. ANS: D REF: 27

33. ANS: C REF: 27

34. ANS: A REF: 27

35. ANS: E REF: 31

36. ANS: B REF: 25-26

37. ANS: G REF: 27

38. ANS: F REF: 26

Match the following terms with their descriptions below.
a. synergism
b. cumulation
c. summation
d. antagonism
e. tolerance

39. Accumulation of a drug in the body because a new dose is given before the excretion of the previous dose

40. Adding one drug to another with the effects of both being the same as if given separately

41. The lessened effect of a drug that has been taken for a prolonged period of time

42. Adding two drugs together to potentiate their individual effects

43. Giving two drugs together to decrease the effects of one of the medications

39. ANS: B REF: 27

40. ANS: C REF: 26

41. ANS: E REF: 28

42. ANS: A REF: 30

43. ANS: D REF: 28

Match the following terms with their descriptions below.
a. desired effect
b. side effect
c. adverse reaction
d. toxicity
e. allergic reaction

44. An unintended, undesirable, and unpredictable effect

45. The expected response to a drug

46. The level above which the desired therapeutic dose has been reached and poisonous effects occur

47. A mild but annoying response to a drug

48. Hypersensitivity to a medication

44. ANS: C REF: 35

45. ANS: A REF: 33

46. ANS: D REF: 27

47. ANS: B REF: 27

48. ANS: E REF: 33