Pharmacology An Introduction 8th edition Hitner Test Bank

SKU: 9781260021820-TEST-BANK

Pharmacology An Introduction 8th Edition by Hitner CH01

ANSWERS ARE LOCATED IN THE SECOND PART OF THIS DOCUMENT

MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.

1) What is the main source of new drugs today?

A) Plants
B) Bacteria
C) Chemical synthesis
D) Enzyme synthesis
E) Animals

Question Details
Learning Outcome : 01.01
Bloom's : Understand
Difficulty : 1 Easy
null : Question Type: CMA
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a Identify drug classification, usual dose, side effects, and contraindications of the top

2) Toxicology is best defined as the study of the:

A) processes of drug absorption, distribution, metabolism, and excretion.
B) use of drugs in treating disease.
C) harmful effects of drugs on living tissue.
D) preparation and administration of medicines.
E) amount of drug that is required to produce therapeutic effects.

Question Details
Learning Outcome : 01.01
Difficulty : 1 Easy
null : Question Type: CMA
Bloom's : Remember
CAAHEP : I.C.11.d. Identify the classifications of medications including adverse reactions
ABHES : 3.a. Define and use entire basic structure of medical words and be able to accurately identif

3) Identify an accurate statement about the side effects of drugs.

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A) Side effects are more of a nuisance than they are harmful.
B) The side effects of a drug, though undesirable, play a direct role in alleviating the symptoms of a disease.
C) Side effects often result in severe damage to vital organs such as the kidneys or liver.
D) The consequences of side effects can be extremely harmful and life-threatening.
E) The instant a patient starts experiencing the side effects of a drug, he or she must discontinue the use of the drug immediately.

Question Details
Bloom's : Understand
null : Question Type: CMA
Learning Outcome : 01.02
Difficulty : 2 Medium
CAAHEP : I.C.11.c. Identify the classifications of medications including side effects
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

4) Nadine takes a daily dose of Benadryl for her seasonal allergies. While this drug helps alleviate the symptoms of her allergy, it also makes her feel drowsy. In this case, the drowsiness that Nadine experiences would be considered a(n):

A) adverse effect.
B) side effect.
C) beneficial effect.
D) toxic effect.
E) therapeutic effect.

Question Details
Bloom's : Understand
null : Question Type: CMA
Learning Outcome : 01.02
Difficulty : 2 Medium
CAAHEP : I.C.11.c. Identify the classifications of medications including side effects
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

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5) Esmeralda, a 75-year-old diabetic patient, is admitted to the hospital after experiencing persistent nausea and abdominal pain. After conducting a series of medical tests, Dr. Robert discovers that Esmerelda's liver is damaged. Esmeralda's medical reports reveal that she has been taking an antidiabetic drug called Troglitazone on a regular basis. Dr. Robert attributes Esmeralda's liver damage to the prolonged usage of this drug. If Dr. Robert is right, then what type of effect has the drug Troglitazone produced in Esmerelda?

A) Side effect
B) Adverse effect
C) Therapeutic effect
D) Allergic effect
E) Beneficial effect

Question Details
null : Question Type: CMA
Learning Outcome : 01.02
Bloom's : Apply
ABHES : 6.a Identify drug classification, usual dose, side effects, and contraindications of the top
Difficulty : 3 Hard
CAAHEP : I.C.11.d. Identify the classifications of medications including adverse reactions

6) In order for the Food and Drug Administration (FDA) to approve the use of a drug, the drug must:

A) be safe and effective.
B) not cause idiosyncratic responses.
C) be safe at any dose.
D) have a low therapeutic index.
E) be able to treat more than one condition.

Question Details
Bloom's : Understand
Difficulty : 1 Easy
null : Question Type: CMA
Learning Outcome : 01.05
ABHES : 6.e Comply with federal, state, and local health laws and regulations
CAAHEP : I.C.11.b. Identify the classifications of medications including desired effects

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7) Duloxetine hydrochloride is an example of a drug's:

A) trade name.
B) generic name.
C) brand name.
D) trade name.
E) proprietary name.

Question Details
Difficulty : 1 Easy
null : Question Type: CMA
Learning Outcome : 01.06
Bloom's : Apply
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

8) Which of the following is *not* a dose-dependent adverse drug effect?

A) Kidney damage
B) Drug allergy
C) Persistent diarrhea
D) Drug poisoning
E) Confusion

Question Details
Difficulty : 1 Easy
null : Question Type: CMA
Bloom's : Remember
Learning Outcome : 01.05
CAAHEP : I.C.11.d. Identify the classifications of medications including adverse reactions
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

9) _____ is an example of an "over-the-counter" drug.

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A) Heroin
B) Morphine
C) Codeine
D) Aspirin
E) Secobarbital

Question Details
Difficulty : 1 Easy
null : Question Type: CMA
Bloom's : Remember
Learning Outcome : 01.06
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a Identify drug classification, usual dose, side effects, and contraindications of the top

10) What does the term pharmacodynamics mean?

A) It refers to the study of how drugs are used to treat disease.
B) It refers to the study of the action of drugs on living tissue.
C) It refers to the study of the harmful effects of drugs on living tissue.
D) It refers to the study of the amount of a drug that is needed to produce beneficial effects.

Question Details
Learning Outcome : 01.01
Bloom's : Remember
Difficulty : 1 Easy
null : Question Type: RMA
ABHES : 3.a. Define and use entire basic structure of medical words and be able to accurately identif
ABHES : 3.b. Build and dissect medical terms from roots/suffixes to understand the word element combi
CAAHEP : V.C.10. Define medical terms and abbreviations related to all body systems

11) Kai's doctor has prescribed a certain antibiotic for his sore throat. The drug makes Kai feel nauseous when he takes it on an empty stomach. Kai's nausea would be considered a(n):

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A) adverse effect.
B) side effect.
C) therapeutic effect.
D) toxic effect.

Question Details
null : Question Type: RMA
Learning Outcome : 01.02
Bloom's : Understand
Difficulty : 2 Medium
CAAHEP : I.C.11

12) A drug's mechanism of action is best defined as:

A) the method through which the drug is eliminated from the body.
B) the way two drugs compete with each other in the body.
C) the way the drug works within the body.
D) the method in which the drug is administered.

Question Details
Bloom's : Remember
null : Question Type: RMA
Difficulty : 2 Medium
Learning Outcome : 01.03
ABHES : 6.a
CAAHEP : I.C.12

13) Dr. Calvin is giving a lecture on antihistamine drugs. Dr. Calvin states that antihistamine drugs are structurally very similar to histamine molecules. Therefore, when they are administered into the body, they compete with histamine molecules for specific binding sites on the surface of cells. When antihistamine drug molecules bind themselves to the histamine receptor sites, they prevent histamine molecules from binding to their receptor sites, thereby eliminating their drug action. Based on Dr. Calvin's explanation, we can conclude that antihistamine drugs show the behavior of _____.

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A) inducers
B) modulators
C) agonists
D) antagonists

Question Details
null : Question Type: RMA
Learning Outcome : 01.03
ABHES : 6.a
Bloom's : Apply
CAAHEP : I.C.12
Difficulty : 3 Hard

14) What is the ceiling effect of a drug?

A) It is the tendency of a drug to produce a greater response with an increase in dosage.
B) It is the phenomenon that occurs when an inactive drug brings about an improvement in a patient's condition when the patient is made to believe that the drug works.
C) It is the point beyond which a drug will not show any further increase in effect with an increase in dosage.
D) It is the point below which a decrease in drug dosage will lead to a simultaneous increase in drug response.

Question Details
null : Question Type: RMA
Bloom's : Understand
Difficulty : 2 Medium
Learning Outcome : 01.04
ABHES : 6.a
CAAHEP : I.C.11

15) Which of the following statements is true about time-plasma drug concentration curves?

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A) They are used to show the percentage of a human or animal population that responds to a specific drug dosage.

B) They are typically used to evaluate drug response among different drugs.

C) They are often used to compare the potency of similar drugs.

D) They give an estimate of the length of time that a drug continues to produce its effect.

Question Details
Bloom's : Understand
Difficulty : 2 Medium
Learning Outcome : 01.04
ABHES : 6.a
CAAHEP : I.C.12

16) The effective dose 50 (ED50) and the lethal dose 50 (LD50) of drug X are 100 mg and 1000 mg respectively. The ED50 and the LD50 of drug Y are 50 mg and 250 mg respectively. Identify an accurate statement based on the information provided.

A) The therapeutic index of drug X is 5.

B) The therapeutic index of drug Y is 10.

C) Drug Y is twice as potent as drug X.

D) Drug Y is safer than drug X.

Question Details
ABHES : 6.b
null : Question Type: RMA
Learning Outcome : 01.04
CAAHEP : I.C.12
Difficulty : 3 Hard
Bloom's : Analyze

17) The therapeutic indexes of drugs A, B, C, and D are 2, 10, 5, and 4 respectively. Which of the following is the safest medication to use of the four drugs listed?

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A) Drug A
B) Drug B
C) Drug C
D) Drug D

Question Details
ABHES : 6.b
null : Question Type: RMA
CAAHEP : I.C.12
Difficulty : 3 Hard
Bloom's : Analyze
Learning Outcome : 01.05

18) N-acetyl-p-aminophenol is an example of a drug's:

A) trade name.
B) generic name.
C) brand name.
D) chemical name.

Question Details
Difficulty : 1 Easy
null : Question Type: RMA
ABHES : 6.a
Learning Outcome : 01.06
Bloom's : Apply
CAAHEP : I.C.11

19) Identify an accurate statement about schedule II drugs.

A) These drugs have accepted medical use.
B) These drugs are prohibited from being sold as they are not legal.
C) These drugs have a very low potential for abuse.
D) These drugs can be sold or bought without a prescription.

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Question Details
null : Question Type: RMA
Bloom's : Understand
Difficulty : 2 Medium
ABHES : 6.a
CAAHEP : I.C.11
Learning Outcome : 01.07

20) Pharmacokinetics is the area of pharmacology that deals with the study of:

A) the processes of drug absorption, distribution, metabolism, and excretion.
B) the action of drugs on living tissue.
C) the use of drugs in treating disease.
D) the harmful effects of drugs on living tissue.

Question Details
Learning Outcome : 01.01
Difficulty : 1 Easy
Bloom's : Remember
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

21) Which of the following is an example of a drug derived from a plant?

A) Insulin
B) Digitalis
C) Cephalosporin
D) Estradiol

Question Details
Learning Outcome : 01.01
Difficulty : 1 Easy
Bloom's : Remember
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

22) Today, new drugs are mainly derived from:

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A) chemical synthesis.
B) animals.
C) plants.
D) enzymatic synthesis.

Question Details
Learning Outcome : 01.01
Difficulty : 1 Easy
Bloom's : Remember
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

23) Which of the following statements is true of toxicity?

A) Toxic effects refer to those effects triggered by drugs that are undesirable but not harmful.
B) The toxic effects of a drug can be life-threatening.
C) The toxic effects of a drug can be controlled by increasing the dosage of the drug.
D) Patients are often advised to tolerate the toxicity of a drug in order to benefit from the drug's therapeutic actions.

Question Details
Learning Outcome : 01.02
Bloom's : Understand
Difficulty : 2 Medium
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

24) Which of the following statements is true of a drug?

A) The effects produced by a drug are always desirable.
B) The properties of a drug do not influence the effects it produces.
C) A drug does not produce more than one effect.
D) A pure drug is a chemical compound with a specific chemical structure.

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Question Details
Learning Outcome : 01.02
Bloom's : Understand
Difficulty : 2 Medium
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

25) Maria visits Dr. John's clinic for a medical consultation. After learning that Maria has been experiencing a severe case of cold and cough, Dr. John conducts a thorough physical examination and prescribes a cough syrup and cetirizine tablets for her symptoms. A few days later, Maria calls Dr. John and informs him that the medication has been making her feel drowsy. How is Dr. John most likely to respond?

A) He will ask Maria to start taking a different dosage of cetirizine.
B) He will advise Maria to bear with the effects of the medication in order to benefit from its therapeutic actions.
C) He will advise Maria to stop taking the tablets immediately and to visit his clinic for another examination.
D) He will ask Maria to stop taking the drug and immediately rush to her house to administer an antidote.

Question Details
Learning Outcome : 01.02
Difficulty : 3 Hard
Bloom's : Analyze
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top
CAAHEP : I.C.11.c. Identify the classifications of medications including side effects

26) Examples of common adverse effects include all of the following *except:*

A) persistent diarrhea.
B) vomiting.
C) confusion.
D) anaphylaxis.

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Question Details
Difficulty : 1 Easy
Learning Outcome : 01.02
Bloom's : Understand
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t
CAAHEP : I.C.11.d. Identify the classifications of medications including adverse reactions

27) Drugs that bind to specific receptors and produce a drug action are called _____.

A) repressors
B) antagonists
C) agonists
D) modulators

Question Details
Difficulty : 1 Easy
Bloom's : Remember
Learning Outcome : 01.03
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

28) A group of interns at Wingsdale Hospital are watching Dr. Gerald and his team perform a surgery. During the surgery, Dr. Gerald resuscitates his patient from cardiac arrest by giving her an intravenous injection of epinephrine. As soon as the patient's condition improves, Dr. Gerald explains to his interns that when epinephrine binds to the beta receptors of the heart, it triggers an increase in heart rate and blood pressure. Based on the information provided in this scenario, we can conclude that epinephrine is acting as a(n):

A) antagonist.
B) modulator.
C) agonist.
D) partial antagonist.

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Question Details
Learning Outcome : 01.03
Bloom's : Apply
Difficulty : 3 Hard
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t
CAAHEP : I.C.11.b. Identify the classifications of medications including desired effects

29) Identify a difference between agonists and antagonists.

A) Agonists bind to specific receptors to trigger a drug action, while antagonists bind to specific receptors to block a drug action.
B) Agonists bind to receptors and prevent them from being activated, while antagonists bind to receptors to activate them.
C) Agonists bind to a specific receptor site in the body, while antagonists can bind to any receptor site in the body.
D) A typical example of an agonist is naloxone, while a typical example of an antagonist is morphine.

Question Details
Learning Outcome : 01.03
Difficulty : 3 Hard
Bloom's : Analyze
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

30) During a pharmaceutical class, Dr. Patrick explains how a certain class of antipsychotic drugs prevents dopamine from producing its effects by blocking specific membrane receptors for dopamine. As a result, dopamine cannot stimulate its receptors to trigger certain cellular functions, and its effects are no longer experienced. After the discussion, Dr. Patrick asks his students to describe the action of the antipsychotic drugs. Which of the following responses from his students is the most accurate?

A) The antipsychotic drugs act as agonists.
B) The antipsychotic drugs act as antagonists.
C) The antipsychotic drugs act as modulators.
D) The antipsychotic drugs act as inducers.

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Question Details
Learning Outcome : 01.03
Bloom's : Apply
Difficulty : 3 Hard
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

31) Competitive antagonism occurs when:

A) two agonists compete for the same receptor.
B) an agonist and an antagonist compete for the same receptor.
C) an antagonist directly inactivates an agonist.
D) an antagonist cancels out the effect of an agonist by binding to a unique receptor.

Question Details
Learning Outcome : 01.03
Difficulty : 3 Hard
Bloom's : Analyze
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

32) James, a health care professional, states that the drug morphine is an agonist. Which of the following supports his statement?

A) Morphine binds to specific receptor sites in the body and triggers a series of cellular changes.
B) Morphine is immediately absorbed by the cells of the body and metabolized.
C) Morphine binds to specific receptor sites in the body and inhibits certain cellular functions.
D) Morphine binds to specific sites in the body and signals surrounding drug molecules to the area.

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Question Details
Learning Outcome : 01.03
Difficulty : 3 Hard
Bloom's : Analyze
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

33) Mrs. Breaux, a patient at St. Anthony's Hospital, almost became comatose after receiving an overdose of morphine. In order to reverse this effect, the doctor ordered the administration of naloxone, which served as a(n):

A) partial agonist.
B) agonist.
C) modulator.
D) antagonist.

Question Details
Learning Outcome : 01.03
Difficulty : 2 Medium
Bloom's : Apply
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

34) Identify an accurate statement about the dose-response relationship.

A) A drug response is inversely proportional to the dose.
B) The magnitude of a drug response decreases with an increase in its dose.
C) Drugs that continue to show an increase in drug response with an increase in dosage have a ceiling effect.
D) Above a certain dosage no further increase in effect is observed.

Question Details
Bloom's : Understand
Difficulty : 2 Medium
Learning Outcome : 01.04
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

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35) _____ is a measure of the strength, or concentration, of a drug required to produce a specific effect.

A) Toxicity
B) Affinity
C) Potency
D) Bioavailability

Question Details
Difficulty : 1 Easy
Bloom's : Remember
Learning Outcome : 01.04
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 3.a. Define and use entire basic structure of medical words and be able to accurately identif

36) The phenomenon that occurs upon taking additional doses of acetaminophen for pain when a 100 percent response has been attained is called the _____.

A) ceiling effect
B) placebo effect
C) first-pass effect
D) Purkinje effect

Question Details
Difficulty : 2 Medium
Bloom's : Apply
Learning Outcome : 01.04
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

37) Which of the following values can be derived from a drug-response curve and used to compare the potency of drugs that produce the same response?

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A) Infusion rate
B) Half-life
C) Effective dose 50
D) Drug clearance

Question Details
Difficulty : 2 Medium
Bloom's : Apply
Learning Outcome : 01.04
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

38) Consider a graded dose-response curve plotted for a drug. Toward which direction would the dose-response curve shift if the curve were plotted for a more potent drug?

A) Up
B) Down
C) Left
D) Right

Question Details
Difficulty : 2 Medium
Learning Outcome : 01.04
Bloom's : Analyze
ABHES : 6.b. Demonstrate accurate occupational math and metric conversions for proper medication admi
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
CAAHEP : II.C.6.a. Analyze healthcare results as reported in graphs

39) What type of curve should be used for representing data when a proper dosing frequency is being determined?

A) A time-response curve
B) A scatter plot
C) A graded dose-response curve
D) A quantal dose-response curve

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Question Details
Learning Outcome : 01.04
Difficulty : 3 Hard
Bloom's : Analyze
ABHES : 6.b. Demonstrate accurate occupational math and metric conversions for proper medication admi
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
CAAHEP : II.C.6.a. Analyze healthcare results as reported in graphs

40) David is analyzing the drug-response relationships of two different drugs, drug A and drug B. Drug A and drug B belong to the same class of drugs. During his study, David discovers that drug A produces the ceiling effect at a much lower dosage than drug B. What does this imply?

A) Drug B is more potent than drug A.
B) Drug A is more potent than drug B.
C) The effective dose 50 (ED50) of drug B is lower than the ED50 of drug A.
D) Drug dosage and drug response are independent of each other.

Question Details
Bloom's : Apply
Learning Outcome : 01.04
Difficulty : 3 Hard
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

41) What will be the effect of taking two aspirin tablets instead of one?

A) The analgesic effect of the drug will decrease.
B) The analgesic effect of the drug will increase.
C) There will be no change in the analgesic effect of the drug.
D) The drug will result in adverse toxic effects.

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Question Details
Learning Outcome : 01.04
Difficulty : 3 Hard
Bloom's : Analyze
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top
CAAHEP : I.P.4.c. Verify the rules of medication administration right dose

42) Which of the following would *not* be considered an adverse effect of taking an oral antibiotic?

A) Extravasation
B) Diarrhea
C) Nausea
D) Vomiting

Question Details
Difficulty : 1 Easy
Bloom's : Understand
Learning Outcome : 01.05
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

43) The lethal dose 50 of a drug is 2500 mg, and the effective dose 50 of the drug is 250 mg. The therapeutic index of the drug will be _____.

A) 10
B) 0.1
C) 25
D) 2.5

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Question Details
Learning Outcome : 01.05
Difficulty : 2 Medium
Bloom's : Apply
ABHES : 6.b. Demonstrate accurate occupational math and metric conversions for proper medication admi
CAAHEP : I.P.4.c. Verify the rules of medication administration right dose
CAAHEP : II.C.2. Apply mathematical computations to solve equations

44) The therapeutic index of drug A is 10, and its effective dose 50 (ED50) is 200 mg. What is the lethal dose 50 (LD50) of drug A?

A) 20 mg
B) 2000 mg
C) 100 mg
D) 400 mg

Question Details
Learning Outcome : 01.05
Difficulty : 3 Hard
Bloom's : Analyze
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t
CAAHEP : I.P.4.c. Verify the rules of medication administration right dose
CAAHEP : II.C.2. Apply mathematical computations to solve equations

45) Three medications have the following therapeutic index values: 2, 4, and 0.5. Which medication is the safest?

A) The medication with the therapeutic index value of 0.5
B) The medication with the therapeutic index value of 2
C) The medication with the therapeutic index value of 4
D) None of these medications

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Question Details
Learning Outcome : 01.05
Difficulty : 3 Hard
Bloom's : Analyze
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t
CAAHEP : I.P.4.c. Verify the rules of medication administration right dose
CAAHEP : I.P.4.b. Verify the rules of medication administration right medication

46) Which of the following would *not* be considered a dose-dependent adverse effect of a drug?

A) Nausea
B) Liver damage
C) Kidney damage
D) Idiosyncrasy

Question Details
Learning Outcome : 01.05
Difficulty : 3 Hard
Bloom's : Analyze
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

47) Drugs, such as thalidomide, that produce birth defects are known as _____.

A) mutagens
B) carcinogens
C) teratogens
D) allergens

Question Details
Difficulty : 1 Easy
Bloom's : Remember
Learning Outcome : 01.05
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t
CAAHEP : I.C.11.d. Identify the classifications of medications including adverse reactions

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48) Which of the following statements is true of drug nomenclature?

A) The nonproprietary name of a drug is usually a contraction of its chemical name.
B) The proprietary name of a drug is more commonly referred to as the generic name.
C) A drug can have several different generic names.
D) The name under which a drug is marketed is known as its nonproprietary name.

Question Details
Learning Outcome : 01.06
Bloom's : Understand
Difficulty : 2 Medium
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

49) The nonproprietary name of a medication is more commonly known as its _____.

A) trade name
B) generic name
C) chemical name
D) brand name

Question Details
Difficulty : 1 Easy
Bloom's : Remember
Learning Outcome : 01.06
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

50) Orion laboratories, a pharmaceutical manufacturing company, manufactures the drug cetirizine and markets the tablets under the name "Alzer." In this case, cetirizine is the _____ name of the drug.

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A) proprietary
B) generic
C) trade
D) brand

Question Details
Learning Outcome : 01.06
Difficulty : 2 Medium
Bloom's : Apply
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.a. Identify drug classification, usual dose, side effects, and contraindications of the top

51) Which of the following is a drug information service that is updated on a monthly basis with the most current drug information?

A) *The Physicians' Desk Reference*
B) *Drug Facts and Comparisons*
C) *The United States Pharmacopeia/National Formulary*
D) *Drug Information—American Hospital Formulary Service*

Question Details
Difficulty : 1 Easy
Bloom's : Understand
Learning Outcome : 01.07
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t

52) Which of the following statements is true of the *United States Pharmacopeia/National Formulary (USP/NF)*?

A) It is updated once in every six months.
B) It is primarily used by physicians and nurses for information relating to the use of drugs in the practice of medicine.
C) It is primarily used by drug manufacturers to ensure that drug production adheres to official government standards.
D) It provides the most current drug information on a regular basis.

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Question Details
CAAHEP : I.C.12. Identify quality assurance practices in healthcare
Bloom's : Understand
Learning Outcome : 01.07
Difficulty : 2 Medium
CAAHEP : I.C.11.a. Identify the classifications of medications including indications for use
ABHES : 6.e. Comply with federal, state, and local health laws and regulations

53) The _____ of 1970 was designed to regulate the dispensing of drugs that have the potential to be misused.

A) Federal Food Drug and Cosmetic Act
B) Federal Pure Food and Drug Act
C) Federal Comprehensive Drug Abuse Prevention and Control Act
D) Regulated Health Professions Act

Question Details
Difficulty : 1 Easy
Bloom's : Remember
CAAHEP : I.C.12. Identify quality assurance practices in healthcare
Learning Outcome : 01.07
ABHES : 6.e. Comply with federal, state, and local health laws and regulations
ABHES : 6.c.3 Comply with legal aspects of creating prescriptions, including federal and state laws

54) In the context of the drug schedules defined in the Federal Comprehensive Drug Abuse Prevention and Control Act, identify an accurate statement about schedule I drugs.

A) These drugs are prescribed by physicians for a narrow range of medical conditions.
B) These drugs have a high potential for abuse and no accepted medical use.
C) This category of drugs includes narcotics such as morphine and pure codeine.
D) These drugs have a very low potential for abuse and are widely used in medical treatment.

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Pharmacology An Introduction 8th Edition by Hitner CH01

Question Details
CAAHEP : I.C.12. Identify quality assurance practices in healthcare
Bloom's : Understand
Learning Outcome : 01.07
Difficulty : 2 Medium
ABHES : 6.d. Properly utilize Drug Facts and Comparisons, drug handbooks, and other drug references t
ABHES : 6.c.3 Comply with legal aspects of creating prescriptions, including federal and state laws

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Pharmacology An Introduction 8th Edition by Hitner CH01

Answer Key

Test name: CH01

1) C
Despite the many examples of drugs obtained from plants and living organisms, the main source of new drugs today is from chemical synthesis. Also, many of the drugs that once were obtained from plants and animals are now chemically synthesized in pharmaceutical laboratories.

2) C
Toxicology is best defined as the study of the harmful effects of drugs on living tissue.

3) A
Many side effects are more of a nuisance than they are harmful. The dry mouth and sedation caused by some antihistamine drugs is an example.

4) B
The drowsiness caused by the drug Benadryl is a side effect because it may be a nuisance, but it is not harmful to Nadine. It is important to understand the differences between side effects, which do not harm patients, and adverse effects and toxic effects, which do harm patients. Most drugs will cause all three effects in patients, depending on the dose administered.

5) B
The drug Troglitazone has produced an adverse effect in Esmeralda's body. Adverse effects are effects that may be harmful (persistent diarrhea, vomiting, or central nervous system [CNS] disturbances such as confusion) or that with prolonged treatment may cause conditions that affect the function of vital organs such as the liver or kidney.

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6) A
According to the FDA, every drug must fulfill two major requirements before it can be approved for use in humans: efficacy (proof of effectiveness) and safety. All drugs will produce toxic and adverse effects if taken in excessive amounts. The therapeutic index helps determine the relative safety of a drug.

7) B
As chemicals, all drugs have chemical names, which tend to be longer and more difficult to remember than generic (nonproprietary) or trade (brand) names. The brand name or trade name for duloxetine hydrochloride is Cymbalta.
8) B
A few adverse effects are not dose dependent. These effects, such as drug idiosyncrasy and drug allergy, are determined by individual variation.
9) D
Aspirin is an example of an "over-the-counter" drug. Nonprescription drugs, usually referred to as “over-the-counter” (OTC) drugs (such as aspirin, antacids, cold remedies), can be purchased anywhere and do not require the services of a physician or pharmacist.
10) B
Pharmacodynamics refers to the study of the action of drugs on living tissue. It is one of the areas of study in the broad field of pharmacology.
11) B
The nausea caused by the antibiotic is a side effect. This is because the effect produced by the drug is more of a nuisance than it is harmful. It is important to understand the differences between side effects, which do not harm patients, and effects that do harm patients, known as adverse effects and toxic effects. Most drugs will cause all three effects in patients, depending on the dose that is administered.

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12) C
The mechanism of action is the way a drug produces its effects, or works, within the body. It is important for health care providers to understand how a drug works in order to prescribe the correct drug for a patient.
13) D
According to the explanation, the antihistamine drug molecules behave like antagonists. Antagonists are also known as blocking drugs. Usually, antagonists bind to a specific receptor to displace or prevent an agonist drug or body substance from activating that receptor.
14) C
The ceiling effect reflects the limit of some drug classes to produce a particular effect. Above a certain dosage no further increase in effect is observed. Doses above those needed to produce the ceiling effect usually cause other undesired, often toxic, drug effects.

15) D
A time-plasma drug concentration curve or a time-response curve reflects the duration of action. Duration of action is the length of time that a drug continues to produce its effect.
16) C
The ED50 can be used to compare the potency of drugs that produce the same response. In this scenario, the ED50 of drug X is 100 mg while the ED50 of drug Y is 50 mg. Therefore, drug Y is twice as potent as drug X. Twice the concentration of drug Y is needed to produce the same response as drug X.
17) B
In this example, drug B is the safest medication to use of the four drugs listed because a therapeutic index of 10 indicates that ten times as much drug is needed to produce a lethal effect in 50 percent of the animals as is needed to produce the therapeutic effect in 50 percent of the animals.

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18) D
As chemicals, all drugs have chemical names, which tend to be longer and more difficult to remember than generic (nonproprietary) or trade (brand) names. The generic name for N-acetyl-p-aminophenol is acetaminophen; an example of a trade name for this drug is Tylenol.

19) A
Schedule II drugs refer to those drugs with high abuse potential and accepted medical use.
20) A
Pharmacokinetics is the area of pharmacology that deals with the study of the processes of drug absorption, distribution, metabolism, and excretion.
21) B
Examples of drugs derived from plants that are still widely used today include the analgesics morphine and codeine, which were obtained from the poppy plant *(Papver somniferum)*; the heart drug digitalis, which was obtained from the purple foxglove *(Digitalis purpurea)*; and the antimalarial drug quinine, which was obtained from the bark of the cinchona tree.
22) A
Despite the many examples of drugs obtained from plants and living organisms, the main source of new drugs today is from chemical synthesis.
23) B
Toxic effects, or toxicity, implies drug poisoning, the consequences of which can be extremely harmful and may be life-threatening.
24) D
Every pure drug is a chemical compound with a specific chemical structure.
25) B

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In this case, Maria is most likely experiencing the side effects of the drug. Many side effects are more of a nuisance than they are harmful. Dr. John will advise Maria to bear with the side effects of the medication in order to benefit from its therapeutic actions.

26) D

Adverse effects are also undesired effects, but these are effects that may be harmful (persistent diarrhea, vomiting, or central nervous system disturbances such as confusion) or that with prolonged treatment may cause conditions that affect the function of vital organs such as the liver or kidney.

27) C

Drugs that bind to specific receptors and produce a drug action are called agonists.

28) C

Based on the information provided in this scenario, we can conclude that epinephrine is acting as an agonist. Drugs that bind to specific receptors and produce a drug action are called agonists.

29) A

Drugs that bind to specific receptors and produce a drug action are called agonists. Drugs that bind to specific receptors and block agonist drug action or cellular functions are called antagonists.

30) B

In this case, the antipsychotic drugs are behaving like antagonists. Drugs that bind to specific receptors and block agonist drug action or cellular functions are called antagonists.

31) B

When both agonist and antagonist drugs bind to the same receptor and are administered together, they compete with each other for the same receptor site. This effect is known as competitive antagonism.

32) A

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Morphine is an example of an agonist. Drugs that bind to specific receptors and produce a drug action are called agonists.

33) D

Naloxone, a morphine antagonist, is administered to prevent, or antagonize, the effects of morphine in cases of morphine overdose. Usually, antagonists bind to a specific receptor to displace or prevent an agonist drug or body substance from activating that receptor.

34) D

Above a certain dosage no further increase in effect is observed. Doses above those needed to produce the ceiling effect usually cause other undesired, often toxic, drug effects.

35) C

Potency is a measure of the strength, or concentration, of a drug required to produce a specific effect.

36) A

The ceiling effect reflects the limit of some drug classes to produce a particular effect. Above a certain dosage no further increase in effect is observed.

37) C

The effective dose 50 (ED50) can be derived from a drug-response curve and used to compare the potency of drugs that produce the same response.

38) C

Consider the ED50 of drug A as 10 mg and of drug B as 20 mg. Therefore, drug A is twice as potent as drug B. When a graded dose-response curve is plotted, the curve shifts to the left for the more potent medication.

39) A

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The relationship of time and the plasma drug concentration is known as the time-plasma drug concentration curve or time-response curve since it reflects the duration of action. Time-plasma drug concentration curves are used for predicting the frequency with which a drug must be administered in order to maintain an effective drug response.

40) B

In this case, drug A is more potent than drug B. Drugs within a drug class that are more potent than other drugs in the same class will produce the ceiling effect at a lower dosage, but they will not "raise the ceiling."

41) B

In this case, the analgesic effect of the drug will increase. The main feature of the dose-response relationship is that a drug response is proportional to the dose. As the dose increases, so does the magnitude of the response.

42) A

Oral drugs often cause nausea, vomiting, and diarrhea because of gastrointestinal (GI) irritation.

43) A

In this case, the therapeutic index of the drug will be 10. The therapeutic index (TI) is a ratio of the lethal dose 50 (LD50) to the effective dose 50 (ED50) of a drug. This index indicates that ten times as much drug is needed to produce a lethal effect in 50 percent of the animals as is needed to produce the therapeutic effect in 50 percent of the animals.

44) B

The LD50 of drug A is 2000 mg. The therapeutic index (TI) is a ratio of the LD50 to the ED50 of a drug. The equation is expressed as TI = LD50/ED50. Therefore, LD50 is equal to the product of the therapeutic index and ED50.

45) C

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The therapeutic index (TI) is a ratio of the lethal dose 50 (LD50) to the effective dose 50 (ED50) of a drug. A therapeutic index value of four indicates that four times as much drug is needed to produce a lethal effect in 50 percent of the animals as is needed to produce the therapeutic effect in 50 percent of the animals.

46) D

A few adverse drug effects are not dose-dependent. These effects, such as drug idiosyncrasy and drug allergy, are determined by individual variation.

47) C

Drugs, such as thalidomide, that produce birth defects are known as teratogens.

48) A

All drugs are chemicals, and many have long chemical-names. As a result, all drugs are given a shorter name, known as the nonproprietary name, which is usually a contraction of the chemical name.

49) B

The nonproprietary name is more commonly referred to as the generic name.

50) B

In the case, cetirizine is the generic name of the drug. All drugs are given a shorter name, known as the nonproprietary name, which is usually a contraction of the chemical name. The nonproprietary name is more commonly referred to as the generic name.

51) B

Drug Facts and Comparisons (F&C) is a loose-leaf index that provides the most current drug information on a regular basis. Drug information and new drug additions are updated monthly.

52) C

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The *United States Pharmacopeia/National Formulary (USP/NF)* is primarily used by drug manufacturers to ensure that drug production adheres to official government standards.

53) C

The Federal Comprehensive Drug Abuse Prevention and Control Act of 1970 was designed to regulate the dispensing of drugs, called controlled substances, that have the potential for abuse.

54) B

Schedule I drugs have a high potential for abuse and no accepted medical use.

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