

## ESSAY QUESTIONS FOR CHAPTER 2

2.1 Describe the therapeutic index and margin of safety measures as a way of understanding drug toxicity. Include in your answer an explanation of the denominator and numerator that go into each ratio.

*pp. 30–31*

2.2 Picture yourself as an emergency room physician at a metropolitan hospital that participates in the DAWN reporting system. What questions would you ask an incoming patient who is displaying symptoms that might be drug-related? What circumstances might prevent you from making an accurate record of the role drugs may have played in these symptoms?

*pp. 33–35*

2.3 Define behavioral tolerance and explain how this phenomenon might account for a drug-related overdose fatality, even though the dose might have fallen short of the lethal range.

*pp. 37–39*

2.4 Distinguish between the major DSM-IV-TR criteria for a diagnosis of substance dependence and a diagnosis of substance abuse and the new DSM-5 criteria for substance use disorder, as defined by the American Psychiatric Association.

*pp. 41–43*

2.5 Distinguish between pharmacological, economically compulsive, and systemic types of drug-related violence. Give a specific example for each type.

*pp. 45–48*

2.6 Discuss how harm reduction may be a better alternative than use reduction.

*pp. 53–54*

## TRUE/FALSE QUESTIONS FOR CHAPTER 2

- 2.1 Cocaine has been used as a local anesthetic in the United States. *p. 29 Ans: T*
- 2.2 Water has the potential for being a psychoactive substance. *p. 29 Ans: T*
- 2.3 There are substances that exist which do not have any potential for toxicity. *p. 30 Ans: F*
- 2.4 Drug safety depends on the possibility that the drug can be toxic at low doses compared to other drugs. *p. 30 Ans: T*
- 2.5 If a drug is ED50, it means the drug will become toxic if 50 mg of the drug is taken. *p. 30 Ans: F*
- 2.6 Each effect produced by a particular drug will have its own dose-response curves. *p. 30 Ans: T*
- 2.7 Examining the properties of a drug effect is that same as examining the properties of the drug itself. *p. 30 Ans: F*
- 2.8 If an LD100 dose were to be given to a group of 50 mice, all of them would die. *p. 30 Ans: T*
- 2.9 The margin of safety measure of a particular drug is a more conservative (in the direction of safety) measure of drug toxicity than the therapeutic index for that drug. *p. 31 Ans: T*
- 2.10 The higher the margin of safety ratio, the more toxic the drug. *p. 31 Ans: F*
- 2.11 A problem with street drugs is that the user doesn't know the toxicity risks until the drug has been used. *p. 31 Ans: T*
- 2.12 The DAWN reporting program reaches practically all emergency department patients in the United States. *p. 33 Ans: F*
- 2.13 According to 2011 DAWN statistics, about 1/4 (27 percent) of drug-related ED visits involved some use of illicit drug use only. *p. 34 Ans: T*
- 2.14 According to 2011 DAWN statistics, most ED visits involved alcohol only. *p. 34 Ans: F*
- 2.15 DAWN statistics are collected for ED visits involving alcohol use alone by individuals twenty-one and older. *p. 34 Ans: F*
- 2.16 Men outnumber women two-to-one in terms of ED visits involving illicit drug use. *p. 34 Ans: T*

- 2.17 A patient mentions drinking eight glasses of vodka and gin during a drug-related ED visit. This is an example of an alcohol-in-combination DAWN case.  
*p. 35 Ans: F*
- 2.18 Polydrug use refers to the use of a drug at different dosage levels from administration to administration.  
*p. 35 Ans: F*
- 2.19 Multiple substance use is another name for polydrug use.  
*p. 35 Ans: T*
- 2.20 Injecting heroin followed by snorting heroin is an example of polydrug use.  
*p. 35 Ans: F*
- 2.21 In the DAWN reports, cocaine, heroin, and alcohol-in-combination cases are almost always lethal.  
*p. 35 Ans: F*
- 2.22 According to recent DAWN statistics, there has been a greater number of drug-related ED for visits prescription and OTC medications alone than with illicit drugs alone. Narcotic analgesics are on the rise.  
*p. 34-35 Ans: T*
- 2.23 There are more fatalities from chronic smoking of tobacco than from illicit drug use.  
*p. 36 Ans: T*
- 2.24 If an individual experiences drug tolerance, an increasing dose must be taken over time in order to maintain the same level of drug effect.  
*p. 37 Ans: T*
- 2.25 Drug abusers take drug doses which are well beyond the LD-response curve amounts.  
*p. 37 Ans: F*
- 2.26 In most cases, the dosage levels taken by drug abusers would be lethal if taken by a first-time user.  
*p. 37 Ans: T*
- 2.27 Tolerance is maximized when the user always takes the drug in the same setting.  
*pp. 37–38 Ans: T*
- 2.28 Drug tolerance is to setting as behavioral tolerance is to repetition.  
*pp. 37–38 Ans: F*
- 2.29 Behavioral tolerance is based on Pavlovian conditioning.  
*pp. 37–38 Ans: T*
- 2.30 The concept of physical dependence originates from observations of heroin abusers.  
*p. 39 Ans: T*
- 2.31 The existence of physical dependence in a particular drug hinges upon the presence of physical withdrawal syndromes, should the individual stop taking the drug.  
*p. 39 Ans: T*
- 2.32 Withdrawal symptoms are the approximately the same for every psychoactive drug.  
*pp. 39–40 Ans: F*
- 2.33 Continuing drug-taking behavior in order to avoid withdrawal is one indication of physical dependence.  
*p. 39 Ans: T*
- 2.34 Withdrawal symptoms involve symptoms generally opposite from the original effect of the drug.

*p. 39 Ans: T*

2.35 Most addicts completing the withdrawal process in its entirety do not become re-addicted.

*pp. 39-40 Ans: F*

2.36 In an experiment discussed in the text, laboratory animals would choose cocaine over food even if the animal was starving to death.

*p. 40 Ans: T*

2.37 Tolerance, withdrawal symptoms, and unintentional overuse are three of the seven criteria for substance dependence.

*p. 42 Ans: T*

2.38 The placental barrier protects a fetus from toxic substances in the mother.

*p. 43 Ans: F*

2.39 The greater the extent of drug-taking behavior during pregnancy, the more likely there will adverse consequences during labor and delivery.

*p. 43 Ans: T*

2.40 A dirty needle carries the risk of HIV infection but not of hepatitis infection.

*p. 43 Ans: F*

2.41 In 2009, the ban on federal funding for needle exchange programs was lifted.

*p. 43 Ans: T*

2.42 Needle exchange programs are available in all fifty states.

*p. 43 Ans: F*

2.43 Needle-exchange programs have increased the prevalence of heroin abuse in recent studies.

*p. 43 Ans: F*

2.44 Prescription drugs have little effect on pregnant woman and the newborn.

*p. 44 Ans: F*

2.45 All psychoactive drugs have the same adverse effects on the fetus.

*p. 44 Ans: F*

2.46 Fetal effects of methamphetamine are unknown but likely to be similar to effects of cocaine—reducing normal fetal blood flow.

*p. 44 Ans: T*

2.47 There is a statistical association between the use of illicit drugs and crime.

*p. 45 Ans: T*

2.48 Violence resulting directly from the physiological effects of an injected drug is referred to as systemic violence.

*p. 45 Ans: F*

2.49 Tendencies toward violence have been observed during times of crack withdrawal as well as crack intoxication.

*p. 46 Ans: T*

2.50 The high price of illicit drugs on the street contributes to the incidence of economically compulsive violence.

*p. 46 Ans: T*

- 2.51 Systemic violence might include robbing a shopkeeper in order to get money to buy drugs. *p. 46 Ans: F*
- 2.52 Under a laissez-faire philosophy, the government would assert little or no regulatory control with respect to drugs. *p. 48 Ans: T*
- 2.53 Under the Harrison Act, cocaine was defined as a narcotic but opiate drugs were not. *p. 49 Ans: F*
- 2.54 The smoking of opium in the United States was opposed at least in part because of its association with Chinese immigrants. *p. 48 Ans: T*
- 2.55 Though cocaine was not defined as a narcotic, it was still affected by the Harrison Act of 1914. *p. 49 Ans: T*
- 2.56 The Marijuana Tax Act of 1937 did not apply to growers of marijuana. *p. 49 Ans: F*
- 2.57 Harry J. Anslinger was the Director of the Federal Bureau of Investigation (FBI) during the 1930s. *p. 49 Ans: F*
- 2.58 Five “schedules” of controlled substances resulted from the Comprehensive Drug Abuse Prevention and Control Act of 1970. *pp. 49-50 Ans: T*
- 2.59 Schedule IV drugs have the highest potential for abuse. *p. 50 Ans: F*
- 2.60 Heroin is an example of a Schedule I drug. *p. 50 Ans: T*
- 2.61 “Drug czars” were established as a result of the 1988 Anti-Drug Abuse Act. *p. 50 Ans: T*
- 2.62 Expenditures to carry out the war on drugs are up by more than 1,400 percent since 1981. *p. 52 Ans: T*
- 2.63 Year to year, there is a clear cut correlation of budget allocations used for drug regulation and the availability of illicit drugs. *p. 52 Ans: F*

**MULTIPLE CHOICE QUESTIONS FOR CHAPTER 2**  
**(1 = easy, 2 = medium, 3 = difficult)**

2.1 According to the text, each year we spend in the United States approximately \_\_\_\_\_ on health care for either specialty services, behavioral consequences, or the prevention of alcohol and illicit drug abuse.

- A. 5 billion
- B. 10 billion
- C. 20 billion
- D. 25 billion

*2 p. 29 Ans: D*

2.2 An extreme case of intoxication can involve which of the following non-drug substances?

- A. broccoli
- B. chocolate
- C. water
- D. sushi

*2 p. 29 Ans: C*

2.3 If a drug is dangerous, poisonous, or in some way interferes with a person's normal functioning, that drug is said to be \_\_\_\_\_.

- A. toxic
- B. addictive
- C. illicit
- D. acute

*1 p. 30 Ans: A*

2.4 \_\_\_\_\_ is defined as the possibility that the short-term effects of a particular drug will trigger a toxic reaction.

- A. Acute toxicity
- B. Collateral toxicity
- C. Conditional toxicity
- D. Chronic toxicity

*2 p. 30 Ans: A*

2.5 A dose-response curve is generally shaped as a(n) \_\_\_\_\_.

- A. S
- B. U
- C. inverted U
- D. inverted V

*1 p. 30 Ans: A*

2.6 An S-shaped graph (dose-response curve) helps explain \_\_\_\_\_.

- A. drug addiction
- B. drug elasticity
- C. drug toxicity
- D. none of the above

*1 p. 30 Ans: C*

2.7 As dose level rises, it is likely that the effect produced by the drug \_\_\_\_\_.

- A. rises as well
- B. rises and then falls
- C. falls and then rises
- D. remains the same

*1 p. 30 Ans: A*

- 2.8 An effective dose (ED) of a drug depends upon \_\_\_\_\_.
- A. what drug effect is being observed
  - B. what percentage of the test population you have specified
  - C. both A and B
  - D. neither A nor B
- 2 p. 30 Ans: C**
- 2.9 When reporting the ED<sub>50</sub> of a drug, the "50" refers to \_\_\_\_\_.
- A. 50 milligrams of the drug
  - B. 50 percent of the test population
  - C. volunteers 50 years of age or older
  - D. 50 percent of the maximal dose that is possible to administer
- 2 p. 30 Ans: B**
- 2.10 The LD-response curve for a particular drug will always be positioned \_\_\_\_\_ with respect to the ED-response curve.
- A. on top
  - B. farther to the left
  - C. farther to the right
  - D. at the bottom
- 3 p. 31 Ans: C**
- 2.11 Analogy: The ED-response curve is to the LD-response curve as \_\_\_\_\_.
- A. effective is to lethal
  - B. emotional is to linguistic
  - C. early is to late
  - D. illicit is to licit
- 2 p. 31 Ans: A**
- 2.12 The therapeutic index is a way of comparing \_\_\_\_\_.
- A. the LD<sub>50</sub> against the LD<sub>1</sub>
  - B. the LD<sub>1</sub> against the ED<sub>99</sub>
  - C. the ED<sub>99</sub> against the ED<sub>50</sub>
  - D. the LD<sub>50</sub> against the ED<sub>50</sub>
- 3 p. 30 Ans: D**
- 2.13 The ratio of the LD<sub>50</sub> over the ED<sub>50</sub> is called the \_\_\_\_\_.
- A. therapeutic index
  - B. margin of safety
  - C. effective dose for a particular drug effect
  - D. lethal dose
- 2 p. 30 Ans: A**
- 2.14 The margin of safety is \_\_\_\_\_ than the therapeutic index.
- A. less accurate in gauging drug toxicity
  - B. simpler to calculate
  - C. more conservative in the direction of safety
  - D. less meaningful in general
- 2 p. 31 Ans: C**
- 2.15 In terms of toxicity, a drug with a therapeutic index of two \_\_\_\_\_ a drug with a therapeutic index of ten.
- A. is roughly equivalent to
  - B. is safer than
  - C. is more dangerous than

D. cannot be compared to

3 p. 31 Ans: C

2.16 The margin of safety is a way of comparing \_\_\_\_\_.

- A. the LD50 against the LD1
- B. the LD1 against the ED99
- C. the ED99 against the ED50
- D. the LD50 against the ED50

3 p. 31 Ans: B

2.17 The ratio of the LD1 over the ED99 is called the \_\_\_\_\_.

- A. therapeutic index
- B. margin of safety
- C. effective dose for a particular drug effect
- D. lethal dose

2 p. 31 Ans: B

2.18 A dash of quinine is sometimes added to street "heroin" in order to \_\_\_\_\_.

- A. simulate the bitter taste of real heroin
- B. make the heroin more injectable
- C. strengthen the effect of the heroin
- D. weaken the effect of the heroin

2 p. 31 Ans: A

2.19 The margin of safety regarding the response to illicit drugs \_\_\_\_\_.

- A. is carefully monitored by the FDA
- B. is totally unregulated
- C. is increasingly monitored in several U.S. states
- D. is monitored by the FDA with respect to heroin

1 p. 31 Ans: B

2.20 According to the text, drugs that are unauthorized copies of prescription medications are known as \_\_\_\_\_.

- A. customized drugs
- B. copycat drugs
- C. look-alike drugs
- D. bootleg drugs

1 p. 31 Ans: C

2.21 Drug-related deaths among celebrities \_\_\_\_\_.

- A. can give you a fairly accurate idea about the relative toxicities of psychoactive drugs
- B. may not represent the drugs most frequently encountered by the rest of society
- C. involve drugs that are relatively inexpensive
- D. involve information that is largely unreported

2 p. 33 Ans: B

2.22 DAWN stands for the \_\_\_\_\_.

- A. District Attorney Wait-list Number (for arrests)
- B. Distribution of Abuse in White Non-adults
- C. Drug Abuse Wait-list Number (for treatment)
- D. Drug Abuse Warning Network

1 p. 33 Ans: D

2.23 Which of the following statements is true?

- A. DAWN statistics come from analysis of data from all U.S. hospitals.
- B. DAWN statistics come from major U.S. metropolitan hospitals.

- C. DAWN statistics come from primarily rural hospitals in the U.S.
- D. DAWN statistics only come from U.S. hospitals with minority populations.

**3 p. 33 Ans: B**

2.24 Information about drug-related medical emergencies is collected by the \_\_\_\_\_.

- A. Drug Abuse Warning Network
- B. Omnibus Drug Act
- C. U.S. Government in cooperation with the Canadian Government
- D. both A and C

**1 p. 33 Ans: A**

2.25 As assessed by DAWN, drug-related ED visits refer to occurrences resulting from \_\_\_\_\_.

- A. adverse reactions to medications
- B. the use of dietary supplements
- C. the use of illicit drugs
- D. all of the above

**1 p. 33 Ans: D**

2.26 Drug-related ED visits \_\_\_\_\_.

- A. include any and all visits to an emergency department that are related to recent drug use
- B. are not counted in DAWN statistics if they result in a fatality
- C. are by definition the result of illicit drug use
- D. exclude suicide attempts

**2 p. 33 Ans: A**

2.27 Which of the following would NOT be included as a drug-related ED visit in DAWN statistics?

- A. nonmedical use of a prescription or OTC drug
- B. alcohol-only consumption if the patient is younger than twenty-one years old
- C. malicious poisoning
- D. alcohol-only consumption if the patient is twenty-one or older

**2 p. 34 Ans: D**

2.28 DAWN statistics do not include drug-related ED visits involve the ingestion of \_\_\_\_\_.

- A. alcohol in combination with other drugs
- B. hallucinogens alone
- C. alcohol alone, unless the patient is under the age of twenty-one
- D. hallucinogens in combination with other drugs

**1 p. 35 Ans: C**

2.29 According to recent DAWN statistics, alcohol-in-combination is responsible for \_\_\_\_\_ of drug-related ED visits.

- A. one-tenth
- B. one-third
- C. one-fourth
- D. three quarters

**3 p. 34 Ans: C**

2.30 Alcohol-in-combination ED visits are described as \_\_\_\_\_.

- A. consuming two or more different alcoholic beverages at one time
- B. using alcohol in conjunction with some other drug
- C. alcohol being combined with non-alcoholic beverages
- D. none of the above

**1 p. 34 Ans: B**

2.31 Which of the following is an example of an alcohol-in-combination ED visit?

- A. drinking beer directly after drinking a glass of wine
- B. mixing gin, whiskey, and vodka in the same beverage
- C. smoking a marijuana joint while drinking beer
- D. mixing vodka and orange juice in the same beverage

1 p. 34 Ans: C

2.32 Which of the following would NOT be an example of polydrug use?

- A. alcohol combined with heroin
- B. alcohol combined with marijuana
- C. Motrin combined with Tylenol
- D. beer combined with tequila

1 p. 35 Ans: D

2.33 According to DAWN statistics, very few drug-related deaths resulted from the use of \_\_\_\_\_ alone.

- A. marijuana
- B. methamphetamine
- C. cocaine
- D. opiates

2 p. 35 Ans: A

2.34 Which of the following is an example of polydrug use?

- A. snorting cocaine and injecting cocaine
- B. drinking whiskey and drinking vodka
- C. taking LSD and smoking cocaine
- D. both A and C

2 p. 35 Ans: C

2.35 If Drug A and Drug B have the same number of drug-related ED visits but Drug A is used by ten times the number of individuals as Drug B, what are the relative toxicities of the two drugs?

- A. Drug A is more toxic than Drug B.
- B. Drug B is more toxic than Drug A.
- C. Drugs A and B have equivalent toxicities.
- D. Not enough information is present to judge the relative toxicities of Drugs A and B.

3 p. 35 Ans: B

2.36 Drug A has ten times the number of drug-related ED visits in the DAWN statistics as Drug B. Drug A is used by ten times the number of individuals as Drug B. What are the relative toxicities of the two drugs?

- A. Drug A is more toxic than Drug B.
- B. Drug B is more toxic than Drug A.
- C. Drugs A and B have equivalent toxicities.
- D. Not enough information is present to judge the relative toxicities of Drugs A and B.

3 p. 35 Ans: C

2.37 In recent years, DAWN statistics indicate \_\_\_\_\_.

- A. an decline in emergencies involving methamphetamine (speed)
- B. a slow decline in the number of emergencies in general
- C. an increase in emergencies involving methamphetamine (speed)
- D. no essential change in methamphetamine (speed) emergencies

1 p. 35 Ans: C

2.38 In recent years, DAWN statistics indicate \_\_\_\_\_.

- A. a decline in emergencies involving narcotic analgesics (prescription pain medication)
- B. a slow decline in the number of emergencies in general
- C. an increase in emergencies involving narcotic analgesics
- D. no essential change in emergencies involving narcotic analgesics

1 p. 35 Ans: C

- 2.39 Heroin-related emergencies have tended to increase since the 1990s because \_\_\_\_\_.
- A. heroin can be injected safely
  - B. heroin can be used without a needle injection
  - C. heroin can be ingested by mouth
  - D. all of the above

1 p. 35 Ans: B

- 2.40 The DAWN reports mainly focus on emergency department cases caused by \_\_\_\_\_.
- A. acute toxicity
  - B. chronic toxicity
  - C. illicit drugs only
  - D. licit drugs only

2 p. 36 Ans: A

- 2.41 Analogy: Acute toxicity is to chronic toxicity as \_\_\_\_\_.
- A. short-term is to long-term
  - B. licit is to illicit
  - C. non-lethal is to lethal
  - D. stimulants are to depressants

1 p. 36 Ans: A

- 2.42 DAWN statistics provide information predominantly about \_\_\_\_\_.
- A. acute toxicity
  - B. chronic toxicity
  - C. drug dependence
  - D. alcohol abuse

1 p. 36 Ans: A

- 2.43 The greatest number of drug-related deaths each year results from \_\_\_\_\_.
- A. the drinking of alcohol and the smoking of tobacco
  - B. overdose of licit prescription and OTC medications
  - C. abuse of illicit drugs
  - D. heroin and cocaine abuse

2 p. 36 Ans: A

- 2.44 The physical or psychological harm a drug such as tobacco or alcohol might cause over a long period of use is known as \_\_\_\_\_.
- A. secondary toxicity
  - B. acute toxicity
  - C. delayed toxicity
  - D. chronic toxicity

1 p. 36 Ans: D

- 2.45 The first documented case of drug tolerance had to do with someone named \_\_\_\_\_.
- A. King Mithridates VI of Pontus
  - B. Lucretia Borgia
  - C. Timothy Leary
  - D. Socrates

1 p. 37 Ans: A

- 2.46 The capacity of a drug dose to have a gradually diminished effect on the user as it is taken repeatedly is known as \_\_\_\_\_.
- A. drug interaction
  - B. drug dependence

- C. drug tolerance
- D. the placebo effect

1 p. 37 Ans: C

- 2.47 Todd started drinking caffeinated coffee every night to stay awake to study for finals. On Sunday evening, Todd was able to stay awake after drinking one cup of coffee. By Thursday evening, Todd found that he needed to drink two cups of the coffee to get the same effect. Why is this so?
- A. Todd must have used caffeine in combination with a second drug on Sunday evening.
  - B. One of the two cups on Thursday night must have been a placebo.
  - C. Todd has developed a tolerance to low doses of caffeine.
  - D. Todd has become dependent on caffeine.

2 p. 37 Ans: C

- 2.48 Assume that an initial dose of 100 mg will produce a particular drug effect. After tolerance, which dose level would most likely produce an equivalent response?
- A. 50 mg
  - B. 75 mg
  - C. 100 mg
  - D. 150 mg

3 p. 37 Ans: D

- 2.49 Assume that an initial dose of 100 mg will produce a particular drug effect. After repeated administrations, a dose of \_\_\_\_\_ produces an equivalent response. Which alternative would be consistent with the greatest degree of tolerance?
- A. 50 mg
  - B. 100 mg
  - C. 150 mg
  - D. 200 mg

3 p. 37 Ans: D

- 2.50 The ingestion of increasingly large doses of a toxic drug will produce \_\_\_\_\_.
- A. a diminished response due to drug dependence
  - B. an increased response due to drug sensitization
  - C. a diminished response due to drug tolerance
  - D. no measurable change in the response to the drug

2 pp. 37–38 Ans: C

- 2.51 If tolerance to a potentially toxic drug has occurred, a toxic response might occur only if the dose level is \_\_\_\_\_.
- A. relatively low
  - B. relatively high
  - C. virtually zero
  - D. substituted by a placebo

2 p. 38 Ans: B

- 2.52 In general, during repeated drug administrations, the strongest response will occur \_\_\_\_\_.
- A. during initial administration of the drug
  - B. after at least two weeks of daily administrations
  - C. after one year of weekly administrations
  - D. during initial administration and then after several months of repeated administrations

2 p. 38 Ans: A

- 2.53 It is possible that, through tolerance, individuals may have \_\_\_\_\_ after a period of regular administrations of a drug.
- A. a dramatically increased response
  - B. an increasing response which then levels off

- C. no discernible response at all
- D. a newly acquired sense of brotherhood

1 p. 38 Ans: C

2.54 Tolerance effects depend upon which of the following factors in drug-taking behavior?

- A. repetition
- B. the ingestion of an illicit substance
- C. the abuse potential of the drug
- D. the age range of the individual using the drug

1 p. 38 Ans: A

2.55 Drug tolerance is to \_\_\_\_\_ as behavioral tolerance is to \_\_\_\_\_.

- A. setting; repetition
- B. setting; sensitivity
- C. repetition; sensitivity
- D. repetition; setting

2 p. 38 Ans: D

2.56 Principles of Pavlovian conditioning have been used to explain which of the following drug-taking phenomena?

- A. the placebo effect
- B. behavioral tolerance
- C. forms of tolerance tied to purely physiological effects
- D. a large number of ER mentions in the DAWN reports

2 p. 38 Ans: B

2.57 According to the text, behavioral tolerance is also referred to as \_\_\_\_\_.

- A. environmental tolerance
- B. conditioned tolerance
- C. analgesic tolerance
- D. administrative tolerance

2 p. 38 Ans: B

2.58 According to the research of Shepard Siegel, environmental cues that are present while taking morphine (an analgesic drug) produce \_\_\_\_\_.

- A. a heightened analgesic effect
- B. a lessened analgesic effect
- C. a heightened sense of identification to the location where the drug is being used
- D. little or no effect on one's response to the drug

3 p. 38 Ans: B

2.59 Behavioral or conditioned tolerance can be considered to be an important contributor to which drug-taking phenomenon?

- A. lethal overdoses
- B. improved responses to a drug
- C. the placebo effect
- D. increased sensitivity to a drug

1 p. 39 Ans: A

2.60 Conditioning effects have been demonstrated with which of the following drugs?

- A. cocaine
- B. alcohol
- C. nicotine
- D. all of the above

2 p. 39 Ans: D

2.61 Drug dependence can be \_\_\_\_\_.

- A. physical and psychological
- B. psychological but not physical
- C. neither psychological nor physical
- D. both A and B are correct

2 p. 39 Ans: D

2.62 Physical dependence requires the presence of \_\_\_\_\_.

- A. a craving for the drug
- B. a set of physical withdrawal symptoms
- C. a physical response to the drug
- D. none of the above

2 p. 39 Ans: B

2.63 In the case of heroin and other abused drugs, withdrawal symptoms are typically \_\_\_\_\_.

- A. opposite to the effects of the drug
- B. surprisingly similar to the effects of the drug
- C. unrelated to the effects of the drug
- D. at first similar to but then totally opposite from the effects of the drug

1 p. 39 Ans: A

2.64 If one of the effects of heroin is constipation, then withdrawal symptoms after chronic heroin abuse would include \_\_\_\_\_.

- A. increased constipation
- B. diarrhea
- C. a period of constipation followed by normal intestinal activity
- D. increased dizziness and headache pain

2 p. 39 Ans: B

2.65 Physical dependence is an inadequate explanation for the abuse of a particular drug if \_\_\_\_\_.

- A. the drug is legally available
- B. the drug is relatively low in toxicity
- C. withdrawal from the drug produces no physical symptoms
- D. withdrawal from the drug produces specific physical symptoms

2 p. 39 Ans: C

2.66 A key factor in psychological dependence is the presence of \_\_\_\_\_.

- A. craving
- B. physical withdrawal symptoms
- C. a heightened sense of well-being
- D. a decline in one's sensitivity to pain

1 p. 39 Ans: A

2.67 A problem in proposing psychological dependence as an explanation for drug abuse is \_\_\_\_\_.

- A. the necessity to show withdrawal symptoms
- B. the requirement that illicit drugs be involved
- C. the presence of conditioned tolerance
- D. its inherent circularity

2 p. 40 Ans: D

2.68 In studies of psychological dependence, a catheter refers to \_\_\_\_\_.

- A. a tube inserted orally to restrict feeding and drinking
- B. measurement device for assessing drug tolerance
- C. a tube inserted into a vein for the administration of a drug directly into the bloodstream
- D. a tube inserted into a muscle for administration of a drug directly into muscle tissue

2 p. 40 Ans: C

2.69 A strong tendency for an animal to self-administer a drug that ordinarily would NOT produce physical withdrawal symptoms yields evidence in favor of \_\_\_\_\_.

- A. physical dependence
- B. psychological dependence
- C. both physical and psychological dependence
- D. neither physical nor psychological dependence

1 p. 40 Ans: B

2.70 Studies of self-administration of drugs in animals indicate that there is little or no inclination for animals to self-administer \_\_\_\_\_.

- A. cocaine and other stimulants
- B. hallucinogens
- C. amphetamines
- D. all of the above

2 pp. 40-41 Ans: B

2.71 LSD, antipsychotic drugs, and antidepressant drugs all share the common feature of \_\_\_\_\_.

- A. producing little or no self-administration in animals
- B. producing hallucinogenic effects
- C. producing effects similar to cocaine and amphetamine
- D. producing strong indications of psychological dependence

2 pp. 40-41 Ans: A

2.72 Drug abusers continue to use drugs due to \_\_\_\_\_.

- A. a strong compulsion to continue taking the drug
- B. the desire to avoid withdrawal symptoms
- C. cravings for the pleasurable effects of the drug
- D. all of the above

2 p. 41 Ans: D

2.73 In studies of self-administration of drugs in animals, cocaine appears to have a \_\_\_\_\_ compared to heroin.

- A. greater potential for psychological dependence
- B. lesser potential for psychological dependence
- C. similar potential for psychological dependence
- D. lesser potential for drug toxicity

2 p. 41 Ans: A

2.74 The DSM-IV-TR of the American Psychiatric Association defines two fundamental conditions related to drug-taking behavior: \_\_\_\_\_.

- A. substance dependence and drug abuse
- B. substance dependence and drug dependence
- C. substance dependence and substance abuse
- D. drug dependence and drug abuse

1 p. 41 Ans: C

2.75 According to the DSM-5, the newly established diagnosis for drug-taking behavior is \_\_\_\_\_.

- A. substance dependence and substance use disorder
- B. substance use disorder and drug dependent syndrome
- C. substance dependence and substance abuse
- D. substance use disorder

2 p. 41 Ans: D

2.76 According to the DSM-5, there are now \_\_\_\_\_ criteria for the newly established diagnosis.

- A. four

- B. seven
- C. eleven
- D. twelve

2 p. 41 Ans: C

- 2.77 According to the DSM-5 definitions, substance use disorder implies that \_\_\_\_\_.
- A. the individual is already dependent upon the substance for 6-month and meets 2 conditions over this period.
  - B. there must be withdrawal symptoms
  - C. there are tolerance issues
  - D. both B and C

2 p. 42 Ans: D

- 2.78 Which of the following is the time frame used for a DSM-5 diagnosis of substance use disorder?
- A. three or more criteria must have occurred within a 12-month period of time.
  - B. three or more criteria must have occurred within a 6-month period of time.
  - C. two or more criteria must have occurred within a 9-month period of time.
  - D. two or more criteria must have occurred within a 12-month period of time.

2 p. 42 Ans: D

- 2.79 Tolerance, withdrawal symptoms, and unintentional overuse are three of the seven criteria for the previous DSM-IV-TR diagnosis of \_\_\_\_\_.
- A. substance abuse
  - B. drug abuse
  - C. substance dependence
  - D. drug-taking behavior

2 p. 42 Ans: C

- 2.80 Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home is not sufficient to signify a diagnosis of \_\_\_\_\_.
- A. schizophrenia
  - B. substance use disorder
  - C. substance abuse
  - D. depression

3 p. 42 Ans: B

- 2.81 In the DSM-5, the American Psychiatric Association added this new criterion for substance use disorder.
- A. recurrent legal difficulties
  - B. craving or a strong desire or urge to use the substance
  - C. recurring failure to meet major role obligations
  - D. unintentional use in excessive amounts

2 p. 42 Ans: B

- 2.82 The "placental barrier" refers to a barrier between the \_\_\_\_\_.
- A. bloodstreams of the mother and the fetus
  - B. placenta of the mother and bloodstream of the mother
  - C. bloodstream of the mother and brain of the mother
  - D. bloodstream and brain of both mother and fetus

1 p. 43 Ans: A

- 2.83 The placental barrier is particularly effective in blocking the crossing of \_\_\_\_\_.
- A. all drugs
  - B. alcohol and nicotine
  - C. illicit drugs
  - D. none of the above

2 p. 43 Ans: D

- 2.84 Which types of effects are typically associated with a mother's use of drugs during the early weeks of her pregnancy?
- A. low birth weight
  - B. physical malformations
  - C. growth retardation
  - D. premature birth

2 p. 43 Ans: B

- 2.85 Which effect is typically associated with a mother's use of drugs after the eighth month of pregnancy?
- A. low birth weight
  - B. physical malformations
  - C. risk of spontaneous abortions
  - D. No effects are generally observed

2 p. 43 Ans: A

- 2.86 Generally speaking, growth retardation, premature birth, low birth weight, and neurological damage to the infant are events most associated with drug use during which time of pregnancy?
- A. before the third month
  - B. during the fourth to fifth month
  - C. during the sixth to seventh month
  - D. after the eighth month

2 p. 43 Ans: D

- 2.87 The median time interval for those who are HIV infected to show symptoms of AIDS is usually approximately \_\_\_\_\_.
- A. six months
  - B. two years
  - C. ten years
  - D. twelve years

2 p. 43 Ans: C

- 2.88 Needle exchange programs have been effective in reducing \_\_\_\_\_.
- A. the incidence of high-risk sexual behavior
  - B. the incidence of HIV infection among intravenous drug users
  - C. the prevalence of spontaneous abortions
  - D. the incidence of physical dependence

1 p. 43 Ans: B

- 2.89 Needle exchange programs are \_\_\_\_\_.
- A. widely accepted in the U.S. but not in Europe
  - B. widely accepted throughout the world
  - C. available in thirty-eight states in the U.S.
  - D. viewed as a failure

2 p. 43 Ans: C

- 2.90 According to the text, what are the effects of using cocaine or crack during pregnancy?
- A. constriction of blood vessels, reducing normal blood flow to the fetus
  - B. high rates of spontaneous abortion
  - C. growth retardation such as lower birth rate and smaller head circumference
  - D. all of the above

3 p. 44 Ans: D

- 2.91 The prescription drug isotretinoin (brand name: Accutane) produces \_\_\_\_\_ when taken during

pregnancy.

- A. extreme acne
- B. a deficiency in Vitamin A
- C. major birth defects
- D. substantial sedation

**3 p. 44 Ans: C**

2.92 When taken during pregnancy, which substance produces fetal effects similar to the effects of cocaine, and shows newborn effects including growth retardation, lethargy, increased difficulty to arouse and, once aroused, increased autonomic reactivity?

- A. marijuana
- B. methamphetamine
- C. heroin
- D. alcohol

**3 p. 44 Ans: B**

2.93 Withdrawal symptoms are frequently observed in the newborns of mothers who had used \_\_\_\_\_ during their pregnancy.

- A. heroin
- B. marijuana
- C. prescription drugs
- D. marijuana and tobacco

**2 p. 44 Ans: A**

2.94 The effects observed among pregnant women with respect to the use of barbiturates are \_\_\_\_\_.

- A. the same as the effects due to alcohol use
- B. clinically insignificant
- C. substantially greater than the effects due to the use of illicit drugs
- D. different from the effects due to the use of tobacco

**3 p. 44 Ans: D**

2.95 Which psychoactive drugs have little or no effect on pregnant women or the newborn?

- A. alcohol
- B. marijuana
- C. prescription drugs
- D. none of the above

**2 p. 44 Ans: D**

2.96 Drug-related violence due to the acute effects of the drug in an individual's system at the time of the violent act is referred to as \_\_\_\_\_.

- A. acute toxicity
- B. pharmacological violence
- C. systemic violence
- D. none of the above

**1 p. 45 Ans: B**

2.97 The Arrestee Drug Abuse Monitoring Program tests adult males arrested for a serious offense for \_\_\_\_\_ major numbers of illicit drugs.

- A. five
- B. six
- C. eight
- D. ten

**1 p. 45 Ans: D**

2.98 The detection period in a standard urinalysis test for an illicit drug can range from \_\_\_\_\_.

- A. several hours to two days
- B. several days to two weeks
- C. It depends on the drug for which an individual is being tested.
- D. Urinalysis is an unreliable method for assessing the presence of an illicit drug.

1 p. 45 Ans: C

2.99 A drug least likely to produce pharmacological violence would be a drug that made an individual \_\_\_\_\_.

- A. agitated and annoyed
- B. irritable and obnoxious
- C. sleepy or passive
- D. euphoric and giddy

1 p. 45 Ans: C

2.100 Which drug shows the least widely reported incidence of pharmacological violence?

- A. marijuana
- B. amphetamine
- C. PCP
- D. alcohol

1 p. 45 Ans: A

2.101 A drug that produces an on-edge manner and social paranoia is \_\_\_\_\_.

- A. PCP
- B. heroin
- C. marijuana
- D. all of the above

1 p. 46 Ans: A

2.102 Which of the following drugs does NOT produce agitation and paranoia?

- A. amphetamines
- B. cocaine
- C. PCP
- D. heroin

2 p. 46 Ans: D

2.103 Which drug shows the most widely reported incidence of pharmacological violence?

- A. heroin
- B. marijuana
- C. antipsychotic medication
- D. alcohol

2 p. 46 Ans: D

2.104 According to the text, a majority of homicides and sexually aggressive acts are committed by users of \_\_\_\_\_.

- A. crack-cocaine
- B. heroin
- C. alcohol
- D. nicotine

2 p. 46 Ans: C

2.105 An increase in one's general inclination toward antisocial behavior is characteristic of \_\_\_\_\_.

- A. the chronic use of most psychoactive drugs
- B. the chronic use of few if any psychoactive drugs
- C. the chronic use of many depressant drugs
- D. the chronic use of hallucinogens

2 p. 46 Ans: B

- 2.106 Economically compulsive violence stems from \_\_\_\_\_.
- A. the expense of drugs
  - B. the economic status of the country
  - C. the cost of overpowering prescription medication
  - D. none of the above
- 1 p. 46 Ans: A**
- 2.107 Economically compulsive violence is commonly associated with which psychoactive drug?
- A. alcohol
  - B. nicotine
  - C. heroin
  - D. several types of prescription medication
- 2 p. 47 Ans: C**
- 2.108 When heroin prices are high, the incidence of heroin-related property crimes \_\_\_\_\_.
- A. increases
  - B. There is no effect.
  - C. decreases
  - D. increases or decreases depending on the dose taken
- 2 p. 47 Ans: A**
- 2.109 Generally speaking, if the price of street drugs increases, communities should expect \_\_\_\_\_.
- A. an increase in crime
  - B. fewer drug users in society
  - C. an increase in licit drug use
  - D. a decrease in emergency room visits due to drug overdose
- 2 p. 47 Ans: A**
- 2.110 Relying on robbery to support one's drug habit is an example of \_\_\_\_\_.
- A. pharmacological violence
  - B. economically compulsive violence
  - C. systematic violence
  - D. passive aggression
- 1 p. 47 Ans: B**
- 2.111 Which individuals within a community are typically targets for economically compulsive violence?
- A. storekeepers
  - B. children
  - C. the elderly
  - D. all of the above
- 2 p. 47 Ans: D**
- 2.112 When the price of street heroin goes up, property crime related to heroin abuse \_\_\_\_\_.
- A. increases
  - B. decreases
  - C. is unaffected
  - D. is related to the price of cocaine
- 1 p. 47 Ans: A**
- 2.113 An increase in criminal behavior as a result of a reduction in the supply of heroin is typically used as an indication of \_\_\_\_\_.
- A. pharmacological violence
  - B. economically compulsive violence
  - C. systemic violence
  - D. psychological and physical dependence

**3 p. 47 Ans: B**

2.114 Females are more likely than males to commit crimes that can be classified as \_\_\_\_\_.

- A. crimes against people
- B. crimes against property
- C. crimes against the public order
- D. When it comes to drug-related crime, no significant gender differences have been identified.

**2 p. 47 Ans: C**

2.115 Three aspects of drugs and violence are pharmacological, economically compulsive, and \_\_\_\_\_.

- A. systemic
- B. dynamic
- C. symbiotic
- D. pandemic

**2 p. 47 Ans: A**

2.116 Drug dealers are most directly affected by \_\_\_\_\_.

- A. pharmacological violence
- B. economically compulsive violence
- C. systemic violence
- D. passive aggression

**1 p. 47 Ans: C**

2.117 "Messing up the money" refers to \_\_\_\_\_.

- A. selling inferior grades of illicit drugs
- B. territorial disputes among drug dealers
- C. fraudulent handling of drug sale money
- D. purchasing drugs with stolen money

**2 p. 47 Ans: C**

2.118 Violence resulting from territorial disputes in drug dealing is an example of

- A. pharmacological violence
- B. economically compulsive violence
- C. systemic violence
- D. passive aggression

**2 p. 47 Ans: C**

2.119 In contrast to outlaw motorcycle gangs, the largest proportion of street gangs involved in drug sales during this time were comprised of individuals between \_\_\_\_\_ years of age.

- A. 10 and 11
- B. 12 and 13
- C. 15 and 16
- D. 16 and 18

**3 p. 48 Ans: C**

2.120 Systemic violence has been substantially reduced since the late 1990s with respect to which of the following drugs?

- A. LSD
- B. ecstasy
- C. heroin
- D. crack cocaine

**2 p. 48 Ans: D**

2.121 In the 1990s, a decline in crack abuse was followed by \_\_\_\_\_.

- A. a decline in homicide rates

- B. a decline in violent crime
- C. an increase in heroin abuse
- D. both A and B

2 p. 48 Ans: D

2.122 In the case of drug-related criminal behavior, an example of a white-collar crime would be \_\_\_\_\_.

- A. armed robbery
- B. embezzlement
- C. mugging
- D. burglary

1 p. 48 Ans: B

2.123 A laissez-faire policy regarding drugs would involve \_\_\_\_\_.

- A. little or no regulation
- B. extensive regulation
- C. well-reasoned procedures regarding regulation
- D. an emphasis upon controlling drugs from France

1 p. 48 Ans: A

2.124 Prior to 1900, opiate addicts who were caught \_\_\_\_\_.

- A. were fired from their jobs
- B. had their children taken from them and placed into foster care
- C. participated fully in the life of the community
- D. were often divorced from their spouses

2 p. 48 Ans: C

2.125 An active public policy toward drug regulation and control \_\_\_\_\_.

- A. has been prevalent throughout U.S. history
- B. once was prevalent early in U.S. history but no longer is the case today
- C. has been prevalent only in the twentieth century
- D. has declined substantially since 1950

2 p. 48 Ans: C

2.126 Prior to the twentieth century, the only drug for which there was a social movement to control its consumption was \_\_\_\_\_.

- A. heroin
- B. morphine
- C. cocaine
- D. alcohol

2 p. 48 Ans: D

2.127 Prior to the twentieth century, there was strong opposition to the smoking of \_\_\_\_\_.

- A. opium
- B. tobacco
- C. cocaine
- D. all of the above

2 p. 48 Ans: A

2.128 *The Jungle*, a novel by Upton Sinclair, \_\_\_\_\_.

- A. resulted in the enactment of regulatory legislation relating to food and drugs in 1906
- B. was the basis for an anti-marijuana movie in the 1930s
- C. promoted rainforest protection policies and future drug discoveries
- D. supported efforts by the government to educate young people about drug abuse

2 p. 49 Ans: A

- 2.129 The significance of the Pure Food and Drug Act of 1906 was that it \_\_\_\_\_.  
A. was enacted to control narcotic drug trafficking  
B. was the first regulatory act regarding drug consumption  
C. banned marijuana in 1937  
D. was repealed in 1914  
**2 p. 49 Ans: B**
- 2.130 The Pure Food and Drug Act of 1906 \_\_\_\_\_.  
A. required manufacturers to list the amounts of alcohol or “habit-forming” drugs on product labels  
B. regulated sales of opiates to medical personnel only  
C. banned foods that contained opium  
D. made it illegal for opiate drugs to be used without a prescription  
**2 p. 49 Ans: A**
- 2.131 The Harrison Act of 1914 \_\_\_\_\_.  
A. made hallucinogens illegal  
B. required strict record keeping of opiate drug transactions  
C. reduced drug-taking behavior substantially  
D. moved the emphasis in the field of drug abuse from a criminal one to a medical one  
**2 p. 49 Ans: B**
- 2.132 According to drug legislation between 1914 and the 1960s, cocaine, heroin, marijuana, and peyote were officially classified as \_\_\_\_\_.  
A. licit drugs  
B. illegal substances only if smoked  
C. narcotic drugs  
D. hallucinogenic drugs  
**2 p. 49 Ans: C**
- 2.133 As a result of the Harrison Act of 1914, \_\_\_\_\_.  
A. several other drugs (i.e., marijuana) were classified as narcotics  
B. narcotics were banned from medical use  
C. the Federal Bureau of Narcotics was established  
D. both A and B  
**2 p. 49 Ans: A**
- 2.134 Harry J. Anslinger \_\_\_\_\_.  
A. was the director of the Federal Bureau of Narcotics (FBN) for more than thirty years  
B. later replaced J. Edgar Hoover as head of the Federal Bureau of Investigation (FBI)  
C. was a proponent of laissez-faire policies  
D. was a long-standing critic of tobacco smoking  
**1 p. 49 Ans: A**
- 2.135 The “killer weed” stories in the 1930s led to \_\_\_\_\_.  
A. an extensive highway beautification program  
B. anti-pesticide legislation during the 1940s  
C. regulation of marijuana cultivation and use  
D. an increase in systemic violence in American cities  
**1 p. 49 Ans: C**
- 2.136 The Marijuana Act of 1937 \_\_\_\_\_.  
A. made it a federal offense to smoke marijuana  
B. identified marijuana smoking as equivalent to tobacco smoking  
C. removed all regulations on the smoking of marijuana  
D. imposed a tax on growers, sellers, and buyers of marijuana  
**3 p. 49 Ans: D**

- 2.137 The Comprehensive Drug Abuse Prevention and Control Act of 1970\_\_\_\_\_.
- A. outlawed sales of narcotics in the United States
  - B. gave states the authority to pass their own laws regarding narcotic abuse
  - C. classified drugs into five classifications
  - D. applied only to manufacturers of drugs
- 1 p. 49 Ans: C*
- 2.138 Following drug legislation in 1970, the term “schedule” has been used as \_\_\_\_\_.
- A. a way of calculating the need for treatment options for drug abusers
  - B. a way of classifying drugs
  - C. a way of tracking the FDA’s approval process for new prescription drugs
  - D. a way of monitoring the number of drug arrests
- 3 p. 49 Ans: B*
- 2.139 Which schedule(s) of controlled substances imply the greatest potential for abuse?
- A. Schedule I and II
  - B. Schedule III and IV
  - C. Schedule V
  - D. All five schedules imply relatively equal potential for abuse.
- 2 p. 49 Ans: A*
- 2.140 Which schedule of drugs is most restricted in U.S. society?
- A. Schedule I
  - B. Schedule II
  - C. Schedule III
  - D. Schedule IV
- 1 p. 49 Ans: A*
- 2.141 A Schedule V drug \_\_\_\_\_.
- A. has a high potential for abuse and no medical use
  - B. has minimal abuse potential and widespread medical use
  - C. has potential for abuse, as well as accepted medical uses; limits on prescriptions apply.
  - D. must be stored in secure vaults by pharmacists and physicians
- 2 p. 50 Ans: B*
- 2.142 Penalties for money laundering when associated with drug smuggling and sales were established by the \_\_\_\_\_.
- A. Harrison Act of 1914
  - B. Comprehensive Drug Abuse Prevention and Control Act of 1970
  - C. Anti Drug Abuse Act of 1988
  - D. Clean Dollar Bill Act of 1993
- 3 p. 50 Ans: C*
- 2.143 Antianxiety drugs and sedative-hypnotics are officially classified as \_\_\_\_\_ drugs.
- A. Schedule I
  - B. Schedule II
  - C. Schedule III
  - D. Schedule IV
- 2 p. 50 Ans: D*
- 2.144 During the 1980s, about \_\_\_\_ percent of the budget to control drug abuse was allocated toward treatment and prevention programs.
- A. 30
  - B. 40
  - C. 60

D. 70

**3 p. 51 Ans: A**

2.145 Currently, about \_\_\_ percent of the budget to control drug abuse is directed toward efforts to reduce the supply of illicit drugs.

- A. 35
- B. 45
- C. 55
- D. 60

**3 p. 51 Ans: D**

2.146 The “war on drugs” in the United States was officially declared by President \_\_\_\_\_.

- A. Richard Nixon in 1971
- B. Theodore Roosevelt in 1906
- C. Ronald Reagan in 1981
- D. George Bush in 1990

**2 p. 52 Ans: A**

2.147 Which of the following is NOT a program associated with the harm reduction approach toward drug abuse?

- A. needle exchange
- B. nicotine patches
- C. international agreements on drug trafficking
- D. methadone maintenance

**1 p. 53 Ans: C**

2.148 The opposite concept in relationship to harm reduction is

- A. pharmacological violence
- B. zero tolerance
- C. benign neglect
- D. biopsychosocial model

**2 p. 53 Ans: B**