

1. Which of the following areas of the brain is most associated with the reward effects of cocaine?
 - A. Locus ceruleus
 - B. Raphe nucleus
 - C. Red nucleus
 - D. Substantia nigra
 - E. Nucleus accumbens

2. Which of the following are present during cocaine withdrawal?
 - A. Euphoria
 - B. Piloerection
 - C. Dilated pupils
 - D. Decreased need for sleep
 - E. Hypersomnolence

3. Use of which of the following substances likely causes a long-term inhibition of new serotonin synthesis and a decrease in serotonin terminal density?
 - A. Alcohol
 - B. Gaba-hydroxybutyrate
 - C. Ketamine
 - D. Methylenedioxymethamphetamine (MDMA)
 - E. Lysergic acid diethylamide (LSD)

4. The average length of time during which it is possible to detect cocaine in a patient's urine following last use is:
 - A. 1 to 3 days.
 - B. 5 to 7 days.
 - C. 7 to 10 days.
 - D. 9 to 11 days.
 - E. 14 to 30 days.

5. Chronic use of which of the following substances produces a relative hypodopaminergic state in the central nervous system, often resulting in a depressive syndrome?
 - A. Alcohol
 - B. Marijuana
 - C. Cocaine
 - D. Heroin
 - E. Benzodiazepines

6. Which of the following symptoms is the hallmark of amphetamine-induced psychotic disorder?
 - A. Paranoia
 - B. Generalized anxiety

- C. Tactile hallucinations
- D. Auditory hallucinations
- E. Looseness of associations

7. Of the following choices, the mechanism of action of cocaine on dopamine in the synaptic cleft is best described as:

- a) cocaine acting as a pure dopamine agonist
- b) cocaine blocking the reuptake of dopamine by dopamine transporters
- c) cocaine acting as a false substrate for dopamine transporters, allowing for more release of dopamine
- d) cocaine blocking the release of dopamine from presynaptic neurons
- e) cocaine increasing dopamine synthesis in terminal boutons

8. Which drug is most likely to cause a stroke or seizure?

- a) cannabis
- b) methamphetamine
- c) cocaine
- d) PCP
- e) heroin

9. What is true of the pharmacological half lives of cocaine and methamphetamine?

- a) Their half lives are approximately equal
- b) Cocaine's half life is greater
- c) Methamphetamine's half life is greater
- d) Half lives differ some, but the half lives of these substance have little effect on the user's experience or preference for the drugs
- e) Half lives of these two substances are different, but are both less than an hour