

## Practice Test Chapter 4 Consciousness nb

1. What are some important differences between stage 4 and REM? Circle True or False for each one.

- True    False    a. They are the same thing. REM occurs in stage 4.  
 True    False    b. Dreaming is more likely to occur in REM  
 True    False    c. Brain waves in stage 4 resemble those of an awake state, while REM brain waves show a deep sleep with very little brain activity.  
 True    False    d. Stage 4 (deep sleep) occurs mostly at the beginning of the night. Much less Stage 4 sleep (if any at all) at the end of the night.

2. How is REM different from NREM? Circle True or False for each one.

- True    False    a. REM sleep occurs more frequently during the latter part of the night.  
 True    False    b. Most of our dreams occur in NREM sleep.  
 True    False    c. During NREM sleep your body becomes paralyzed so that the musculature can be recharged.  
 True    False    d. nightmares occur in REM. Night Terrors occur in NREM.  
 True    False    e. If you sleepwalk, you are most likely in REM and dreaming.

3. What is narcolepsy? Circle one

- a. It is where you stop breathing during sleep and become frightened.  
 b. Narcolepsy is the sudden irresistible onset of sleep often at inappropriate times.  
 c. Narcolepsy is the condition that some people develop after many years of narcotics abuse. It is characterized by an inability reach stage 4 sleep and get hence spend too much time in REM.  
 d. None of the above are true.

4. How would you know if someone was **physically** addicted instead of **psychologically** addicted to a drug? Circle one

- a. If someone is physically addicted/dependent, they would show evidence of tolerance and withdrawal. Tolerance and withdrawal isn't a part of psychological dependence.  
 b. If someone is physically addicted/dependent, they would crave the drug if the drug wasn't available. Craving is not a part of psychological addiction.  
 c. Under physical addiction, one would think about the drug frequently. Not true if one is psychologically addicted.  
 d. None of the above are true.

5. What can we say about psychological dependence? Circle True or False for each one.

- True        False    In psychological dependence, people use the drug because they think they need it or because it does positive things for them.  
 True        False    Psychological dependence like physical dependence can lead to cravings or strong desires for a drug.  
 True        False    There is no physical withdrawal effects associated with psychological dependence, but it is no less dangerous than physical addiction. It can last longer than physical addiction and can be strong enough to keep a user in a drug-induced state.  
 True        False    Physical dependence is usually associated with withdrawal reactions including physical pain and intense cravings when the drug is withheld.

6. What was the purpose of the research by Merry when he did his research in London and reported in the article “The Loss of Control Myth”? Circle one
- He was testing the hypothesis that alcohol users who were not physically dependent would crave alcohol merely by visiting a bar they often frequented.
  - He was testing the hypothesis that a single dose of alcohol would provoking cravings in alcoholics even if they didn’t know they were getting a dose of alcohol.
  - He was testing the hypothesis that social drinkers and alcoholics would develop tolerance after just 5 shots.
  - He was testing the hypothesis that alcoholics who had developed tolerance to alcohol would drink more alcohol than alcoholics who had not developed tolerance. He gave both types of drinkers a fake “tasting test” where the drinks had alcohol but no one knew it. Their task was to drink the drinks and rate them for taste preference. Alcoholics who had developed tolerance drank more of the drinks than alcoholics who had not developed tolerance.
7. You read the article about how behavioral scientists regard addiction in the article: Behavioral Perspectives on the Neuroscience of Drug Addiction”. Circle True or False for each one.

- |      |       |   |
|------|-------|---|
| True | False | a. The perspective of behavioral psychologists is that drug use behavior is just a form of excessive behavior and it occurs because the addict is getting reinforced for the behavior. So the addict comes to do the behavior too often, even when other behaviors are considered appropriate. Overeating and gambling are other examples of this.  |
| True | False | b. An addict may come to perform a drug use behavior too frequently because there isn’t enough reinforcement from other “more normal/acceptable” behaviors. For example, the sex addict seeks sex when sexual gratification is one of the only few sources of positive reinforcement in his life.   |
| True | False | c. an addict may come to perform the behavior too frequently if his learning history has provided a high rate of reinforcement for that behavior. Like the sex addict who became that way because he/she had had the opportunity for a rich sexual history and now comes to depend on that reinforcement. (if you’re really ugly and no one wants to have sex with you, it would be harder to become a sex addict.) |
| True | False | d. Behavioral scientists regard addiction as a brain disease. They search for how the brain of an addict changes from early use to later chronic use. Scientists from the Behavioral perspective, also search for drugs that might reduce craving.  |

8. When a person is shut off from the world, such that he or she cannot even tell what time it is by light or dark for a few weeks, this person's sleep-waking cycle

- a. stays exactly as it was since this cycle is innate and cannot be modified.
- b. shortens to an average of about 20 hours.
- c. lengthens to more than 24 hours but less than 25 hours.
- d. becomes completely disrupted.

9. How are "alcoholics" different from "problem drinkers"? Circle True or False for each.

- True False a. There are more alcoholics than problem drinkers
- True False b. alcoholics display physical dependence whereas problem drinkers do not.
- True False c. Problem drinkers are responsible for much more of the "social ills" than alcoholics. In other words, most of the cost to society for excessive drinking is caused by problem drinkers.
- True False d. Alcoholics Anonymous was created to help Alcoholics and not problem drinkers.
- True False e. According to the article "The Drinking Dilemma", for drinkers who are court ordered into treatment, the only treatment option should be abstinence.

## Tie Breaker

1. Bill was a college student who drank 4 night a week. When he did drink, he usually consumed 12 drinks. Many would certainly say he is drinking alcoholically or at least drinking like an alcoholic. But when he got out of college he cut way down and now, years later, just drinks a couple nights a week and usually only 2-3 drinks per occasion. How would a **behavioral psychologist** explain this change in drinking behavior?

**(circle all that apply)**

- 1. His brain must have changed. More specifically, because he is drinking less after college because his dopamine levels have been reduced in the reward pathways of his brain.
  - 2. He "matured out".
  - 3. He certainly was reinforced for his drinking in college, but now he has other things in his life that are just as, or even more, satisfying than drinking. To continue drinking like he did in college would screw up those other things in his life that he likes (like marriage, kids, job etc).
2. When you are deprived of REM sleep, you will go there more frequently than if you hadn't been deprived. This is known as
-

3. From the article “Behavioral Perspectives on the Neuroscience of Drug Addiction”:  
Advantages of a behavioral approach to addictions over a brain based approach is that a behavioral approach  
**(circle all that apply)**
- can account for “addictions” that do not involve drugs.
  - can account for situations where those who use drugs in excess when younger ( those who drink alcoholically in college) but do NOT grow up into adult addicts.
  - can account for the fact that many who are addicted, can stop the addiction when their life circumstances change. (like when addicted soldiers returned home from Viet Nam addicted and then stopped)
  - can account for the fact that people can quit on their own when the consequences of continued use become severe. Like when smokers quit when the health risks become serious and obvious.
  - can generate many more valid treatment options. Like using contingency management in the treatment of cocaine addiction.

3. See the picture at the right. This woman is having electrodes placed all over her scalp. She is getting ready for a sleep study where she will fall asleep and researchers will monitor her sleep. What is the name of the device that picks up electrical signals from the brain and displays them on a screen?



\_\_\_\_\_ (abbreviation is fine)

4. In the graph in Merry, and presented below, in the “mixture” column, what does the O stand for? \_\_\_\_\_ what does the A stand for? \_\_\_\_\_

This is not mentioned in the article, but what do you think?

TABLE I—CRAVING SCALE SCORE

| Mixture | Patients | Days | Doses | Craving score (points) |
|---------|----------|------|-------|------------------------|
| O       | 9        | 8    | 72    | 33                     |
| A       | 9        | 7    | 63    | 33                     |
| 2A      | 9        | 1    | 9     | 13                     |

5. See the graph above again. How many patients were in Merry’s study? \_\_\_\_\_

## Sudden Death

1. Jet lag happens when you fly east or west and have difficulty adjusting to the new time zone. Jet lag is less of a problem when you fly \_\_\_\_\_. (not specifically in the text, but knowing how our sleep cycle would change if we were cut off from external cues like living in a cave, can help you answer this.)
  - a. East
  - b. West
  
3. What is contingency management in the treatment of addictions? **(circle one)**
  - a. It involves making sure the addict has a sponsor. His sobriety is contingent on this.
  - b. It involves paying addicts to NOT use, or at least giving them the chance to earn money for not using.
  - c. It is a treatment option and only effective for those with a physiological dependence.
  - d. It is the opposite of a “stepped care “ protocol.
  
4. If your breathing stops during sleep you could have the condition called \_\_\_\_\_.  
If you suddenly fall asleep while standing, talking, or driving, you could have the condition called \_\_\_\_\_.