

## Study Guide Chapter 4 – Consciousness

### **Sleep** (read beginning of chapter through section 4.4.)

1. How is a circadian rhythm different from any other?
2. What are some of the consequences of sleep debt?
3. How many years of our lives does the average person spend sleeping?
4. What is meant by sleep rebound?
5. The text raises the question: why we sleep (in section 4.2). What was their conclusion?
6. How do we measure brain wave activity? (it measures frequency and amplitude of brain waves)
7. Sleep can be divided into 2 main different phases. What are they?
8. Which stages of sleep is it hard to wake someone up from?
9. What is REM rebound?
10. Why was Freud interested in dreams? What was the difference between manifest content and latent content?
11. What was the conclusion of the Cartwright study?
12. What is the most common sleep disorder? The text mentions 2 ways it can be experienced. What are these 2 ways?
13. When is sleep walking most likely? REM or NREM?
14. Read the thing on “A Sleepwalking Defense?”
15. What is REM Behavior Disorder? What part of sleep does it occur? (REM or NREM)
16. What is restless leg syndrome?
17. What part of sleep do we see Night Terrors?
18. What is sleep apnea? What is one of the most common treatments?
19. What is narcolepsy?
20. As far as differences between REM and NREM:
  - a. Which occurs more frequently in the latter part of the night?
  - b. Which shows brain waves more like what we see when you are awake but relaxed?
  - c. Which shows rapid movements of the eyes?
  - d. Which is associated with muscle paralysis?
  - e. Which is most associated with sleepwalking?
  - f. Night terrors are most likely to occur during which?
  - g. Our book doesn't say, but know this: Nightmares are just bad dreams that happen in REM. And we are more likely to dream in REM. These dreams in REM are more like on-going movies, maybe with some themes and sometimes you remember them. Night terrors on the other hand are more like scary images and you don't usually remember them.

### **Substance Use/Abuse** (read only the “substance use disorders” section of section 4.5)

21. What is the difference between a physical dependence and a psychological one.
22. If you could be one or the other, which would you rather be? (assuming you wanted to get rid of the disorder)
23. What is tolerance? Withdrawal?

## **Alcohol Articles**

I am not impressed with the material presented in the text. For that reason, I have provided you with 3 articles to read.

### **From “The Drinking Dilemma”**

1. How are alcoholics different from problem drinkers?
2. Who is there more of in America: alcoholics or problem drinkers? By what ratio or percentages?
3. Which one causes most of our “social ills” in society?
4. What is the “stepped-care protocol? Is that what we use in the treatment of people who need help with their drinking?
5. What is a “brief intervention”? Helpful or not?
6. As the main point of the article, The author would claim American can not solve/reduce its alcohol problem until we recognize one thing. What is that?
7. If it were possible to be one or the other only, which would you rather be: physically addicted or psychologically addicted and why? (from the text page 177-178)

### **From “The Loss of Control Myth” by Merry (1966)**

8. What was the question Merry tried to answer by his research?
9. What does “loss of control” mean here?
10. In an experiment (as it was presented in Chapter 1)we start with 2 equal groups. This design is a bit of a twist. We have 2 equal groups at the start, but the same people are in both groups. Groups in this design, are “what they were given” to drink. On some days the alcoholics got \_\_\_\_\_ and other days they got none. The dependent variable was \_\_\_\_\_
11. What was the result or outcome of his study? In other words, what did he find?

### **Behavioral Perspectives on the Neuroscience of Drug Addiction**

12. Which approach gives us more realistic options for treatment?
13. What is “maturing out”? Which approach can best explain it and how do they explain it?
14. Which approach can best explain the fact that soldiers in Vietnam returned as drug addicts, yet most were able to quit on their own and didn’t continue as drug addicts?
15. We use the term “addiction” loosely. We use it to refer to gambling and sex as well as drugs. Which approach better accounts for “non drug addictions” like gambling or sex? And how does it account for those non drug addictions?