**Questions Bank for *Sleep, A Necessity of Life or a Waste of Time?***

1. Which of the following characteristics is NOT true of the so called “Sleepless elite?"

a) They may have a genetic mutation.

b) About 20% of the US population is “sleepless elite.”

c) Sleepless elite do not take naps during the day.

d) They typically have a higher metabolism.

2. How many hours if sleep does the Mayo Clinic (And most pediatricians) recommend for most teenagers?

a) 3 hours a night.

b) 6 hours a night.

c) 9 hours a night.

d) 12 hours a night.

3. What kind of test do you perform to see if someone is resistant to insulin?

a) A blood test to see how much insulin is in her blood.

b) An MRI.

c) A blood test to see how much sugar is in her blood.

d) An X-Ray.

4. If the liver and muscle cells cannot take up glucose, where does the glucose go?

a) fat cells.

b) bone cells.

c) kidney cells.

d) blood cells.

5. When an organism is having an exciting experience and learning a lot of things, what happens to its neurons?

a) they get removed.

b) they build synaptic terminals.

c) they replicate.

d) the increase axon length.

6. In which of the following situations would an organism be losing synapses, but getting smarter?

a) learning.

b) sleeping.

c) sitting quietly and doing nothing.

d) making dinner.

7. Reactive Oxygen Species is

a) a type of cellular waste.

b) a type of hormone released by the Thalamus.

c) a signaling molecule used by muscle cells.

d) not found in the human body.

8. If your body was not producing any Superoxide Dismutase, what would be a result?

a) you would build muscle mass.

b) the number of synaptic terminals per neuron would increase.

c) the amount of neurotransmitters released by sending neurons would increase.

d) reactive oxygen species would build up.

9. When the colorless chemical A is added to the colorless chemical B, you get a blue color. You have two dilutions of chemical A that you are adding to two dishes of chemical B. When you use chemical A at dilution X, you have to add 10 drops to get a blue color. When you use chemical A at dilution Y, you have to add 5 drops to get a blue color. Which of the following statements must be true?

a) Chemical A is an enzyme.

b) Chemical B is a dye.

c) Dilution X is more concentrateed than dilution Y.

d) Dilution Y is more concentrated than dilution X.

10. Growth hormone does NOT…

a) make you taller.

b) make neurons send signals faster.

c) increase muscle mass.

d) stimulate the growth of the liver.

11. Which of the following statements about growth hormone is FALSE?

a) it is secreted at constant levels at night.

b) it is secreted in bursts at night.

c) Young people secrete more growth hormone than old people.

d) Growth hormone is not secreted at night if you don’t sleep.

12. If a sleep deprived mouse made 2 times as much cellular waste as a normal sleeping mouse, how much enzyme would the sleep deprived mouse have to make to get rid of the waste?

a) the same amount as a normal sleeping mouse.

b) 2 times less than a normal sleeping mouse.

c) 2 times more than a normal sleeping mouse.

d) half as much as a normal sleeping mouse.

13. What reasoning does the Mayo Clinic (And other pediatricians) give for not taking naps more than 30 minutes long?

a) You might end up skipping a meal.

b) It can give you a headache.

c) You will feel more tired at night.

d) You will have trouble falling asleep at night.

14. Two puppies were taken into the woods and allowed explore for 8 hours. Then one puppy was allowed to sleep for 6 hours, while the other was kept awake for 6 hours. What might be true of the puppy that was kept awake for 6 hours?

a) it has fewer active synaptic terminals than the puppy that slept.

b) it has more active synaptic terminals than the puppy that slept.

c) it has more neurons than the puppy that slept.

d) it has less neurons than the puppy that slept.

15. Modafinil is a drug that is sometimes taken by people to keep them awake for a long time. What might happen to someone who took Modafinil every day for a month and only slept 3 hours a night during that month?

a) Their insulin levels would rise.

b) Their daily total amount of growth hormone would increase.

c) They would be able to remember things better.

d) Their cellular wastes would increase.