Bio-10-Q3W7-Nervous System- H.W

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Which part of the brain controls conscious activities, memory, language, and the senses?
a. thalamus
b. cerebellum
c. medulla oblongata
d. cerebrum

____ 2. The _____ is the area of the brain that controls involuntary activities,, such as breathing and heart rate.
a. medulla oblongata
b. cerebrum
c. hypothalamus
d. cerebellum

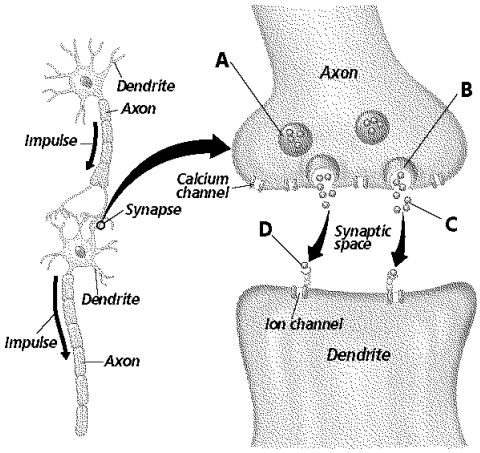

Figure 36-3

____ 3. Which part of Figure 36-3 is affected most by drugs?
a. A
b. B
c. D
d. C

____ 4. Where do the neurotransmitters end up in Figure 36-3?
a. in the axon
b. in the synaptic space
c. outside of myelin sheath
d. in the dendrite

____ 5. In which direction is the flow of calcium ions in Figure 36-3?
a. towards axon
b. into synaptic space
c. towards dendrite
d. outside of myelin sheath

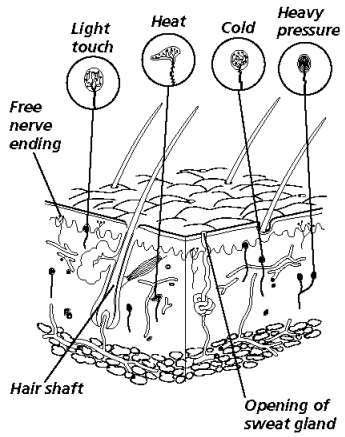

Figure 36-5

____ 6. Why is the heavy pressure sensor located where it is shown in Figure 36-5?
   a. because heavy pressure is not that important
   b. because heavy pressure must push lower in the skin
   c. because heavy pressure is more damaging than light pressure
   d. because heavy pressure is really only felt in the epidermis

____ 7. Why are the heat sensors located just under the epidermis in Figure 36-5?
   a. because heat is hard to sense
   b. so heat can be easily ignored
   c. so heat can be sensed fast
   d. because heat isn't damaging to nerves

____ 8. If the semicircular canals in one of your ears were damaged, you might
   a. lose your sense of balance.
   b. lose your sense of rhythm.
   c. lose your ability to hear low-frequency sounds.
   d. lose your ability to coordinate your neck muscles.

____ 9. Sensory neurons can _____.
   a. process incoming impulses and pass them on to motor neurons
   b. carry response impulses away from the brain and spinal cord
   c. carry impulses across synapses
   d. carry impulses from outside and inside the body to the brain and spinal cord

____ 10. Cocaine is a stimulant because it _____.
   a. relieves anxiety
   b. causes levels of neurotransmitters in the brain to increase
   c. causes blood pressure to drop
   d. causes heart rate to slow down

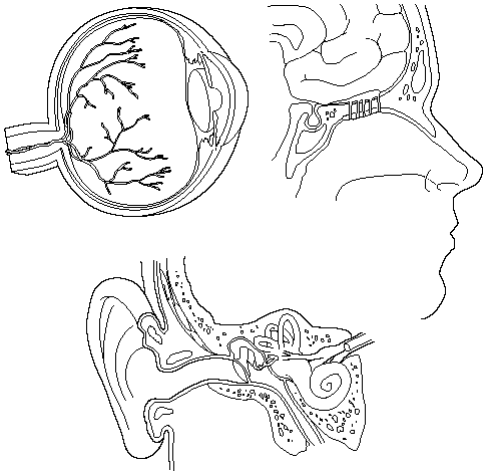

Figure 36-4

____ 11. Where is the nerve located in all the organs shown in Figure 36-4?

a. near the surface
b. in the skin
c. relatively deep in the body
d. in different places

____ 12. What is the possible explanation for the location of the nerves in Figure 36-4?

a. so they can feel the outside air
b. so they can be near the stimulus
c. so they are protected
d. so they will be closer to the brain

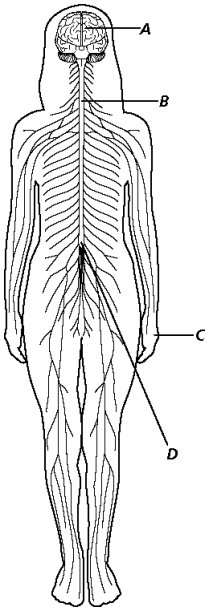

Figure 36-2

____ 13. What is the path of a reflex impulse in Figure 36-2?

a. C-D-C
b. C-A-C
c. C-B-C
d. C-B-A-B-C

____ 14. What is the path of a voluntary impulse in Figure 36-2?

a. C-B-C
b. C-D-C
c. C-B-A-B-C
d. C-A-C

____ 15. What labeled part of Figure 36-2 is not part of the peripheral nervous system?

a. D
b. C
c. B
d. A

____ 16. You can see the colors in a picture because you are aided by the _____.
a. cones of the retina
b. rods of the retina
c. left visual field
d. right visual field

____ 17. Sound waves are converted into nerve impulses inside the
a. malleus.
b. cochlea.
c. ear canal.
d. optic nerve.

____ 18. What is any drug that inhibits transmission of sensory impulses at a synapse called?
a. depressant
b. hallucinogen
c. neurotransmitter
d. stimulant

____ 19. Alcohol may act on the CNS by _____.
a. increasing oxygen content
b. blocking the movement of sodium and calcium ions across the cell membrane
c. increasing anxiety
d. speeding up the movement of sodium and calcium ions

____ 20. Which of the following are activities of drugs in the nervous system?
a. decreased neurotransmitter activity at a synapse
b. alteration of pain or mood
c. increased neurotransmitter activity at a synapse
d. all of these

____ 21. A nerve impulse travels from one cell to another by passing from _____.
a. one dendrite to another dendrite
b. one axon to another axon
c. one dendrite to an axon
d. one axon to a dendrite

____ 22. The malleus, incus, and stapes are found in the
a. inner ear.
b. outer ear.
c. middle ear.
d. eardrum.

____ 23. Your senses of hearing and touch both depend on nerve impulses being generated by
a. sound waves.
b. electrical stimulation.
c. mechanical stimulation.
d. a change in temperature.

____ 24. In the skin of your fingertips, you might expect to find receptors for
a. pressure.
b. touch.
c. pain.
d. all of these

____ 25. A person who is addicted to a drug is experiencing withdrawal when he or she _____.
a. becomes ill after stopping its use
b. feels better when stopping its use
c. needs more of the drug to achieve the same effect
d. needs to take the drug more often

____ 26. A(n) _____ is any drug that speeds up the activities of the nervous system.
a. depressant
b. stimulant
c. antibiotic
d. addictive drug

Matching

Match each item with the correct statement below.

a. tolerance	h. depressant
b. reflex	i. hallucinogen
c. neurotransmitters	j. medulla oblongata
d. synapse	k. cochlea
e. addiction	l. axon
f. semicircular canals	m. rods
g. narcotic	n. retina

____ 27. Chemicals that diffuse across the synapse and stimulate polarity changes in a neuron
____ 28. Occurs when a person needs larger and/or more frequent doses of a drug to achieve the same effect
____ 29. Psychological and physical dependence on drugs
____ 30. Automatic response to a stimuli
____ 31. Fluid-filled, snail-shaped structure in the inner ear
____ 32. Layer of nerve tissue made up of sensory neurons that respond to light
____ 33. Any drug that slows down the activities of the CNS
____ 34. Structure in the inner ear that helps maintain balance
____ 35. Single extension of a neuron that carries impulses away from the cell body
____ 36. Controls involuntary activities such as breathing and heart rate
____ 37. Light receptors adapted for vision in dim light
____ 38. Drug that affects the CNS, altering moods, thoughts, and sensory perceptions
____ 39. Tiny space between the axon of one neuron and the dendrites of another neuron over which nerve impulses must travel
____ 40. Medicine that relieves pain and causes sleep

True/False

Indicate whether the statement is true or false.

____ 41. On a bright sunny day, the cones in your eyes play a greater role in your sense of sight than the rods.

____ 42. Only the left hemisphere of the brain is involved in the sense of sight.

____ 43. When you are looking at an object, each of your eyes sees the object from the same perspective.

____ 44. The retina contains two types of light receptor cells.

____ 45. The senses of taste and smell are closely linked.

____ 46. The lens in the eye controls the amount of light that strikes the retina.

____ 47. Impulses coming from sensory receptors in your nose and mouth are interpreted as odors and tastes by the cerebrum.

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