

AP Psychology

**3A- Neural Communication, Nervous System & Endocrine System**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Who believed that bumps on the skull reveal mental abilities and character traits?
  - A) Sir Charles Sherrington
  - B) Stephen Kasslyn
  - C) Franz Gall
  - D) Candace Pert
  - E) Solomon Snyder
  
2. Dendrites are branching extensions of
  - A) neurotransmitters.
  - B) endorphins.
  - C) neurons.
  - D) myelin.
  - E) endocrine glands.
  
3. An axon is
  - A) a cell that serves as the basic building block of the nervous system.
  - B) a layer of fatty tissue that encases the fibers of many neurons.
  - C) an antagonist molecule that blocks neurotransmitter receptor sites.
  - D) the extension of a neuron that carries messages away from the cell body.
  - E) a junction between a sending and receiving neuron.
  
4. A brief electrical charge that travels down the axon of a neuron is called the
  - A) synapse.
  - B) agonist.
  - C) action potential.
  - D) myelin sheath.
  - E) refractory period.
  
5. Which of the following are located exclusively within the brain and spinal cord?
  - A) sensory neurons
  - B) motor neurons
  - C) myelin sheath
  - D) interneurons
  - E) axons

6. A synapse is a(n)
- A) chemical messenger that triggers muscle contractions.
  - B) automatic response to sensory input.
  - C) neural network.
  - D) junction between a sending neuron and a receiving neuron.
  - E) neural cable containing many axons.
7. The selective permeability of a neural membrane creates a(n)
- A) myelin sheath.
  - B) resting potential.
  - C) neural network.
  - D) reuptake.
  - E) dendrite.
8. Reuptake refers to the
- A) movement of neurotransmitter molecules across a synaptic gap.
  - B) release of hormones into the bloodstream.
  - C) inflow of positively charged ions through an axon membrane.
  - D) reabsorption of excess neurotransmitter molecules by a sending neuron.
  - E) the ending of the refractory period.
9. Nerves are neural cables containing many
- A) hormones.
  - B) endorphins.
  - C) interneurons.
  - D) axons.
  - E) lesions.
10. Motor neurons are to the \_\_\_\_\_ nervous system as interneurons are to the \_\_\_\_\_ nervous system.
- A) sympathetic; parasympathetic
  - B) central; peripheral
  - C) autonomic; somatic
  - D) parasympathetic; sympathetic
  - E) peripheral; central

11. Hormones are the chemical messengers of the
- A) action potential.
  - B) autonomic nervous system.
  - C) endocrine system.
  - D) peripheral nervous system.
  - E) central nervous system.
12. Which endocrine gland regulates body growth?
- A) parathyroid
  - B) adrenal
  - C) thyroid
  - D) pituitary
  - E) pancreas
13. Epinephrine and norepinephrine are released by the
- A) thyroid gland.
  - B) pituitary gland.
  - C) parathyroids.
  - D) adrenal glands.
  - E) pancreas.
14. After a car swerves in front of you on the highway, you notice that your heart is still racing, even though you know you are no longer in danger. Why do the physical symptoms of fear linger even after we cognitively realize the danger has passed?
- A) Dopamine controls fear, and this chemical takes a certain amount of time to break down in your system.
  - B) Endocrine messages tend to outlast the effects of neural messages.
  - C) Excitatory neurotransmitters travel faster than inhibitory neurotransmitters.
  - D) The parasympathetic nervous system is less effective than the sympathetic nervous system.
  - E) The adrenal glands tend to act more quickly than the rest of the endocrine system.
15. The body's speedy, electrochemical information system is called the
- A) circulatory system.
  - B) threshold.
  - C) action potential.
  - D) nervous system.
  - E) endocrine system.

16. Within a single neuron the action potential
- A) is generated in the dendrites.
  - B) will be slower if myelin is present.
  - C) depends on the movement of charged calcium atoms.
  - D) travels in one direction toward the axon terminals.
  - E) crosses the synapse to the adjacent neurons.
17. The depolarization of a neural membrane can create a(n)
- A) action potential.
  - B) myelin sheath.
  - C) lesion.
  - D) neural network.
  - E) interneuron.
18. The movement of positively charged ions across the membrane of a neuron can produce a(n)
- A) action potential.
  - B) synapse.
  - C) neurotransmitters.
  - D) myelin sheath.
  - E) interneuron.
19. The speed at which a neural impulse travels is increased when the axon is encased by a(n)
- A) sympathetic nerve.
  - B) myelin sheath.
  - C) endocrine gland.
  - D) pituitary gland.
  - E) synaptic vesicle.
20. The chemical messengers released into the spatial junctions between neurons are called
- A) hormones.
  - B) neurotransmitters.
  - C) synapses.
  - D) sensory neurons.
  - E) motor neurons.

## Answer Key

1. C
2. C
3. D
4. C
5. D
6. D
7. B
8. D
9. D
10. E
11. C
12. D
13. D
14. B
15. D
16. D
17. A
18. A
19. B
20. B