

*Test Bank for Introduction to Behavioral
Neuroscience 1st Edition by Elizabeth,
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TEST BANKS



Introduction to

Behavioral Neuro- science

Chapter 1: Structure and Function of the Nervous System

Multiple Choice

1. Axons are _____ and dendrites are _____.
 - A. presynaptic; postsynaptic*
 - B. postsynaptic; presynaptic
 - C. peri-synaptic; somatic
 - D. somatic; peri-synaptic

Bloom's Level 1. Remembering

2. In immunofluorescent labeling, what is being detected (bound) by antibodies?
 - A. A specific cell type, like neuron or glia
 - B. A specific protein*
 - C. A fluorescent tag
 - D. A specific mRNA

Bloom's Level 1. Remembering

3. The _____ nervous system is composed of the brain and spinal cord.
 - A. central*
 - B. peripheral
 - C. radial
 - D. cephalic

Bloom's Level 1. Remembering

4. A brain section cut along the midline, separating right and left hemispheres is:
 - A. coronal.
 - B. sagittal.*
 - C. horizontal.
 - D. parallel.

Bloom's Level 2. Understanding

5. Where in the brain are the lateral ventricles located?
 - A. Telencephalon*
 - B. Diencephalon
 - C. Mesencephalon
 - D. Metencephalon

Bloom's Level 1. Remembering

6. Motor neuron cell bodies are found in the:
- A. dorsal root ganglion.
 - B. ventral roots.
 - C. dorsal horns of the spinal cord.
 - D. ventral horns of the spinal cord.*

Bloom's Level 1. Remembering

7. The parietal lobe is most important for which of the following?
- A. Vision
 - B. Language
 - C. Memory functions
 - D. Somatic sensation*

Bloom's Level 1. Remembering

8. Which brain region helps smooth motor movements and is especially sensitive to the effects of alcohol?
- A. The primary motor cortex
 - B. The basal ganglia
 - C. The cerebellum*
 - D. The reticular formation

Bloom's Level 1. Remembering

9. Your peripheral nervous system:
- A. is all consciously controlled/perceived .
 - B. is all unconsciously controlled/perceived.
 - C. has both consciously controlled and perceived components and components that are not consciously controlled or perceived.*
 - D. all connects to your central nervous system via spinal nerves.

Bloom's Level 2. Understanding

10. Male and female human brains:
- A. are extremely different structurally; you could identify someone as male or female by just looking at their MRI.
 - B. are NOT structurally different in any meaningful way; you could NOT identify someone as male or female by just looking at their MRI.*
 - C. are completely the same.
 - D. Differ in whether they have forebrain vocal nuclei.

Bloom's Level 2. Understanding

11. The _____ nervous system mediates our conscious motor control while the _____ nervous system controls involuntary motor movements.
- A. somatic, autonomic*
 - B. autonomic, somatic
 - C. sympathetic, parasympathetic
 - D. parasympathetic, sympathetic

Bloom's Level 1. Remembering

12. Graded assessments are usually stressful for students. Which of the following is probably happening in a typical student taking a stressful exam or quiz?
- A. Their sympathetic nervous system is more active than usual*
 - B. Their parasympathetic nervous system is more active than usual
 - C. Their autonomic nervous system is more active than usual
 - D. Their somatosensory nervous system is mostly off

Bloom's Level 2. Understanding

13. Which part of the nervous system communicates most with your visceral organs?
- A. Autonomic*
 - B. Somatic
 - C. Sympathetic
 - D. Cranial

Bloom's Level 2. Understanding

14. Which of the following is **not** part of the peripheral nervous system?
- A. The sympathetic nervous system
 - B. The parasympathetic nervous system
 - C. The enteric nervous system
 - D. The brain stem*

Bloom's Level 1. Remembering

Chapter 1: Structure and Function of the Nervous System

Fill in the Blank

15. According to the Central Dogma, DNA is transcribed into _____ which is translated into _____.

Answer: RNA or mRNA / protein

Bloom's Level 1. Remembering

16. _____ are structures that contain collections of neuronal cell bodies and are found in animals above the level of the phylum Cnidaria, such as flatworms Multiple choice.

Answer: Ganglia

Bloom's Level 1. Remembering

17. _____ are mesh-like systems of separate, yet interconnected neurons (not clustered into nerves or centralized)

Answer: Neural nets

Bloom's Level 1. Remembering

18. All sensory information (except smell) goes through the _____.

Answer: thalamus

Bloom's Level 1. Remembering

19. _____ nerves are a part of the peripheral nervous system and emerge directly from the spinal cord.

Answer: Spinal

Bloom's Level 1. Remembering

20. The enteric nervous system is connected to the brain via the_____.

Answer: gut-brain axis

Bloom's Level 1. Remembering

Chapter 1: Structure and Function of the Nervous System

Application Questions for Collaborative Learning

21. An individual suffers a lesion to the right half of the spinal cord in the lower thoracic region. What symptoms would you expect to be present? You will need to check out chapter 9 for differences between the organization of the pain/temperature pathways versus the touch/pressure pathways. In your answer, include a drawing of the spinal cord and these sensory/motor tracts.

Answer:

Motor loss and loss of touch/proprioception in the right leg. Loss of pain and temperature sensation in the left leg.

Bloom's Level 4. Analyzing

22. The left middle cerebral artery (MCA) supplies blood to the left hemisphere of the brain, including portions of the left temporal, frontal, and parietal lobes (see image 1.47 for details). If an individual suffered a stroke that temporarily blocked the left MCA, what deficits would you expect to be present?

Answer:

Right side weakness/paralysis and sensory loss

Speech impairment

Right visual field defect

Bloom's Level 3. Applying

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