Practice test 1 spring 2011 copy

Student: ____________________________________________

1. The fundamental units of the nervous system are nerve cells, called:
   A. axons
   B. glial cells
   C. neurons
   D. neurotransmitters

2. Which of the following is NOT one of the functions of glial cells?
   A. They nourish nerve cells.
   B. They communicate messages within the nervous system.
   C. They help repair damage that might occur to neurons.
   D. All of these are functions of glial cells.

3. The branch-like fibers extending in clusters from the neuron's cell body are called:
   A. axons
   B. terminal buttons
   C. glial fibers
   D. dendrites

4. Compare your forearm, hand, and fingers to a neuron. In such an analogy, the dendrites would be your:
   A. forearm
   B. fingers
   C. hand
   D. knuckles

5. Dendrite is to axon as _________ is to __________.
   A. receiving; sending
   B. sending; receiving
   C. reuptake; action potential
   D. action potential; reuptake

6. Electrical wires are generally protected by a tube of plastic. A similar insulating function is performed in the nervous system by:
   A. myelin
   B. glial cells
   C. terminal buttons
   D. None of these

7. A synapse is a(n):
   A. chemical
   B. signal
   C. joint
   D. gap

8. Regarding neurotransmission, which of the following statements is TRUE?
   A. Neurotransmitters always increase the likelihood that a receiving neuron will fire.
   B. Neurotransmitters may decrease the likelihood that a receiving neuron will fire.
   C. A given neuron's dendrites receive either only excitatory or only inhibitory messages.
   D. Both B and C are true.
9. The neurotransmitter dopamine is involved in:
   A. attention and learning
   B. Parkinson's disease
   C. schizophrenia
   D. All of these

10. Which disorder is CORRECTLY paired with an associated neurotransmitter?
    A. Parkinson's disease; dopamine
    B. depression; glutamate
    C. schizophrenia; serotonin
    D. Alzheimer's disease; endorphins

11. At the broadest level, the nervous system is divided into the _______ and the _______ nervous systems.
    A. primary; secondary
    B. somatic; autonomic
    C. sympathetic; parasympathetic
    D. central; peripheral

12. The brain and the spinal cord constitute the _______ nervous system.
    A. central
    B. peripheral
    C. primary
    D. autonomic

13. Automatic, involuntary responses to stimuli are termed:
    A. action potentials
    B. conditioned responses
    C. instincts
    D. reflexes

14. The two major divisions of the peripheral nervous system are the _______ and _______ divisions.
    A. somatic; autonomic
    B. sympathetic; parasympathetic
    C. afferent; efferent
    D. sensory; motor

15. The central nervous system consists of ____________. The peripheral nervous system comprises ____________.
    A. the somatic and autonomic nervous systems; the sympathetic and parasympathetic nervous systems
    B. the somatic and autonomic nervous systems; the brain and the spinal cord
    C. the sympathetic and parasympathetic nervous systems; the somatic and autonomic nervous systems
    D. the brain and the spinal cord; the somatic and autonomic nervous systems

16. Somatic is to autonomic as _______ is to _______.
    A. involuntary; voluntary
    B. voluntary; involuntary
    C. excitation; rest
    D. rest; excitation

17. Excitation is to rest as _______ is to _______.
    A. autonomic; somatic
    B. somatic; autonomic
    C. sympathetic; parasympathetic
    D. parasympathetic; sympathetic
18. Which of the following situations is most likely to involve the action of the parasympathetic nervous system?
   A. Brooke's finger accidentally grazes the hot iron; she immediately jerks her hand away.
   B. After a satisfying evening meal, Callum relaxes in front of the television.
   C. Walking toward her car in a deserted parking garage one night, Danica is surprised by a strange man appearing from nowhere.
   D. None of these

19. Izzy's pupils are dilated and her heart is pounding; her breathing is shallow and rapid. Her ________ nervous system is active.
   A. parasympathetic
   B. sympathetic
   C. autonomic
   D. somatic

20. Which of the following is NOT a brain scanning technique?
   A. electroencephalogram (EEG)
   B. electromyogram (EMG)
   C. positron emission tomography (PET)
   D. transcranial magnetic stimulation (TMS)

21. Brent is taking part in an experiment in the cognitive neuroscience lab on campus. Silently, he reads rapid sequences of words flashed on a computer screen. Simultaneously, the electrical activity of his brain is recorded through skull electrodes. The brain scanning technique used in this study is:
   A. fMRI
   B. PET
   C. EEG
   D. TMS

22. Marisol is trying a new treatment for severe depression. Brief pulses are sent through her brain. Marisol is undergoing:
   A. optogenetic therapy
   B. transcranial magnetic stimulation
   C. positron emission tomography
   D. functional magnetic resonance imaging

23. The part of brain closest to the spinal cord is the ________: it is important for such functions as ________.
   A. cerebellum; movement and motor coordination
   B. cerebellum; heart rate and respiration
   C. medulla; movement and motor coordination
   D. medulla; heart rate and respiration

24. Ultimately extending from the medulla into the forebrain, the _______ functions to increase or decrease the brain's arousal in response to external stimulation.
   A. reticular formation
   B. thalamus
   C. cerebellum
   D. limbic system

25. Yves has been drinking. He has difficulty walking a straight line when asked to do so by a police officer. Apparently, Yves' ________ is functioning poorly.
   A. thalamus
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   C. corpus callosum
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26. Information travels from our sensory receptors to the _______ in the brain, which relays it to higher association areas.
   A. thalamus
   B. cerebellum
   C. hypothalamus
   D. amygdala

27. Pizza! Beer! Sex! Our motivation or drive for such things is based in part on the activity of the brain region known as the:
   A. hypothalamus
   B. thalamus
   C. hippocampus
   D. amygdala

28. The hypothalamus:
   A. maintains homeostasis
   B. regulates survival-directed behavior
   C. Both A and B
   D. Neither A nor B

29. The ________ in the brain contributes to the body's maintenance of a steady internal physiological state, called ________.
   A. hippocampus; homeostasis
   B. hypothalamus; homeostasis
   C. hippocampus; equilibrium
   D. hypothalamus; equilibrium

30. The amygdala is to emotion as the hippocampus is to:
   A. memory
   B. movement
   C. decision making
   D. vision
Practice test 1 spring 2011 copy Key

1. The fundamental units of the nervous system are nerve cells, called:
   (p. 61)
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   APA Goal: Outcomes 1.2, 4.2
   Bloom's Taxonomy: Comprehension
   Difficulty: Moderate
   Feldman - Chapter 03 #22

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   APA Goal: Outcomes 1.2, 4.2
   Bloom's Taxonomy: Comprehension
   Difficulty: Difficult
   Feldman - Chapter 03 #23

9. The neurotransmitter dopamine is involved in:
   A. attention and learning
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   APA Goal: Outcomes 1.2, 4.2
   Bloom's Taxonomy: Comprehension
   Difficulty: Moderate
   Feldman - Chapter 03 #25

10. Which disorder is CORRECTLY paired with an associated neurotransmitter?
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    APA Goal: Outcomes 1.2, 4.2
    Bloom's Taxonomy: Comprehension
    Difficulty: Moderate
    Feldman - Chapter 03 #28

11. At the broadest level, the nervous system is divided into the _________ and the _______ nervous systems.
    A. primary; secondary
    B. somatic; autonomic
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    APA Goal: Outcome 1.2
    Bloom's Taxonomy: Analysis
    Difficulty: Basic
    Feldman - Chapter 03 #32

12. The brain and the spinal cord constitute the _______ nervous system.
    A. central
    B. peripheral
    C. primary
    D. autonomic

    APA Goal: Outcome 1.2
    Bloom's Taxonomy: Knowledge
    Difficulty: Basic
    Feldman - Chapter 03 #33
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