TEST BANK FOR PSYCHOLOGY IN EVERYDAY LIFE 5TH EDITION MYERS

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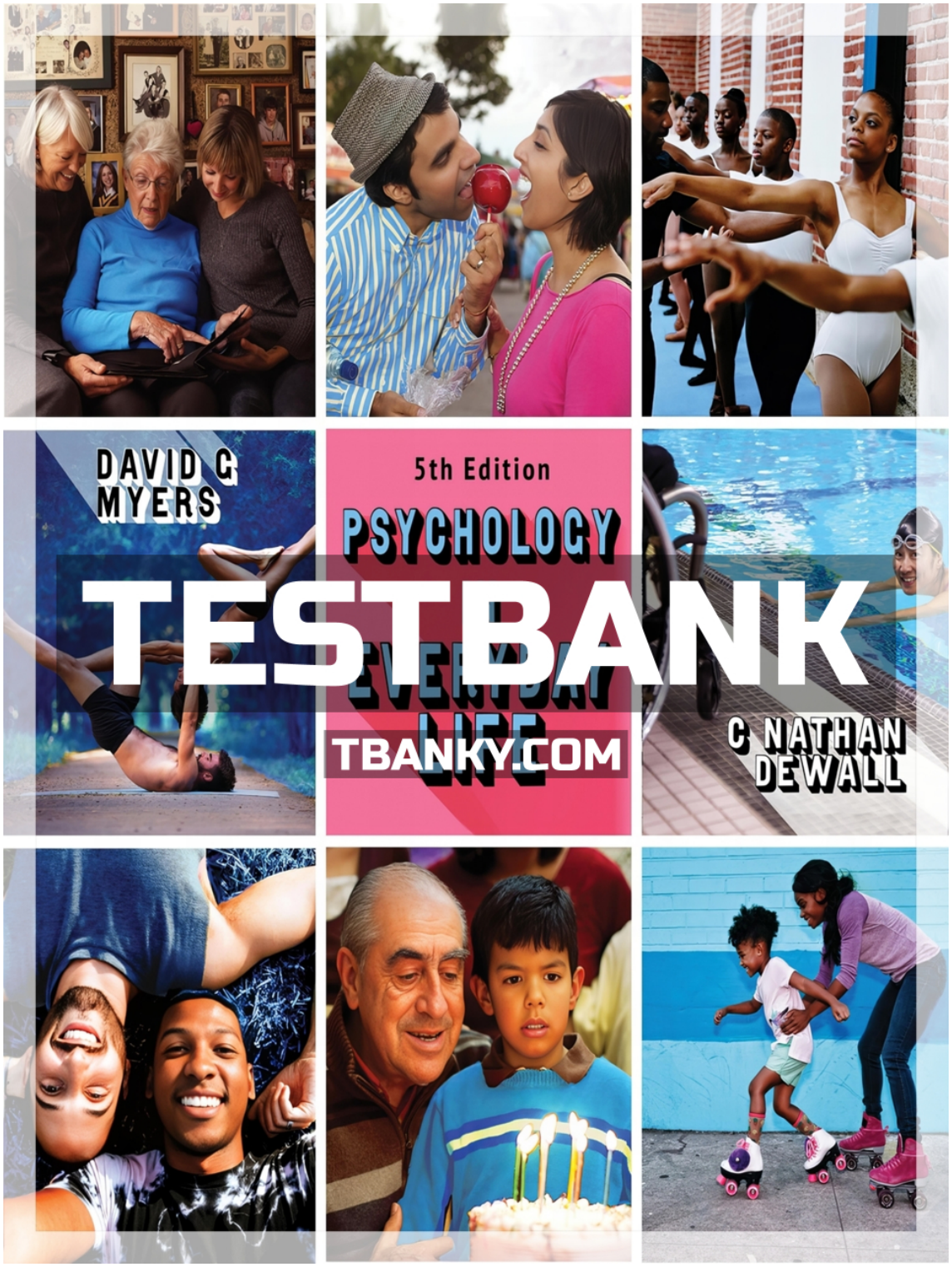

Name:_____ Class:_____ Date:_____

TB1 Chapter 02: Multiple Choice

1. Plasticity refers to the brain's capacity to change by forming new neural pathways based on
   a. refractory periods.
   b. lateralization.
   c. experience.
   d. reuptake.

ANSWER: c

2. Jane suffered brain damage as a result of a serious car accident when she was only 13 months old. Fortunately, her brain recovered because _____ is strongest in early childhood.
   a. cerebral cortex maturation
   b. plasticity
   c. folding of the four lobes
   d. localization of simple brain functions

ANSWER: b

3. Blind echolocation experts who can use the brain's visual centers to navigate their surroundings best illustrate the value of
   a. plasticity.
   b. reuptake.
   c. endorphins.
   d. refractory periods.

ANSWER: a

4. Many years of intensive dance practice have led to changes in Allysa's motor cortex that enable her skilled leg movements. This best illustrates the value of
   a. reuptake.
   b. echolocation.
   c. plasticity.
   d. lateralization.

ANSWER: c

5. Neurons are best described as
   a. brief electrical charges that travel down the axon.
   b. chemical molecules that cross the synaptic gap.
   c. nerve cells that function as the building blocks of the nervous system.
   d. bundled axon cables that connect the CNS with muscles, glands, and sense organs.

ANSWER: c

6. The part of the neuron that contains the nucleus is called the
   a. cell body.
   b. dendrite.

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c. axon.
d. myelin sheath.

ANSWER: a

7. Dendrites are branching extensions of
a. neurotransmitters.
b. endorphins.
c. neurons.
d. glial cells.

ANSWER: c

8. The function of dendrites is to
a. receive incoming signals from other neurons.
b. release neurotransmitters into the spatial junctions between neurons.
c. coordinate the activation of the parasympathetic and sympathetic nervous systems.
d. control pain through the release of opiate-like chemicals into the brain.

ANSWER: a

9. 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. a molecule that blocks neurotransmitter receptor sites.
d. the extension of a neuron that carries messages away from the cell body.

ANSWER: d

10. Dendrite is to _____ as axon is to _____.
a. sensory neuron; motor neuron
b. sympathetic nervous system: parasympathetic nervous system
c. signal reception; signal transmission
d. central nervous system; peripheral nervous system

ANSWER: c

11. In transmitting sensory information to the brain, an electrical signal travels from the _____ of a single neuron.
a. dendrites to the axon to the cell body
b. axon to the cell body to the dendrites
c. dendrites to the cell body to the axon
d. axon to the dendrites to the cell body

ANSWER: c

12. Action potentials, or nerve impulses, are

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a. chemical messengers.
b. hormones.
c. dendrites.
d. electrical signals.

ANSWER: d

13. An electrical signal that travels down the axon of a neuron is called the
a. synapse.
b. myelin sheath.
c. action potential.
d. refractory period.

ANSWER: c

14. Queen bees are to _____ as worker bees are to _____.
a. neurons; glial cells
b. cell bodies; dendrites
c. axons; glial cells
d. dendrites; axons

ANSWER: a

15. Neurons are surrounded by _____, which guide neural connections and clean up after neurons send messages to one another.
a. endorphins
b. glial cells
c. hormones
d. SSRIs

ANSWER: b

16. One function of glial cells is to
a. increase the speed of neural impulses.
b. mimic the effects of neurotransmitters.
c. provide nutrients to neurons.
d. stimulate the production of hormones.

ANSWER: c

17. Glial cells provide _____, the layer of fatty tissue that insulates some neurons.
a. synapses
b. myelin
c. dendrites
d. axons

ANSWER: b

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18. _____ play(s) an important role in information processing.
    a. Myelin
    b. Glial cells
    c. Dendrites
    d. Axons

ANSWER: b

19. A myelin sheath is a
    a. nerve network within the spinal cord that controls physical arousal.
    b. large band of neural fibers connecting the two adrenal glands.
    c. layer of fatty tissue encasing the axons of some nerve cells.
    d. bushy extension of a neuron that conducts impulses toward the cell body.

ANSWER: c

20. The speed at which a neural impulse travels is increased when the axon is encased by a(n)
    a. endorphin.
    b. myelin sheath.
    c. glial cell.
    d. synaptic vesicle.

ANSWER: b

21. Mathematical computations by a computer are faster than your quickest mathematical computations because the top speed of a neural impulse is about _____ times slower than the speed of electricity through the wired circuitry in a computer.
    a. 300
    b. 3000
    c. 300,000
    d. 3,000,000

ANSWER: d

22. A synapse is a(n)
    a. chemical messenger that triggers muscle contractions.
    b. automatic response to sensory input.
    c. junction between a sending neuron and a receiving neuron.
    d. electrical cable containing many axons.

ANSWER: c

23. The axon of a sending neuron is separated from the dendrite of a receiving neuron by a
    a. myelin sheath.
    b. neural network.

c. glial cell.
d. synaptic gap.

ANSWER: d

24. The signals that a neuron receives are
a. always excitatory.
b. always inhibitory.
c. mostly excitatory and sometimes inhibitory.
d. never excitatory nor inhibitory.

ANSWER: c

25. Most signals that neurons receive from other neurons are _____, speeding up the neuron; some, however, are _____, slowing it down.
a. refractory; reuptake
b. reuptake; refractory
c. inhibitory; excitatory
d. excitatory; inhibitory

ANSWER: d

26. To trigger an action potential, the excitatory signals must _____ the inhibitory signals by a minimum intensity, or _____.
a. exceed; threshold
b. exceed; synapse
c. be less than; threshold
d. be less than; synapse

ANSWER: a

27. The minimum level of stimulation required to trigger a neural impulse is called the
a. reflex.
b. threshold.
c. synapse.
d. action potential.

ANSWER: b

28. Excitatory signals to a neuron must exceed inhibitory signals by a minimum intensity in order to trigger
a. reuptake.
b. a refractory period.
c. an action potential.
d. neurogenesis.

ANSWER: c

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TB1 Chapter 02: Multiple Choice

29. Jane is explaining how neurons communicate to her friend. How should she best define threshold for her friend?
    a. It is the tiny gap between neurons.
    b. It is a nerve impulse.
    c. It is the level of stimulation required to trigger a neural impulse.
    d. It is a brief resting pause that occurs after a neuron has fired.

ANSWER: c

30. When a neuron fires
    a. an impulse travels down its axon, carrying information to another cell.
    b. the synaptic gap closes.
    c. inhibitory signals are automatically sent to neighboring cells.
    d. nothing happens.

ANSWER: a

31. The refractory period that occurs after a neuron has fired is a time interval in which
    a. chemical messengers cross synaptic gaps between neurons.
    b. a neurotransmitter is reabsorbed by a sending neuron.
    c. an action potential cannot occur.
    d. an organism reflexively withdraws from a pain stimulus.

ANSWER: c

32. Increasing excitatory signals above the threshold for a neuron to fire will not affect the intensity of an action potential. This indicates that a neuron's reaction
    a. is inhibited by the myelin sheath.
    b. is delayed by a refractory period.
    c. is an all-or-none response.
    d. depends on neurotransmitter molecules.

ANSWER: c

33. A neuron's reaction of either firing at full strength or not firing at all is described as
    a. an all-or-none response.
    b. a refractory period.
    c. neural plasticity.
    d. a reflexive response.

ANSWER: a

34. Guns either fire or they don't, just like the _____ of a neuron.
    a. all-or-none response
    b. excitatory signals
    c. reuptake process

d. inhibitory signals

ANSWER: a

35. Abigail believes that neurons fire a little at a time. Based on what you have learned about how neurons communicate, how would you explain the firing of a neuron?
a. the refractory response
b. reuptake response
c. inhibitory responses
d. an all-or-none response

ANSWER: d

36. A slap on the back is more painful than a pat on the back because a slap triggers
a. the release of endorphins.
b. more intense neural impulses.
c. the release of GABA.
d. more neurons to fire, and to fire more often.

ANSWER: d

37. When an action potential reaches the end of an axon, an electrical impulse is then converted into a
a. myelin sheath.
b. reflexive response.
c. chemical message.
d. glial cell.

ANSWER: c

38. Neuron-produced chemicals that carry messages to other neurons or to muscles and glands are called
a. synapses.
b. interneurons.
c. dendrites.
d. neurotransmitters.

ANSWER: d

39. The chemical messengers released into the spatial junctions between neurons are called
a. hormones.
b. neurotransmitters.
c. interneurons.
d. glial cells.

ANSWER: b

40. Neurotransmitters are released from terminal branches of the
a. dendrites.

b. cell body.
c. axon.
d. myelin sheath.

ANSWER: c

41. Reuptake refers to the
a. movement of neurotransmitter molecules across a synaptic gap.
b. release of hormones into the bloodstream.
c. resting pause that occurs after a neuron has fired.
d. reabsorption of excess neurotransmitter molecules by a sending neuron.

ANSWER: d

42. The number of neurotransmitter molecules located within a specific synaptic gap would most clearly be reduced by
a. an action potential.
b. ACh-producing neurons.
c. lateralization.
d. reuptake.

ANSWER: d

43. Some popularly prescribed antidepressants are called
a. selective serotonin reuptake inhibitors.
b. neurotransmitters.
c. all-or-none responders.
d. endorphins.

ANSWER: a

44. SSRIs relieve depression by partially blocking the reuptake of
a. acetylcholine.
b. serotonin.
c. dopamine.
d. glutamate.

ANSWER: b

45. The neurotransmitter dopamine is responsible for all of the following EXCEPT
a. learning.
b. hunger.
c. attention.
d. pleasure.

ANSWER: b

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TB1 Chapter 02: Multiple Choice

46. Serotonin is NOT associated with
    a. attention.
    b. hunger.
    c. sleepiness.
    d. arousal.

ANSWER: a

47. Which neurotransmitter plays the most direct role in learning and memory?
    a. dopamine
    b. acetylcholine
    c. GABA
    d. oxytocin

ANSWER: b

48. Mr. Hernandez's symptoms of confusion and memory loss have led his physicians to conclude that he suffers from Alzheimer's disease. His symptoms are most likely to be linked with a deterioration of brain cells that produce the neurotransmitter
    a. dopamine.
    b. acetylcholine.
    c. epinephrine.
    d. endorphins.

ANSWER: b

49. Which neurotransmitter influences movement, learning, attention, and emotion?
    a. ACh
    b. dopamine
    c. serotonin
    d. GABA

ANSWER: b

50. Schizophrenia is most closely linked to an oversupply of the neurotransmitter
    a. dopamine.
    b. epinephrine.
    c. acetylcholine.
    d. serotonin.

ANSWER: a

51. Mr. Stetson suffers from Parkinson's disease and his shaking arm movements are so severe that he has difficulty feeding or dressing himself without help. His symptoms are most likely to be linked with an undersupply of the neurotransmitter
    a. cortisol.
    b. dopamine.

c. serotonin.
d. oxytocin.

ANSWER: b

52. An undersupply of serotonin is most closely linked to
a. Alzheimer's disease.
b. schizophrenia.
c. Parkinson's disease.
d. depression.

ANSWER: d

53. Sherry has been somewhat depressed lately. Her physician believes that the neurotransmitter that influences alertness and arousal is the root of her depression. Which neurotransmitter may be the culprit?
a. dopamine
b. serotonin
c. GABA
d. norepinephrine

ANSWER: d

54. An undersupply of the major inhibitory neurotransmitter known as _____ is linked to insomnia.
a. glutamate
b. GABA
c. serotonin
d. ACh

ANSWER: b

55. Christopher's seizures have led him to seek medical help. It is likely that his symptoms are most closely linked to an
a. oversupply of GABA.
b. undersupply of serotonin.
c. oversupply of glutamate.
d. undersupply of acetylcholine.

ANSWER: c

56. Opiate drugs _____ neural activity and temporarily _____ pain and anxiety.
a. depress; increase
b. accelerate; decrease
c. depress; decrease
d. accelerate; increase

ANSWER: c

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TB1 Chapter 02: Multiple Choice

57. Which of the following is an opiate that elevates mood and eases pain?
    a. GABA
    b. acetylcholine
    c. morphine
    d. glutamate

ANSWER: c

58. Opiate-like neurotransmitters linked to pain control and to feelings of pleasure are known as
    a. glia.
    b. SSRIs.
    c. endorphins.
    d. glutamates.

ANSWER: c

59. Endorphins are
    a. neurotransmitters.
    b. sex hormones.
    c. endocrine glands.
    d. glial cells.

ANSWER: a

60. Opiate drugs occupy the same receptor sites as
    a. serotonin.
    b. endorphins.
    c. dopamine.
    d. epinephrine.

ANSWER: b

61. Ricardo was the goalie in a long, bruising soccer game but feels little fatigue or discomfort. His lack of pain is most likely caused by the release of
    a. glutamate.
    b. dopamine.
    c. acetylcholine.
    d. endorphins.

ANSWER: d

62. Deidra has been doing aerobic exercise daily for more than three years. The release of _____ can help explain why she feels good after exercising.
    a. axons
    b. neurons
    c. endorphins

d. glial cells

ANSWER: c

63. The body's natural production of endorphins is likely to be
a. increased by heroin use and increased by vigorous exercise.
b. decreased by heroin use and decreased by vigorous exercise.
c. increased by heroin use and decreased by vigorous exercise.
d. decreased by heroin use and increased by vigorous exercise.

ANSWER: d

64. Kevin's intensely uncomfortable withdrawal symptoms following heroin use were probably due in part to a reduction in his body's normal production of
a. dopamine.
b. epinephrine.
c. acetylcholine.
d. endorphins.

ANSWER: d

65. Mathilda believes in the healing effects of acupuncture and frequently advocates for its use. Researchers have been able to confirm its effectiveness and credit _____ for its effects.
a. GABA
b. endorphins
c. glutamate
d. ACh

ANSWER: b

66. The nervous system is
a. the complete set of glands that secrete hormones into the bloodstream.
b. the collection of bundled axons that form electrical cables carrying information to the body's muscles.
c. an organism's complete set of automatic reflex responses.
d. the electrochemical communication network that includes all the body's neurons.

ANSWER: d

67. The two major divisions of the nervous system are the central nervous system and the _____ nervous system.
a. autonomic
b. sympathetic
c. somatic
d. peripheral

ANSWER: d

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TB1 Chapter 02: Multiple Choice

68. The central nervous system consists of
a. sensory and motor neurons.
b. somatic and autonomic systems.
c. the brain and the spinal cord.
d. sympathetic and parasympathetic branches.

ANSWER: c

69. Which nervous system is responsible for gathering information and transmitting decisions from the CNS to other parts of the body?
a. sympathetic nervous system
b. peripheral nervous system
c. somatic nervous system
d. autonomic nervous system

ANSWER: b

70. Devin is playing soccer. Instructions about where and how to move are carried from his CNS to his muscles by
a. the myelin sheath.
b. interneurons.
c. motor neurons.
d. sensory neurons.

ANSWER: c

71. Information travels through axons that are bundled into the cables we call
a. interneurons.
b. action potentials.
c. nerves.
d. reflex pathways.

ANSWER: c

72. You feel the pain of a sprained ankle when _____ relay(s) messages from your ankle to your central nervous system.
a. the myelin sheath
b. interneurons
c. motor neurons
d. sensory neurons

ANSWER: d

73. Sensory neurons are located in the
a. synaptic gaps.
b. endocrine system.

c. peripheral nervous system.
d. myelin sheath.

ANSWER: c

74. Information is carried from the central nervous system to the body's tissues by
a. interneurons.
b. sensory neurons.
c. motor neurons.
d. adrenal glands.

ANSWER: c

75. Some neurons enable you to kick a soccer ball by relaying outgoing messages to the muscles in your legs and feet. These neurons are called
a. interneurons.
b. sensory neurons.
c. neurotransmitters.
d. motor neurons.

ANSWER: d

76. Motor neurons transmit signals to
a. glands.
b. interneurons.
c. sensory neurons.
d. all of these parts.

ANSWER: a

77. Neurons that function within the brain and spinal cord are called
a. sensory neurons.
b. interneurons.
c. endorphins.
d. motor neurons.

ANSWER: b

78. Central nervous system neurons that process information between sensory inputs and motor outputs are called
a. neurotransmitters.
b. interneurons.
c. synapses.
d. dendrites.

ANSWER: b

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TB1 Chapter 02: Multiple Choice

79. The two parts of the peripheral nervous system are the
    a. brain and spinal cord.
    b. sympathetic nervous system and parasympathetic nervous system.
    c. endocrine system and circulatory system.
    d. somatic nervous system and the autonomic nervous system.

ANSWER: d

80. The somatic nervous system is a component of the _____ nervous system.
    a. peripheral
    b. central
    c. sympathetic
    d. parasympathetic

ANSWER: a

81. Messages are transmitted from your spinal cord to muscles in your back by the _____ nervous system.
    a. somatic
    b. parasympathetic
    c. sympathetic
    d. autonomic

ANSWER: a

82. The part of the peripheral nervous system that controls the movements of your mouth and jaws as you eat is called the
    a. somatic nervous system.
    b. sympathetic nervous system.
    c. endocrine system.
    d. autonomic nervous system.

ANSWER: a

83. As you are sitting in the library reading a book, a friend approaches you from behind, places her hand on your shoulder, and says "Hi." Which part of your nervous system transfers this information to your brain and then gives you instructions to turn your head?
    a. autonomic
    b. sympathetic
    c. parasympathetic
    d. somatic

ANSWER: d

84. The part of the peripheral nervous system that controls the glands and the muscles of the internal organs is called the
    a. somatic nervous system.
    b. endocrine system.

TB1 Chapter 02: Multiple Choice

c. sensory nervous system.
d. autonomic nervous system.

ANSWER: d

85. Messages are transmitted from your spinal cord to your stomach by the
a. sensory nervous system.
b. somatic nervous system.
c. central nervous system.
d. autonomic nervous system.

ANSWER: d

86. Which nervous system is self-regulating and named as such?
a. autonomic
b. sympathetic
c. parasympathetic
d. somatic

ANSWER: a

87. Which division of the autonomic nervous system arouses the body and mobilizes its energy in stressful situations?
a. the parasympathetic nervous system
b. the sympathetic nervous system
c. the somatic nervous system
d. the central nervous system

ANSWER: b

88. When a black bear suddenly appears in his front yard, Barry's _____ nervous system arouses and energizes him. When the bear is gone and the perceived threat is over, his _____ nervous system calms and conserves his energy.
a. autonomic; somatic
b. sympathetic; parasympathetic
c. somatic; autonomic
d. parasympathetic; sympathetic

ANSWER: b

89. You are asleep one night when you hear a rustling sound from downstairs. Your heart starts racing and you begin to perspire. These physical reactions are triggered by the
a. somatic nervous system.
b. sympathetic nervous system.
c. parasympathetic nervous system.
d. sensory nervous system.

TB1 Chapter 02: Multiple Choice

ANSWER: b

90. The parasympathetic nervous system
    a. stimulates digestion and slows heartbeat.
    b. inhibits digestion and accelerates heartbeat.
    c. stimulates digestion and accelerates heartbeat.
    d. inhibits digestion and slows heartbeat.

ANSWER: a

91. After discovering that the shadows outside his window were only the trees in the yard, James' blood pressure decreased and his heartbeat slowed. These physical reactions were most directly regulated by his
    a. parasympathetic nervous system.
    b. sympathetic nervous system.
    c. somatic nervous system.
    d. sensory nervous system.

ANSWER: a

92. An accelerated heartbeat is to a slowed heartbeat as the _____ nervous system is to the _____ nervous system.
    a. somatic; autonomic
    b. autonomic; somatic
    c. sympathetic; parasympathetic
    d. parasympathetic; sympathetic

ANSWER: c

93. Neural networks refer to
    a. the branching extensions of a neuron.
    b. interrelated clusters of neurons in the central nervous system.
    c. electrical cables containing many axons.
    d. junctions between sending and receiving neurons.

ANSWER: b

94. The strengthening of the brain's synaptic connections facilitates the formation of
    a. interneurons.
    b. endorphins.
    c. neural networks.
    d. glial cells.

ANSWER: c

95. Marvin, a football quarterback, can simultaneously make calculations of receiver distances, player movements, and the force of his own arm movements needed to effectively throw a pass. This best illustrates the activity of multiple

TB1 Chapter 02: Multiple Choice

a. endocrine glands.
b. endorphins.
c. neural networks.
d. reticular formations.

ANSWER: c

96. The part of the central nervous system that carries information from your senses to your brain and motor-control information to your body parts is the
a. pituitary gland.
b. pancreas.
c. spinal cord.
d. myelin sheath.

ANSWER: c

97. The part of the _____ that carries information from your senses to your brain and motor-control information to your body parts is the spinal cord.
a. central nervous system
b. peripheral nervous system
c. parasympathetic nervous system
d. somatic nervous system

ANSWER: a

98. A simple, automatic, inborn response to a sensory stimulus is called a(n)
a. neural network.
b. action potential.
c. neurotransmitter.
d. reflex.

ANSWER: d

99. As Becky tries to remove the cookies she is baking from the stove, she accidentally touches the side of the stove with her hand, burning it. Becky instinctively moves her hand from the stove before realizing that she has burned her hand. This illustrates the
a. importance of the parasympathetic nervous system.
b. relevance of interneurons.
c. all-or-none response.
d. importance of reflexive responses.

ANSWER: d

100. The knee-jerk reflex is controlled by interneurons in the
a. synaptic gap.
b. spinal cord.

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c. sympathetic nervous system.
d. parasympathetic nervous system.

ANSWER: b

101. In a tragic biking accident, Dan damaged his spinal cord. As a result, his legs are paralyzed. Dan's injury was located in his
a. somatic nervous system.
b. autonomic nervous system.
c. sympathetic nervous system.
d. central nervous system.

ANSWER: d

102. Erik consistently exhibits a knee-jerk response without having any sensations of the taps on his knees. Erik's experience is most indicative of
a. neural plasticity.
b. a severed spinal cord.
c. a sympathetic nervous system injury.
d. a refractory period.

ANSWER: b

103. The endocrine system consists of the
a. communication network that includes all the body's neurons.
b. regions of the brain that regulate emotion.
c. interneurons within the spinal cord.
d. glands that secrete hormones.

ANSWER: d

104. Hormones are the chemical messengers of the
a. autonomic nervous system.
b. somatic nervous system.
c. endocrine system.
d. central nervous system.

ANSWER: c

105. The speedy nervous system zips messages by way of neurotransmitters. Endocrine messages, however, are delivered more slowly because hormones travel through
a. myelinated neurons.
b. the bloodstream.
c. glial cells.
d. interneurons.

ANSWER: b

TB1 Chapter 02: Multiple Choice

106. The _____ is similar to the nervous system in that both produce molecules that act on receptors elsewhere in the body.

a. central nervous system
b. endocrine system
c. peripheral nervous system
d. autonomic nervous system

ANSWER: b

107. The effects of _____ last longer than neural messages.

a. hormones
b. neurotransmitters
c. the nervous system
d. reflexes

ANSWER: a

108. Michelle and her boyfriend had a fight earlier in the day. Although they made up after the fight, Michelle still feels angry hours later. Why is this?

a. Central nervous system messages last an extended period.
b. Peripheral nervous system messages last an extended period.
c. Endocrine system messages last an extended period.
d. Parasympathetic nervous system messages last an extended period.

ANSWER: c

109. The ovaries in females and the testes in males are part of the

a. somatic nervous system.
b. endocrine system.
c. autonomic nervous system.
d. central nervous system.

ANSWER: b

110. The release of hormones by the adrenal glands is most likely to trigger

a. depression.
b. the fight-or-flight response.
c. the pain reflex.
d. a refractory period.

ANSWER: b

111. If your boss accused you of lying about a contract, your adrenal glands would probably release _____ into your bloodstream.

a. endorphins
b. acetylcholine

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c. epinephrine
d. oxytocin

ANSWER: c

112. The release of epinephrine into the bloodstream is most likely to
a. increase blood sugar.
b. lower blood pressure.
c. stimulate digestion.
d. decrease perspiration.

ANSWER: a

113. The hypothalamus influences the _____ to send messages to the _____.
a. adrenal glands; pancreas
b. pituitary; endocrine glands
c. motor neurons; sensory neurons
d. somatic nervous system; autonomic nervous system

ANSWER: b

114. At the age of 25, Mrs. Scott was 4 feet 2 inches tall. Mrs. Scott was probably so short because of the lack of a growth hormone produced by the
a. pancreas.
b. thyroid.
c. adrenal gland.
d. pituitary gland.

ANSWER: d

115. Laura and several classmates are studying for an upcoming test. As they talk, levels of oxytocin in Laura's bloodstream begin to rise. This is most likely to lead Laura to experience increased feelings of social
a. irritation.
b. envy.
c. trust.
d. anxiety.

ANSWER: c

116. Oxytocin is secreted by the
a. pancreas.
b. thyroid gland.
c. pituitary gland.
d. adrenal gland.

ANSWER: c

TB1 Chapter 02: Multiple Choice

117. Darleen is in labor with her first child. Which hormone is responsible for the contractions that she feels as part of labor?
a. ACh
b. glutamate
c. oxytocin
d. GABA
ANSWER: c

118. The fact that oxytocin aids both milk flow in nursing and orgasm suggests that oxytocin
a. is important for survival.
b. facilitates pleasurable sensations.
c. aids pair bonding.
d. promotes social bonding.
ANSWER: d

119. The master gland of the endocrine system is the
a. thyroid gland.
b. adrenal gland.
c. pituitary gland.
d. pancreas.
ANSWER: c

120. The pituitary gland is referred to as the "master gland" because it
a. directs other endocrine glands to release their hormones.
b. directs the hypothalamus to release its hormones.
c. is directed by the hypothalamus.
d. directs other adrenal glands to release their hormones.
ANSWER: a

121. A device that records waves of electrical activity sweeping across the surface of the brain is called a(n)
a. fMRI.
b. EEG.
c. PET scan.
d. MRI.
ANSWER: b

122. Erika is participating in a study in which she completes tasks while electrodes are placed on her scalp to record waves of electrical activity on the brain's surface. Which brain imaging technique is being used?
a. MRI
b. EEG
c. MEG

d. PET scan

ANSWER: b

123. Professor Costellese is interested in studying how the brain works. He is interested in learning how reading influences brain activity. Which technique is he likely to use to aid his research on the brain?

a. fMRI
b. PET
c. EEG
d. MEG

ANSWER: d

124. Which technique measures fields from the brain's natural electrical activity?

a. MRI
b. PET scan
c. EEG
d. MEG

ANSWER: d

125. By measuring magnetic fields from the brain's natural electrical activity, researchers are able to understand how certain tasks are related to brain activity in certain areas. This technique is called a(n)

a. EEG.
b. MEG.
c. PET scan.
d. MRI.

ANSWER: b

126. Garry just left his physician's office where he underwent a brain scan that measured the magnetic fields from his brain's neural electrical activity. Which brain scan was this?

a. MRI
b. EEG
c. MEG
d. PET scan

ANSWER: c

127. To identify which of Iona's brain areas was most active when she talked, neuroscientists gave her a temporarily radioactive form of glucose and a(n)

a. fMRI.
b. PET scan.
c. EEG.
d. MRI scan.

ANSWER: b

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128. Magnetic resonance imaging uses magnetic fields and _____ to produce computer-generated images of soft tissue.

a. radio waves
b. microelectrodes inserted into the brain
c. a radioactive form of glucose
d. electrodes placed on the scalp

ANSWER: a

129. Fluid-filled brain areas are called

a. ventricles.
b. pons.
c. the cerebellum.
d. lesions.

ANSWER: a

130. The best way to detect enlarged fluid-filled brain regions in some patients who have schizophrenia is to use a(n)

a. EEG.
b. MRI.
c. PET scan.
d. SSRI.

ANSWER: b

131. To detect Mr. Wagner's loss of brain tissue from a type of dementia, his physicians are most likely to request that he receive a(n)

a. EEG.
b. MRI scan.
c. SSRI.
d. PET scan.

ANSWER: b

132. To identify which specific brain areas are most active while a person is doing the multiplication tables, researchers would be most likely to make use of a(n)

a. fMRI.
b. microelectrode insertion.
c. MRI.
d. SSRI.

ANSWER: a

133. Wayne's doctor performed a test to reveal both the function and structure of his brain. Which brain scan was used?

a. MRI

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b. EEG
c. fMRI
d. PET

ANSWER: c

134. Researchers who found that symptoms of depression and anxiety correlated with increased activity in the right frontal lobe used the _____ to examine the brain.
a. EEG
b. MEG
c. PET
d. MRI

ANSWER: a

135. The study that is mapping long-distance brain fiber connections in search of what makes us human and what makes each human different from other humans is the
a. Brain Exposure Project.
b. Positron Emission Tomography Scan.
c. Human Connectome Project.
d. Organ of Agility Study.

ANSWER: c

136. Human brain complexity arises from new systems built on top of older ones. The remnants of humanity's most distant past involve components of the
a. amygdala.
b. hippocampus.
c. brainstem.
d. hypothalamus.

ANSWER: c

137. Basic automatic survival functions, such as heartbeat and breathing, are controlled by the
a. pons.
b. brainstem.
c. thalamus.
d. reticular formation.

ANSWER: b

138. The part of the brainstem that controls heartbeat and breathing is called the
a. cerebellum.
b. medulla.
c. amygdala.
d. thalamus.

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ANSWER: b

139. The part of the brainstem that helps to control sleep is called the
a. hypothalamus.
b. hippocampus.
c. amygdala.
d. pons.

ANSWER: d

140. Harry often struggles with sleep and coordinating his gross motor movements. Researchers have determined that the _____ is responsible for both of these functions.
a. medulla
b. pons
c. cerebellum
d. thalamus

ANSWER: b

141. If your _____ is destroyed, the right side of your brain could not control the movements of your left hand.
a. brainstem
b. hippocampus
c. amygdala
d. hypothalamus

ANSWER: a

142. The joined pair of egg-shaped brain structures that receives information from all your senses except smell is the
a. hippocampus.
b. amygdala.
c. pons.
d. thalamus.

ANSWER: d

143. The brain structure that acts as a sensory control center is the
a. medulla.
b. cerebellum.
c. thalamus.
d. hippocampus.

ANSWER: c

144. Darron lost his sense of taste because a tumor caused damage to a structure located on top of his brainstem. This structure is known as the

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a. amygdala.
b. thalamus.
c. medulla.
d. hippocampus.

ANSWER: b

145. Information from higher brain regions is transmitted to the medulla and cerebellum through the
a. hypothalamus.
b. hippocampus.
c. amygdala.
d. thalamus.

ANSWER: d

146. The reticular formation is a nerve network that travels through the _____ into the thalamus.
a. brainstem
b. amygdala
c. hypothalamus
d. cerebellum

ANSWER: a

147. Jazmine is cooking dinner while studying for her upcoming class exam. Which brain area is involved in this multitasking?
a. reticular formation
b. medulla
c. pons
d. cerebellum

ANSWER: a

148. Which region inside your brainstem plays a role in arousing you to a state of alertness when, for example, you trip over the slippers you accidentally left by your bed?
a. reticular formation
b. hypothalamus
c. amygdala
d. hippocampus

ANSWER: a

149. Severing a cat's reticular formation from higher brain regions causes the cat to
a. become violently aggressive.
b. cower in fear.
c. experience convulsive seizures.
d. lapse into a coma.

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ANSWER: d

150. Which baseball-sized structure behind the brainstem serves many functions, including helping you to control your emotions and aiding your vocabulary, reading, and ability to store information?

a. amygdala
b. cerebellum
c. hippocampus
d. reticular formation

ANSWER: b

151. The cerebellum regulates

a. hunger and thirst.
b. heartbeat and breathing.
c. physical coordination and balance.
d. fear and rage.

ANSWER: c

152. After Todd collided with a friend on his bicycle, doctors detected damage to his cerebellum. Todd is most likely to have difficulty

a. doing mathematical computations.
b. understanding what others are saying.
c. tasting the flavors of foods.
d. playing his guitar.

ANSWER: d

153. Which structure at the back of the brain helps process and store memories for things you cannot consciously recall, such as how to ride a skateboard?

a. amygdala
b. cerebellum
c. hypothalamus
d. reticular formation

ANSWER: b

154. As Cloe reads a new book, her _____ is involved in aiding her vocabulary, reading, and ability to store information.

a. medulla
b. pons
c. cerebellum
d. thalamus

ANSWER: a

155. By managing life-sustaining functions outside our awareness, the brainstem frees newer brain regions to

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enable our conscious thinking. This best illustrates the value of
a. the all-or-none response.
b. two-track processing.
c. neural plasticity.
d. the split brain.
ANSWER: b

156. A neural system at the border between the brainstem and the cerebral hemispheres is known as the
a. pons.
b. limbic system.
c. reticular formation.
d. medulla.
ANSWER: b

157. The sequence of brain regions from the oldest to newest is
a. limbic system, brainstem, cerebral cortex.
b. brainstem, cerebral cortex, limbic system.
c. limbic system, cerebral cortex, brainstem.
d. brainstem, limbic system, cerebral cortex.
ANSWER: d

158. The limbic system consists of
a. the amygdala, hypothalamus, and hippocampus.
b. the cerebral hemispheres and frontal lobes.
c. all four frontal lobes.
d. the motor cortex and somatosensory cortex.
ANSWER: a

159. The amygdala consists of lima-bean-sized, emotion-linked neural clusters in the
a. brainstem.
b. reticular formation.
c. limbic system.
d. cerebellum.
ANSWER: c

160. The amygdala is responsible for the regulation of
a. survival mechanisms.
b. hunger.
c. balance.
d. emotion.
ANSWER: d

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161. Carolyn is home alone when she hears someone trying to open her front door. She is immediately frightened. Which brain area is involved in her emotional response?

a. amygdala
b. hypothalamus
c. medulla
d. hippocampus

ANSWER: a

162. One woman no longer experienced fear even when threatened with a gun. Her fearlessness is best attributed to damage to her

a. pons.
b. cerebellum.
c. hypothalamus.
d. amygdala.

ANSWER: d

163. To demonstrate that brain stimulation can make a rat violently aggressive, a neuroscientist should electrically stimulate the rat's

a. reticular formation.
b. cerebellum.
c. medulla.
d. amygdala.

ANSWER: d

164. Given that enabling aggression and fear is a primary function of the amygdala, which of the following is true?

a. Other brain areas are also involved in our feeling afraid or acting aggressively.
b. Aggression and fear are strictly amygdala functions.
c. The limbic system is the only system that regulates emotions.
d. The amygdala works closely with the hypothalamus and hippocampus.

ANSWER: a

165. Which limbic system structure regulates hunger and thirst?

a. medulla
b. amygdala
c. hippocampus
d. hypothalamus

ANSWER: d

166. The brain structure that provides a major link between the nervous system and the endocrine system is the

a. cerebellum.

b. amygdala.
c. reticular formation.
d. hypothalamus.

ANSWER: d

167. Your hypothalamus secretes hormones based on signals it receives from the
a. motor cortex.
b. cerebral cortex.
c. somatosensory cortex.
d. association areas.

ANSWER: b

168. As Bryson thinks about having sex with his girlfriend, his hypothalamus secretes hormones that trigger the pituitary gland to
a. influence the hippocampus to release hormones.
b. activate a reward deficiency syndrome.
c. activate his cerebellum.
d. influence his sex glands to release their hormones.

ANSWER: d

169. James Olds and Peter Milner located reward centers in the brain structure known as the
a. hypothalamus.
b. cerebellum.
c. medulla.
d. amygdala.

ANSWER: a

170. Animal research has revealed one general reward system that triggers the release of the neurotransmitter
a. acetylcholine.
b. GABA.
c. dopamine.
d. epinephrine.

ANSWER: c

171. A brain tumor caused extensive damage to Mr. Roller's hypothalamus. It is most likely that he may suffer a loss of
a. visual perception.
b. muscular coordination.
c. sexual motivation.
d. language comprehension.

ANSWER: c

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172. The neural center in the limbic system that processes conscious, explicit memories of facts and events for storage is called the
a. hypothalamus.
b. thalamus.
c. hippocampus.
d. medulla.
ANSWER: c

173. Those who survive a hippocampal brain tumor in childhood are likely to have difficulty _____.
a. getting adequate sleep
b. remembering new information
c. maintaining body balance while walking
d. experiencing feelings of fear
ANSWER: b

174. After experiencing a series of head injuries while playing professional football, Art has begun to struggle with remembering the names of friends and even family members. His memory difficulties are most likely to be due to damage to his
a. hippocampus.
b. motor cortex.
c. amygdala.
d. hypothalamus.
ANSWER: a

175. Higher academic achievement has been linked to which brain structure?
a. the thalamus
b. the hippocampus
c. the medulla
d. the reticular formation
ANSWER: b

176. Eighty-five percent of human brain weight comes from the
a. hippocampus.
b. cerebrum.
c. corpus callosum.
d. frontal lobes.
ANSWER: b

177. The cerebral cortex is the covering layer of the
a. brainstem.
b. corpus callosum.

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c. hippocampus.
d. cerebrum.

ANSWER: d

178. The brain's thin surface layer, which serves as your body's ultimate control and information processing center, is the
a. limbic system.
b. cerebellum.
c. corpus callosum.
d. cerebral cortex.

ANSWER: d

179. The brain's left and right hemispheres are filled mainly with axons that
a. control the motor and somatosensory areas.
b. connect the cortex to other areas of the brain.
c. control the association areas of the brain.
d. monitor the various lobes of the brain.

ANSWER: b

180. Your conscious awareness of your own name and self-identity depends primarily on the normal functioning of your
a. somatosensory cortex.
b. amygdala.
c. motor cortex.
d. cerebral cortex.

ANSWER: d

181. Which portion of the cerebral cortex lies directly behind the forehead and is involved in speaking and muscle movements and in making plans and judgments?
a. temporal lobes
b. frontal lobes
c. parietal lobes
d. occipital lobes

ANSWER: b

182. Which portion of the cerebral cortex is roughly above the ears and includes areas that receive information from the ears?
a. parietal lobes
b. temporal lobes
c. occipital lobes
d. frontal lobes

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ANSWER: b

183. Which portion of the cerebral cortex is located nearest the top of the head just behind the frontal lobes and receives sensory input for touch and body position?
a. occipital lobes
b. hippocampus
c. parietal lobes
d. temporal lobes

ANSWER: c

184. The occipital lobes are to _____ as the temporal lobes are to _____.
a. hearing; sensing movement
b. seeing; sensing touch
c. seeing; hearing
d. speaking; hearing

ANSWER: c

185. The parietal lobes are to _____ as the temporal lobes are to _____.
a. speaking; sensing movement
b. seeing; sensing touch
c. sensory input; hearing
d. speaking; hearing

ANSWER: c

186. By applying mild electrical stimulation to parts of an animal's cortex, Gustav Fritsch and Eduard Hitzig triggered body movements. They discovered what is now called the
a. motor cortex.
b. visual cortex.
c. auditory cortex.
d. somatosensory cortex.

ANSWER: a

187. The motor cortex is located at the rear of the _____ lobes.
a. occipital
b. temporal
c. frontal
d. parietal

ANSWER: c

188. The motor cortex is
a. an area at the rear of the frontal lobes that controls voluntary movements.

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b. an area at the front of the parietal lobes that registers and processes body touch and movement sensations.
c. ab area of the cerebral cortex that is not involved in primary motor or sensory functions.
d. the portion of the cerebral cortex lying at the back of the head.

ANSWER: a

189. A laboratory cat could be made to twitch its whiskers by direct stimulation of the _____ lobes of its cerebral cortex.
a. temporal
b. occipital
c. frontal
d. parietal

ANSWER: c

190. During open-brain surgery, Frank's right ankle twitched whenever the surgeon electrically stimulated a specific area within Frank's
a. left frontal lobe.
b. right frontal lobe.
c. left parietal lobe.
d. right parietal lobe.

ANSWER: a

191. Gloria had a stroke that damaged the right side of her brain. Yet, she has difficulty moving her left arm, not her right arm. This indicates that the
a. somatosensory cortex is responsible for phantom limb movements.
b. motor cortex on the right side of the brain controls movements of specific body parts on the right side of the body.
c. association areas of the brain control movements of all body parts.
d. motor cortex on the right side of the brain controls movements of specific body parts on the opposite side of the body.

ANSWER: d

192. Stimulating the right side of the brain will cause movement on the left side of the body. This indicates that the
a. somatosensory cortex is responsible for phantom limb movements.
b. motor cortex on the right side of the brain controls movements of specific body parts on the right side of the body.
c. association areas of the brain control movements of all body parts.
d. motor cortex on the right side of the brain controls movements of specific body parts on the opposite side of the body.

ANSWER: d

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193. Who mapped the motor cortex during the 1930s?
a. de Courten-Myers
b. Foerster and Penfield
c. Fritsch and Hitzig
d. Delgado and Gibbs
ANSWER: b

194. Which of the following body parts is associated with the greatest amount of brain tissue in the motor cortex?
a. arms
b. face
c. trunk
d. knees
ANSWER: b

195. The somatosensory cortex is most critical for our sense of
a. sight.
b. hearing.
c. touch.
d. smell.
ANSWER: c

196. Which part of your brain is essential for receiving information that you are raising your arm?
a. corpus callosum
b. hippocampus
c. somatosensory cortex
d. temporal lobes
ANSWER: c

197. Of the following body parts, which is associated with the greatest amount of brain tissue in the somatosensory cortex?
a. toes
b. knees
c. neck
d. fingers
ANSWER: d

198. Which lobes of the brain receive the input that enables you to feel your friend giving you a backrub?
a. parietal
b. temporal
c. occipital

d. frontal

ANSWER: a

199. The surgical removal of a large tumor from Trevor's occipital lobe resulted in extensive loss of brain tissue. Trevor is most likely to suffer some loss of

a. muscular coordination.
b. visual perception.
c. speaking ability.
d. pain sensations.

ANSWER: b

200. Auditory stimulation is processed in the _____ lobes.

a. occipital
b. temporal
c. frontal
d. parietal

ANSWER: b

201. Falsely hearing a sound in the absence of any external stimulus is called

a. neurogenesis.
b. a split-brain condition.
c. a hallucination.
d. an fMRI.

ANSWER: c

202. The auditory hallucinations experienced by people with schizophrenia are most closely linked with the activation of areas in their

a. motor cortex.
b. parietal lobes.
c. temporal lobes.
d. somatosensory cortex.

ANSWER: c

203. The association areas are located in the

a. brainstem.
b. thalamus.
c. hippocampus.
d. cerebral cortex.

ANSWER: d

204. The largest regions of the brain are involved in higher mental functions such as learning, remembering, thinking, and speaking. These regions are called the

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a. somatosensory cortex.
b. hippocampus.
c. corpus callosum.
d. association areas.

ANSWER: d

205. The fact that the ability to interpret and integrate sensory information with stored memories is lost following damage to the _____ disconfirms the claim that we really only use 10 percent of our brain.
a. motor cortex
b. amygdala
c. hypothalamus
d. association areas

ANSWER: d

206. After he suffered a stroke, Mr. Smith's ability to play golf quickly returned to normal. Unfortunately, however, he could no longer figure out how to find his way from his bedroom to the kitchen. It is most likely that Mr. Smith suffered damage to
a. the amygdala.
b. the somatosensory cortex.
c. the motor cortex.
d. an association area.

ANSWER: d

207. Which of the following brain areas enables judgment, planning, social interactions, and processing of new memories?
a. frontal lobes
b. prefrontal cortex
c. temporal lobes
d. parietal lobes

ANSWER: b

208. Knowing that you will be punished for hitting your little sister is a function of the
a. somatosensory cortex.
b. corpus callosum.
c. association areas.
d. motor cortex.

ANSWER: c

209. Tammy is talking with a group of friends at another friend's house party. This behavior is regulated by her
a. frontal lobes.
b. occipital lobes.

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c. parietal lobes.
d. temporal lobes.

ANSWER: a

210. Melinda is a returning college student. She took 10 years off when she had her first child and is now finishing course requirements for her bachelor's degree. She has noticed that many of her classmates are much younger than she is and that they miss many classes and talk about "partying" frequently. This may be because their _____ are not yet completely developed.
a. frontal lobes
b. occipital lobes
c. parietal lobes
d. temporal lobes

ANSWER: a

211. The classic case of railroad worker Phineas Gage best illustrated that frontal lobe damage can
a. trigger muscle spasms.
b. enhance moral reasoning skills.
c. alter one's personality.
d. facilitate neurogenesis.

ANSWER: c

212. Cecil Clayton became increasingly impulsive and violent, and his score on an intelligence test dropped following damage to his left _____ lobe in a sawmill accident.
a. parietal
b. occipital
c. frontal
d. temporal

ANSWER: c

213. People's moral judgments are most likely to seem unrestrained by normal emotions if they have experienced damage to their _____ lobes.
a. temporal
b. occipital
c. parietal
d. frontal

ANSWER: d

214. Impaired mathematical and spatial reasoning is especially likely to be linked with damage to association areas in the
a. parietal lobes.
b. temporal lobes.
c. occipital lobes.

d. frontal lobes.

ANSWER: a

215. The inability to recognize familiar faces even though one can clearly see and describe features of the faces is associated with damage to the right _____ lobe.

a. frontal
b. parietal
c. occipital
d. temporal

ANSWER: d

216. Which of the following abilities is NOT directly related to functional connectivity?

a. memory
b. language
c. hearing
d. attention

ANSWER: c

217. Dr. Jones conducts research to better understand how different regions of the brain work together. He is also interested in the causes of psychological disorders. Which of the following techniques is he likely to implement in his research?

a. analyses of functional connectivity
b. cortex mapping
c. neurogenesis
d. splitting the corpus callosum

ANSWER: a

218. The capacity of a brain area to develop new _____ as it adjusts to damage is known as plasticity.

a. manifest content
b. information-processing abilities
c. latent content
d. neural pathways

ANSWER: d

219. Although Ray lost some manual dexterity following brain damage from a stroke, the development of new neural pathways enabled him to regain most of his lost agility. This best illustrates the value of

a. neurogenesis.
b. lateralization.
c. plasticity.
d. reuptake.

ANSWER: c

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220. The benefits of brain plasticity are most clearly demonstrated in
a. children who have had a cerebral hemisphere surgically removed.
b. people paralyzed by a severed spinal cord.
c. individuals with Alzheimer's disease.
d. split-brain patients.
ANSWER: a

221. If a slow-growing right-hemisphere tumor disrupts perception, the left hemisphere may take over this perception functioning. This best illustrates the value of
a. the split brain.
b. neurogenesis.
c. reuptake.
d. plasticity.
ANSWER: d

222. Among deaf people, a temporal lobe area normally dedicated to hearing may begin to process signals from the visual system used to see and interpret signs, for example. This best illustrates the impact of
a. plasticity.
b. neurogenesis.
c. lateralization.
d. refractory periods.
ANSWER: a

223. After Warren's right hand was paralyzed, the somatosensory cortex area that had processed sensations of touch from that hand gradually began to process touch sensations from his lower right arm. This best illustrates the consequences of
a. neurogenesis.
b. plasticity.
c. lateralization.
d. the split brain.
ANSWER: b

224. The process of forming new neurons within the brain is called
a. lateralization.
b. hemispherectomy.
c. neurogenesis.
d. plasticity.
ANSWER: c

225. Exercise and sleep are natural ways to promote
a. lateralization.
b. neurogenesis.

c. hemispherectomy.
d. reuptake.

ANSWER: b

226. The surgical removal of an entire hemisphere of the brain is called
a. a hemispherectomy.
b. neurogenesis.
c. plasticity.
d. lateralization.

ANSWER: a

227. A tendency for the brain's left and right hemispheres to serve different functions is called
a. hemispherectomy.
b. lateralization.
c. neurogenesis.
d. plasticity.

ANSWER: b

228. The control of speech production by the left rather than the right hemisphere of the brain best illustrates
a. neurogenesis.
b. lateralization.
c. tomography.
d. plasticity.

ANSWER: b

229. Damage to the left cerebral hemisphere is most likely to reduce people's ability to
a. solve arithmetic problems.
b. copy drawings.
c. recognize faces.
d. recognize familiar melodies.

ANSWER: a

230. The corpus callosum is a wide band of axon fibers that
a. enables the left hemisphere to control the right side of the body.
b. transmits information between the cerebral hemispheres.
c. sends information from the left half of your field of vision to your right cerebral hemisphere.
d. transfers neural impulses from the somatosensory cortex to the motor cortex.

ANSWER: b

231. People who have had their corpus callosum surgically severed are said to be patients with
a. brain plasticity.

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b. brain fissures.
c. neurogenesis.
d. split brains.

ANSWER: d

232. Neurosurgeons have severed the corpus callosum in human patients in order to reduce
a. lateralization.
b. epileptic seizures.
c. neural plasticity.
d. neurogenesis.

ANSWER: b

233. Sensory information is transmitted from the _____ visual field of _____ to the left cerebral hemisphere.
a. left; only the left eye
b. right; only the right eye
c. left; only the right eye
d. right; both the right and left eyes

ANSWER: d

234. A picture of a cat is briefly flashed in the left visual field of a split-brain patient named Anna. At the same time a picture of a girl is flashed in the right visual field. In identifying what she saw, Anna would be most likely to
a. use her left hand to point to a picture of a cat.
b. verbally report that she saw a cat.
c. use her left hand to point to a picture of a girl.
d. verbally report that she saw a girl.

ANSWER: d

235. A neurosurgeon begins to sedate the entire left cerebral hemisphere of a patient, who is instructed to count aloud with both arms in the air. What will most likely happen?
a. The patient's left arm will fall limp, and the patient will become speechless.
b. The patient's right arm will fall limp, and the patient will become speechless.
c. The patient's left arm will fall limp, but the patient will continue counting aloud.
d. The patient's right arm will fall limp, but the patient will continue counting aloud.

ANSWER: b

236. Deaf people who use sign language typically
a. demonstrate greater mathematical competence than hearing persons.
b. process language in their left cerebral hemisphere.
c. have better communication skills than hearing persons.

d. have a smaller corpus callosum than hearing persons.

ANSWER: b

237. Which of the following best describes the relationship between the left and right brain hemispheres?

a. They work together.

b. They are not aware of each other.

c. The right brain hemisphere controls most of human functioning.

d. The left brain hemisphere is not required.

ANSWER: a

238. Juan is studying pre-algebra, and Amanda is trying to match artists with their artwork. Based on their current activities, it is likely that Juan's _____ is active, and Amanda's _____ is active.

a. left hemisphere; right hemisphere

b. right hemisphere; left hemisphere

c. association area; somatosensory cortex

d. somatosensory cortex; association area

ANSWER: a

239. People who suffer partial paralysis as a result of damage to the _____will sometimes obstinately claim they can move a paralyzed limb.

a. right cerebral hemisphere

b. corpus callosum

c. left cerebral hemisphere

d. occipital lobes

ANSWER: a

240. When Lanae does her math homework, which area of her brain is most active?

a. her amygdala

b. her left hemisphere

c. her temporal lobe

d. her right hemisphere

ANSWER: b

241. The scientific study of the links between biological and psychological processes is called

a. neurology.

b. cognitive psychology.

c. endocrinology.

d. biological psychology.

ANSWER: d

242. Dr. Warbs conducts research on the relationship between excess neurotransmitter molecules in the synaptic gap and migraines. Dr. Warbs' research focus is most characteristic of

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a. tomography.
b. biological psychology.
c. endocrinology.
d. cognitive psychology.

ANSWER: b

243. A biological psychologist would be most interested in conducting research on the relationship between
a. neurotransmitters and schizophrenia.
b. age and bone density.
c. self-esteem and popularity.
d. genetics and eye color.

ANSWER: a

244. Cognitive neuroscience is most directly concerned with studying connections between
a. hormonal and neural processes.
b. evolution and natural selection.
c. genes and neurotransmitters.
d. brain activity and thought processes.

ANSWER: d

245. Which specialty area would be most interested in identifying the brain-activation patterns associated with a person's ability to solve crossword puzzles?
a. evolutionary psychology
b. cognitive neuroscience
c. behavior genetics
d. personality psychology

ANSWER: b

246. Consciousness is defined as
a. the ability to solve problems, reason, and remember.
b. the process of organizing and interpreting sensory information.
c. effortless processing of incidental information into memory.
d. our awareness of ourselves and our environment.

ANSWER: d

247. Attention to her long-term goal of becoming a doctor enables Maria to avoid thoughtlessly skipping difficult class assignments. This best illustrates the adaptive value of
a. change blindness.
b. consciousness.
c. the circadian rhythm.
d. REM rebound.

TB1 Chapter 02: Multiple Choice

ANSWER: b

248. Brain scans indicate that consciousness arises from
a. the suprachiasmatic nucleus.
b. the amygdala.
c. the somatosensory cortex.
d. coordinated, cortex-wide activity.

ANSWER: d

249. _____ is a product of coordinated, cortex-wide activity.
a. Selective attention
b. Sequential processing
c. Consciousness
d. Echolocation

ANSWER: c

250. If a stimulus activates enough brain-wide coordinated neural activity, it crosses a(n) _____ for consciousness.
a. synapse
b. sequence
c. action potential
d. threshold

ANSWER: d

251. Alyssa is learning how to drive and is intently focused on the car she is operating, the traffic on the road, and the road signs and traffic signals. This concentration is an aspect of her
a. inattentional blindness.
b. change blindness.
c. consciousness.
d. two-track mind.

ANSWER: c

252. Sequential processing refers to
a. the formation of complex neural networks.
b. consciously focusing on one aspect of a problem at a time.
c. the brain's ability to automatically regulate basic life-sustaining processes such as breathing.
d. the coordinated cortex-wide activity that triggers consciousness.

ANSWER: b

253. Angela is focusing her study efforts on biology, a subject she knows nothing about. Specifically, she is focused on an assignment involving dissection. She is likely to use
a. sequential processing.

b. selective attention.
c. neurogenesis.
d. parallel processing.

ANSWER: a

254. Multiplying two large numbers by consciously focusing on and solving each subcomponent of the task in serial order best illustrates
a. the circadian rhythm.
b. the two-track mind.
c. sequential processing.
d. change blindness.

ANSWER: c

255. June is at a research conference and is browsing through a poster session when a title catches her eye. Reading carefully about the new research described in the poster, June is engaged in
a. parallel processing.
b. sequential processing.
c. consciousness.
d. inattentional blindness.

ANSWER: b

256. Stephanie is learning how to touch type. Because this is a new skill for her, it will involve
a. sequential processing.
b. parallel processing.
c. selective attention.
d. neurogenesis.

ANSWER: a

257. Wayne is playing a new video game with his older brother. Because this is his first time playing the game, it will involve
a. sequential processing.
b. parallel processing.
c. change blindness.
d. neurogenesis.

ANSWER: a

258. The processing of many aspects of a problem at the same time is called
a. neural plasticity.
b. selective attention.
c. parallel processing.
d. REM rebound.

Name:_____ Class:_____ Date:_____

TB1 Chapter 02: Multiple Choice

ANSWER: c

259. A capacity to monitor the color, shape, and motion of a flying kite all at the same time best illustrates
a. REM rebound.
b. parallel processing.
c. the circadian rhythm.
d. change blindness.

ANSWER: b

260. As you watch an airplane fly by, you notice the motion, the color, and shape of the plane. This involves
a. parallel processing.
b. sequential processing.
c. consciousness.
d. selective attention.

ANSWER: a

261. When Fran awoke this morning, she was slightly groggy but was able to function. Before lunch she was exceptionally alert. When she left work this afternoon, she was tired and wanted to take a nap. These changes in Fran throughout the day represent different
a. states of consciousness.
b. selective attentions.
c. cocktail party effects.
d. inattentional blindness.

ANSWER: a

262. Which of the following is NOT a state of consciousness?
a. daydreaming
b. sleeping
c. inattentional blindness
d. meditating

ANSWER: c

263. Focusing conscious awareness on a particular stimulus is called
a. neurogenesis.
b. parallel processing.
c. change blindness.
d. selective attention.

ANSWER: d

264. Our inability to consciously process all the sensory information available to us at any single point in time best illustrates the need for
a. circadian rhythm.

TB1 Chapter 02: Multiple Choice

b. selective attention.
c. REM rebound.
d. hypnagogic sensations.

ANSWER: b

265. While engrossed in studying for his psychology course, Juan isn't easily distracted by the sounds of the TV or even by his sisters' conversation. This best illustrates
a. inattentional blindness.
b. latent content.
c. hypnagogic sensations.
d. selective attention.

ANSWER: d

266. A grocery store employee was so distracted by the sight of a bank robber's weapon that she failed to perceive the unique tattoo on his arm. This best illustrates the impact of
a. parallel processing.
b. change blindness.
c. selective attention.
d. hypnagogic sensations.

ANSWER: c

267. Tracey frequently checks her text messages while driving. Although this is extremely dangerous, like Tracey, _____ percent of American drivers have read or sent a text message while driving in the past month.
a. 15
b. 25
c. 35
d. 60

ANSWER: d

268. The increased risk of car accidents for drivers talking on a cell phone
a. results primarily from using one hand to simply hold one's cell phone.
b. is no greater than the risk for drivers chatting with other passengers.
c. is no greater than the risks for drivers listening to a car radio.
d. is equally great for those using handheld and those using hands-free phones.

ANSWER: d

269. Which of the following poses the greatest risk of an accident while driving?
a. sending text messages
b. talking on a cell phone
c. listening to the car radio
d. talking with others in the vehicle

TB1 Chapter 02: Multiple Choice

ANSWER: a

270. While driving to work, Tom was so focused on his cell-phone conversation that he inadvertently drove through a red light and hit another vehicle. Tom's experience best illustrates the impact of
a. parallel processing.
b. the suprachiasmatic nucleus.
c. hypnagogic sensations.
d. selective attention.

ANSWER: d

271. Failing to see visible objects when our attention is directed elsewhere is called
a. narcolepsy.
b. parallel processing.
c. paradoxical sleep.
d. inattentional blindness.

ANSWER: d

272. When asked to watch a video and press a key each time a black-shirted player passed a basketball, most research participants remained unaware of an umbrella-toting woman strolling across the video screen. This illustrated
a. REM rebound.
b. inattentional blindness.
c. hypnagogic sensations.
d. parallel processing.

ANSWER: b

273. While a man provided directions to a construction worker, two experimenters rudely interrupted by passing between them carrying a door. The man's failure to notice that during this interruption the construction worker was replaced by another person wearing different-colored clothes illustrates
a. neural plasticity.
b. latent content.
c. parallel processing.
d. change blindness.

ANSWER: d

274. After stopping to talk to a friend at the library, Lisa fails to notice that her cell phone, which had been in her back pocket, has fallen out. Her oversight best illustrates
a. parallel processing.
b. inattentional blindness.
c. sequential processing.
d. change blindness.

ANSWER: d

Name:_____ Class:_____ Date:_____

TB1 Chapter 02: Multiple Choice

275. After turning to wave at one of her friends during lunch, Ivy fails to notice that her new iPad, which had been right next to her lunch plate, is no longer there. Her oversight best illustrates
a. parallel processing.
b. neural plasticity.
c. latent content.
d. change blindness.
ANSWER: d

276. Research on sleep and dreaming confirms that
a. sleepwalkers are acting out their dreams.
b. while some people dream every night, others seldom dream.
c. the brain's auditory cortex responds to sound stimuli even during sleep.
d. older adults sleep more than young adults.
ANSWER: c

277. Circadian rhythm refers to
a. the pattern of emotional ups and downs we routinely experience.
b. a pattern of biological functioning that occurs on a 24-hour cycle.
c. the experience of sleep apnea following a lengthy transoceanic plane flight.
d. the cycle of four distinct stages that we experience during a normal night's sleep.
ANSWER: b

278. When pulling an all-nighter to study for an exam, students often feel groggiest in the middle of the night but experience new energy around the time they normally would wake up. This best illustrates the impact of
a. sleep apnea.
b. neurogenesis.
c. the circadian rhythm.
d. REM rebound.
ANSWER: c

279. With the approach of night, our body temperature begins to drop. This best illustrates the dynamics of the
a. hypnagogic state.
b. circadian rhythm.
c. alpha wave pattern.
d. REM rebound.
ANSWER: b

280. Human body temperatures typically _____ with the approach of night but _____ as morning approaches.
a. rise; stay the same
b. fall; rise

TB1 Chapter 02: Multiple Choice

c. fall; stay the same
d. rise; fall

ANSWER: b

281. Amber most enjoys partying with friends in the late evening. Her mother, however, prefers to socialize in the morning when she feels most energetic. This difference between Amber and her mother is best explained by the fact that age and experience tend to alter our
a. REM rebound.
b. NREM-2 sleep.
c. hypnagogic sensations.
d. circadian rhythm.

ANSWER: d

282. Most 20-year-olds are "owls," with performance _____ across the day. Most older adults are "larks," with performance _____ as the day progresses.
a. improving; declining
b. declining; improving
c. declining; staying the same
d. staying the same; declining

ANSWER: a

283. Fast and jerky movements of the eyes are especially likely to be associated with
a. change blindness.
b. parallel processing.
c. REM (R) sleep.
d. sleep apnea.

ANSWER: c

284. The relatively slow brain waves of a relaxed, awake state are called
a. EEGs.
b. REM rebound.
c. alpha waves.
d. delta waves.

ANSWER: c

285. It's almost midnight and Joanna is ready to go to sleep. Although her eyes are closed and she's very relaxed, she has not yet fallen asleep. An EEG is most likely to indicate the presence of
a. delta waves.
b. alpha waves.
c. free radicals.
d. rapid eye movements.

TB1 Chapter 02: Multiple Choice

ANSWER: b

286. A periodic, natural loss of consciousness that involves distinct stages is known as
a. general anesthesia.
b. the two-track mind.
c. a hallucination.
d. sleep.
ANSWER: d

287. Which sleep stage is characterized by slowed breathing and irregular brain waves?
a. N1
b. N2
c. N3
d. REM
ANSWER: a

288. Fantastic images resembling hallucinations occur with the onset of
a. sleep apnea.
b. delta waves.
c. change blindness.
d. N1 sleep.
ANSWER: d

289. Hypnagogic sensations are most closely associated with _____ sleep.
a. N1
b. N2
c. N3
d. REM
ANSWER: a

290. Shortly after falling asleep, Josh felt like he was falling from the top of a high cliff. His experience best illustrates
a. the circadian rhythm.
b. hypnagogic sensations.
c. sleep apnea.
d. narcolepsy.
ANSWER: b

291. Which sleep stage lasts about 20 minutes and includes bursts of rapid, rhythmic brain-wave activity?
a. N1
b. N2

c. N3
d. REM
ANSWER: b

292. An EEG shows bursts of rapid brain-wave activity during _____ sleep.
a. N1
b. N2
c. N3
d. REM
ANSWER: b

293. An hour after going to bed, Joseph was so soundly asleep his parents were unable to awaken him for a scheduled dose of medicine. At this point in Joseph's sleep, an EEG would have most likely detected
a. alpha waves.
b. free radicals.
c. delta waves.
d. REM rebound.
ANSWER: c

294. The large slow brain waves associated with deep sleep are called
a. EEGs.
b. delta waves.
c. REM rebound.
d. alpha waves.
ANSWER: b

295. Which 30-minute sleep stage is characterized by slow-wave sleep and delta waves?
a. N1
b. N2
c. N3
d. REM
ANSWER: c

296. Delta waves are most clearly associated with _____ sleep.
a. N1
b. N2
c. N3
d. REM
ANSWER: c

297. Bed-wetting is most likely to occur at the end of _____ sleep.

TB1 Chapter 02: Multiple Choice

a. N1
b. N2
c. N3
d. REM

ANSWER: c

298. Hypnagogic sensations are to _____ as delta waves are to _____.
a. N1; N3
b. REM; N2
c. N2; REM
d. REM; N1

ANSWER: a

299. At 2 o'clock in the morning, 25-year-old Shawn has already slept for three hours. As long as his sleep continues, we can expect an increasing occurrence of
a. hypnagogic sensations.
b. muscle tension.
c. REM sleep.
d. NREM-3 sleep.

ANSWER: c

300. During the course of a full night's sleep, young adults are most likely to spend more time in
a. N3 sleep than in N2 sleep.
b. REM sleep than in N1 sleep.
c. N1 sleep than in N3 sleep.
d. REM sleep than in N2 sleep.

ANSWER: b

301. Compared with young adults, older adults are especially likely to
a. spend less time in paradoxical sleep.
b. spend less time in N1 sleep.
c. spend more time in paradoxical sleep.
d. complete the sleep cycle more slowly.

ANSWER: a

302. Stephanie is sleeping and will pass through a multistage sleep cycle several times tonight. As the night progresses, we can expect that she will spend less time in _____ sleep.
a. deep
b. REM
c. N1
d. N2

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TB1 Chapter 02: Multiple Choice

ANSWER: a

303. The brain waves associated with REM sleep are most similar to those of
a. N1 sleep.
b. N2 sleep.
c. N3 sleep.
d. an awake but relaxed state.

ANSWER: a

304. Alicia is sleeping and is currently dreaming. Which sleep stage is she in?
a. REM
b. N1
c. N2
d. N3

ANSWER: a

305. Three hours after she goes to sleep, Alexandra's heart rate increases, her breathing becomes more rapid, and her eyes move rapidly under her closed lids. Research suggests that Alexandra is
a. dreaming.
b. emitting delta waves.
c. about to sleepwalk.
d. experiencing a night terror.

ANSWER: a

306. Genital arousal is most likely to be associated with
a. sleep apnea.
b. REM sleep.
c. NREM-3 sleep.
d. narcolepsy.

ANSWER: b

307. During REM sleep, your muscles are relaxed because messages from the motor cortex are blocked by the
a. brainstem.
b. hypothalamus.
c. suprachiasmatic nucleus.
d. amygdala.

ANSWER: a

308. REM sleep is called paradoxical sleep because
a. our heart rate is slow and steady, while our breathing is highly irregular.
b. we are deeply asleep but can be awakened easily.

c. our motor cortex is highly active, while our voluntary muscles hardly move.
d. it leads to highly imaginative dreams that are perceived as colorless images.

ANSWER: c

309. Piper is in a sleep stage that is also known as paradoxical sleep. Which sleep stage is she in?
a. REM
b. N1
c. N2
d. N3

ANSWER: a

310. After sleeping for about an hour and a half, Fernando enters a phase of paradoxical sleep. He is likely to
a. be easily awakened.
b. have slower, more regular breathing.
c. emit slower brain waves.
d. have very relaxed muscles.

ANSWER: d

311. Fifty-year-old Wayne insists that he never dreams. Research suggests that he probably
a. would report a vivid dream if he were awakened during REM sleep.
b. dreams during N1 rather than during REM sleep.
c. experiences more N2 sleep than most people.
d. cycles through the distinct sleep stages much more slowly than most people.

ANSWER: a

312. The sleep cycle can be expected to repeat itself every _____ minutes.
a. 30
b. 60
c. 90
d. 120

ANSWER: c

313. Which of the following is a good indicator of how much sleep a person needs each day?
a. biological sex
b. weight
c. age
d. race

ANSWER: c

314. Kirsten worries that her teenage son, Jimmy, doesn't get enough sleep. Which of the following is NOT linked to American adolescents getting less sleep?

TB1 Chapter 02: Multiple Choice

a. earlier school start times
b. eating an early dinner
c. extracurricular activities
d. social media use

ANSWER: b

315. The circadian rhythm is influenced by light-sensitive retinal proteins that trigger signals to the
a. suprachiasmatic nucleus.
b. hippocampus.
c. amygdala.
d. brainstem.

ANSWER: a

316. After flying from Barcelona to Boston, Andrew experienced extra hours of daylight and had a restless, sleepless night. His problem was most likely caused by a disruption of his
a. sequential processing.
b. circadian rhythm.
c. hypnagogic sensations.
d. sleep apnea.

ANSWER: b

317. The activation of light-sensitive proteins in our eyes' retinas signals our brain to decrease the production of
a. free radicals.
b. serotonin.
c. melatonin.
d. dopamine.

ANSWER: c

318. The pair of cell clusters in the hypothalamus that controls our circadian rhythm is
a. the hippocampus.
b. melatonin.
c. hypnagogic sensation.
d. the suprachiasmatic nucleus.

ANSWER: d

319. Exposure to bright light causes the
a. thyroid gland to increase the production of melatonin.
b. thyroid gland to suppress the production of melatonin.
c. suprachiasmatic nucleus to increase the production of melatonin.
d. suprachiasmatic nucleus to suppress the production of melatonin.

ANSWER: d

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TB1 Chapter 02: Multiple Choice

320. Humans placed under unnatural constant illumination have more difficulty sleeping thanks to decreased production of

a. leptin.
b. cortisol.
c. melatonin.
d. free radicals.

ANSWER: c

321. It is around 11:00 P.M. and Bill is beginning to feel extremely sleepy. This is because the _____ quiets down, allowing the release of melatonin into the bloodstream.

a. suprachiasmatic nucleus
b. pituitary gland
c. thyroid gland
d. hypothalamus

ANSWER: a

322. The idea that sleeping at night kept our ancestors out of danger supports which theory of why we need sleep?

a. Sleep protects.
b. Sleep helps us recover.
c. Sleep aids memory.
d. Sleep helps creativity.

ANSWER: a

323. Bats need a lot of sleep because they burn a lot of calories, which produces _____ that are toxic to neurons.

a. growth hormones
b. high melatonin levels
c. free radicals
d. alpha waves

ANSWER: c

324. Which of the following animals tend to sleep the least?

a. giraffes
b. dolphins
c. cats
d. bats

ANSWER: a

325. Sleep can help us to recuperate by doing all of the following EXCEPT

a. restoring the immune system.

TB1 Chapter 02: Multiple Choice

b. consolidating our memories.
c. repairing brain tissue.
d. pruning unused connections in the brain.

ANSWER: b

326. During sleep, memories stored in the _____ are moved to permanent storage in areas of the cortex.
a. thalamus
b. suprachiasmatic nucleus
c. amygdala
d. hippocampus

ANSWER: d

327. Barbara has a psychology exam tomorrow and has been studying all day today. What advice would you give her to help her on her exam tomorrow?
a. "Cram for the exam all night tonight."
b. "Don't worry about it tonight. Get up early tomorrow and cram for the exam right before you take it."
c. "Don't sweat it! If you don't know the material by now, there is no point studying."
d. "Make sure you get enough sleep tonight because sleep strengthens neural connections and replays recent learning."

ANSWER: d

328. Simone is a political cartoonist whose work requires her to think imaginatively and present ideas in visually novel ways. Her work is most likely to be facilitated by
a. hypnagogic sensations.
b. EEG recordings.
c. full nights of sleep.
d. sleep apnea.

ANSWER: c

329. Production of the human growth hormone necessary for muscle development is most strongly associated with
a. alpha waves.
b. slow-wave sleep.
c. hypnagogic sensations.
d. REM rebound.

ANSWER: b

330. Terrance spent several sleepless nights worrying about whether he would be accepted by the college of his choice. During the first few days after he received his acceptance letter, he averaged nearly 12 hours of sleep. He then settled back to 7.5 to 9 hours of sleep a day. The unusually lengthy sleep time of the first few days after exams suggests that Terrance ended the semester with
a. sleep apnea.

TB1 Chapter 02: Multiple Choice

b. narcolepsy.
c. low melatonin levels.
d. a sleep debt.

ANSWER: d

331. People who regularly sleep less than normal experience a(n) _____ risk of depression and a(n) _____ risk of gaining weight.
a. decreased; decreased
b. increased; increased
c. decreased; increased
d. increased; decreased

ANSWER: b

332. Sleep deprivation has been shown to
a. increase attentiveness to highly motivating tasks.
b. reduce REM rebound.
c. diminish immunity to disease.
d. decrease narcolepsy.

ANSWER: c

333. Traffic accident rates have been found to _____ after the spring change to daylight saving time and to _____ after the fall change back to standard time.
a. increase; increase
b. decrease; decrease
c. increase; decrease
d. decrease; increase

ANSWER: c

334. Shelby has not had enough sleep in the past week. She is at increased risk of having a driving accident because her lack of sleep diminishes her
a. cortisol levels.
b. REM rebound.
c. ability to focus attention.
d. hypnagogic sensations.

ANSWER: c

335. Of the following people, who will be LEAST likely to resist temptation to the sight of food?
a. Bree, who is on a diet
b. Scott, who is fasting for religious reasons
c. Parker, who is well rested
d. Margo, who has not gotten enough sleep for the past few days

TB1 Chapter 02: Multiple Choice

ANSWER: d

336. It is difficult to resist food temptations when sleep deprived because the
a. cortical responses that help us resist temptation decrease.
b. production of cortisol increases.
c. production of ghrelin increases.
d. decreased production of cortisol related to sleep loss increases hunger.

ANSWER: a

337. Sleep deprivation increases levels of the hunger-arousing hormone _____ and decreases levels of the hunger-suppressing hormone _____.
a. melatonin; cortisol
b. serotonin; orexin
c. ghrelin; leptin
d. epinephrine; norepinephrine

ANSWER: c

338. Sleep deprivation _____ the production of body fat by _____ levels of the stress hormone cortisol.
a. stimulates; increasing
b. inhibits; increasing
c. stimulates; decreasing
d. inhibits; decreasing

ANSWER: a

339. Sleep deprivation has been found to _____ metabolic rate and _____ limbic brain responses to the mere sight of food.
a. increase; enhance
b. decrease; diminish
c. increase; diminish
d. decrease; enhance

ANSWER: d

340. Jamie consistently fails to get as much sleep as she needs. This is most likely to place her at an increased risk of
a. narcolepsy.
b. night terrors.
c. sleep apnea.
d. gaining weight.

ANSWER: d

341. Claire has a difficult time sleeping several nights throughout the week. Which of the following is NOT a natural sleep aid that you should recommend to Claire?

TB1 Chapter 02: Multiple Choice

a. get regular exercise
b. take long naps
c. relax before bedtime
d. manage your stress

ANSWER: b

342. Brenda, who is supposed to get married tomorrow morning, can't get to sleep. Regarding Brenda's inability to fall asleep, you would say that she is
a. displaying early signs of insomnia.
b. displaying normal sleep deprivation because she is either excited or anxious.
c. suffering from both sleep apnea and narcolepsy.
d. unable to sleep because she is afraid of experiencing night terrors due to her excitement.

ANSWER: b

343. A recurring difficulty in falling or staying asleep is called
a. narcolepsy.
b. insomnia.
c. sleep apnea.
d. paradoxical sleep.

ANSWER: b

344. REM sleep is
a. reduced by alcohol and reduced by sleeping pills.
b. increased by alcohol and reduced by sleeping pills.
c. reduced by alcohol and increased by sleeping pills.
d. increased by alcohol and increased by sleeping pills.

ANSWER: a

345. A need to take larger and larger doses of sleeping pills to avoid insomnia is an indication of
a. narcolepsy.
b. tolerance.
c. sleep apnea.
d. REM rebound.

ANSWER: b

346. Narcolepsy is a disorder in which a person
a. temporarily stops breathing during sleep.
b. has sudden uncontrollable seizures.
c. experiences uncontrollable attacks of overwhelming sleepiness.
d. has difficulty falling and staying asleep.

ANSWER: c

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347. Mr. Jones is arguing with his son about the son's use of the car. In the middle of the argument, Mr. Jones suddenly falls asleep. Mr. Jones apparently suffers from
a. narcolepsy.
b. insomnia.
c. sleep apnea.
d. sleepwalking.
ANSWER: a

348. In which of the following disorders does the person repeatedly stop breathing while asleep?
a. narcolepsy
b. sleep apnea
c. night terrors
d. insomnia
ANSWER: b

349. Mr. Glenday repeatedly stops breathing while asleep. It is most likely that Mr. Glenday suffers from
a. sleep apnea.
b. narcolepsy.
c. night terrors.
d. insomnia.
ANSWER: a

350. Particularly among men, sleep apnea is linked with
a. night terrors.
b. sleepwalking.
c. narcolepsy.
d. obesity.
ANSWER: d

351. At 3:00 A.M., 10-year-old Lee gets out of bed and sleepwalks to the kitchen. An EEG of his brain activity is most likely to indicate the presence of
a. alpha waves.
b. sleep spindles.
c. REM sleep.
d. delta waves.
ANSWER: d

352. Sitting up in bed, talking nonsense, and appearing terrified during N3 sleep is most characteristic of
a. narcolepsy.
b. sleep apnea.

c. night terrors.
d. REM rebound.

ANSWER: c

353. It has been found that night terrors
a. are usually recalled vividly for days following their occurrence.
b. are typically accompanied by a state of temporary muscular immobility or paralysis.
c. jolt the sleeper to a sudden state of full waking alertness.
d. typically occur during N3 sleep.

ANSWER: d

354. A sequence of images, emotions, and thoughts passing through a sleeping person's mind is called a(n)
a. dream.
b. image.
c. memory.
d. REM rebound.

ANSWER: a

355. Research studies of the content of dreams indicate that
a. men are less likely than women to report dreams with sexual overtones.
b. the genital arousal that occurs during sleep is typically related to sexual dreams.
c. most dreams are bad dreams, involving being attacked or rejected, for example.
d. most dreams are pleasant, exotic, and unrelated to ordinary daily life.

ANSWER: c

356. Which of the following is NOT a common theme in our dreams?
a. winning the lottery
b. failing at something
c. being attacked
d. experiencing misfortune

ANSWER: a

357. During lunch your friend tells you about her latest dream. In her dream, she was attacked, beaten, and robbed while at home. What would your response be?
a. "That's a strange dream."
b. "You should be extra careful. It may be a premonition."
c. "I read recently that those types of dreams are very rare."
d. "Being attacked is one of the most common themes in dreams."

ANSWER: d

358. Our capacity to monitor external stimuli well enough to stroll around our house while sleeping best

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illustrates that we function with a
a. circadian rhythm.
b. two-track mind.
c. REM rebound.
d. sleep debt.
ANSWER: b

359. Who is most likely to have a violent dream tonight?
a. Sally, who watched a musical right before going to bed
b. Michael, who played a video game before going to bed
c. Jenny, who is undergoing play therapy
d. Kelly, who watched a scary movie before going to bed
ANSWER: d

360. According to Freud, the dreams of adults can be traced back to
a. erotic wishes.
b. stressful life events.
c. biological needs for brain stimulation.
d. random bursts of neural activity.
ANSWER: a

361. Freud called the remembered story line of a dream its _____ content.
a. manifest
b. paradoxical
c. hypnagogic
d. circadian
ANSWER: a

362. As Alane recalled her dream, she was walking in the park when a tall, dark, and handsome gentleman approached her; suddenly the scene shifted and the man disappeared. According to Freud, Alane's account represents the _____ content of her dream.
a. paradoxical
b. manifest
c. latent
d. hypnagogic
ANSWER: b

363. According to Freud, the latent content of a dream refers to
a. its accompanying brain-wave pattern.
b. the previous day's events that prompted the dream.
c. the sensory stimuli in the sleeper's environment that are incorporated into the dream.

d. its underlying but censored meaning.

ANSWER: d

364. Fred remembered a recent dream in which his girlfriend suddenly grabbed the wheel of his speeding car. Fred's therapist suggested that the dream might be a representation of the girlfriend's efforts to avoid sexual intimacy. According to Freud, the therapist was attempting to reveal the _____ of Fred's dream.

a. paradoxical content
b. circadian rhythm
c. latent content
d. manifest content

ANSWER: c

365. Which of the following is NOT a criticism of Freud's dream theory?

a. Dreams can be interpreted in many different ways.
b. There is no scientific evidence to support Freud's theory.
c. We do not experience sexually themed dreams frequently.
d. Freud's theory has inspired other theories.

ANSWER: d

366. Chris has greater difficulty remembering what he learns during his Spanish class if he experiences less than his normal amount of REM sleep the night after the class. Which theory best accounts for Chris' experience?

a. wish-fulfillment theory
b. cognitive development theory
c. REM rebound theory
d. information-processing theory

ANSWER: d

367. You have an exam coming up and have been studying for the past hour. You know that if you get a good night's rest, it will aid your memory of what you have studied. Why is that?

a. Sleep appears to reactivate recent experiences that are stored in the hippocampus and move them to permanent storage elsewhere in the cortex.
b. Sleep allows resting neurons time to repair themselves and prunes unused connections in the brain.
c. During sleep, the pituitary gland releases a human growth hormone that is necessary for muscle development.
d. You are incorrect. Getting a good night's rest will not improve your memory of what you studied.

ANSWER: a

368. Evidence suggests that we strengthen and file away our memories of recent life events through

a. sleeptalking.
b. EEG recordings.
c. sleep apnea.
d. REM sleep.

TB1 Chapter 02: Multiple Choice

ANSWER: d

369. Brain regions that were active as people learned to identify the difference between objects were especially likely to be active again later as they experienced
a. night terrors.
b. narcolepsy.
c. sleep apnea.
d. REM sleep.
ANSWER: d

370. Research indicates that total time spent in REM sleep is especially high in
a. males.
b. infants.
c. females.
d. the elderly.
ANSWER: b

371. Dreams often involve sudden emotional reactions and seemingly random changes in scene. This best serves to support the theory that dreams
a. strengthen our memories of the preceding day's events.
b. reflect our level of cognitive development.
c. prepare us for the stress and challenges of the following day.
d. are initiated when neural activity spreads upward from the brainstem.
ANSWER: d

372. Increased activity in the _____ during REM sleep may best explain why dream images are often accompanied by a strong emotional tone.
a. suprachiasmatic nucleus
b. frontal lobes
c. somatosensory cortex
d. limbic system
ANSWER: d

373. Which theory emphasizes that dreams simulate reality by drawing on our current understandings of reality?
a. wish-fulfillment theory
b. random neural activation theory
c. REM rebound theory
d. cognitive development theory
ANSWER: d

374. Kailee is a university student in a philosophy program. The fact that her dreams often involve abstract issues is best explained by

TB1 Chapter 02: Multiple Choice

a. wish-fulfillment theory.
b. cognitive development theory.
c. neural activation theory.
d. REM rebound theory.

ANSWER: b

375. REM rebound involves the
a. tendency for REM sleep periods to become longer and more frequent as a normal night of sleep progresses.
b. increase in REM sleep that characteristically follows intense learning episodes or stressful daytime experiences.
c. unusual symptoms of tiredness and irritability that follow periods of REM sleep deprivation.
d. tendency for REM sleep to increase following REM sleep deprivation.

ANSWER: d

376. The best indication that our dreaming serves a necessary biological function is provided by the fact that
a. most dreams are psychologically meaningless.
b. the disruption of REM sleep leads to narcolepsy.
c. we experience REM rebound.
d. sexual tension is naturally discharged during REM sleep.

ANSWER: c

Name:_____ Class:_____ Date:_____

TB1 Chapter 02: Essay

1. Explain how plasticity of the brain changes throughout life. When is it considered the strongest?
ANSWER:

2. Draw a neuron, and label and identify each part. Briefly describe the function of each part of the neuron.
ANSWER:

3. Describe how an action potential moves down a neuron.
ANSWER:

4. After Julia began using a street drug to enhance her moods, she discovered that she needed larger and larger doses of the drug in order to feel the drug's effect. Use your understanding of the neurotransmission process to explain Julia's experience.
ANSWER:

5. The ancient Greek physician Hippocrates believed that four basic body fluids (blood, black bile, yellow bile, and phlegm) influenced human behavior, emotions, and personality. Use your understanding of the body's rapid and slower chemical communication systems to support or refute the general logic of Hippocrates' theory.
ANSWER:

6. Compare and contrast three of the different brain imaging techniques discussed in the text.
ANSWER:

7. Describe specific functions of our older brain structures that reveal that our brains are responsible for much more than simply our capacity to think.
ANSWER:

8. Describe how damage to specific structures in your limbic system would likely affect your experience of (a) emotions such as fear and anger, (b) motives such as the thirst and sex drives, and (c) memories such as recall of high school classmates.
ANSWER:

9. After suffering a head injury while playing soccer, Jennifer says that she remembers what her father looks like, and she can accurately recall many of her father's distinctive facial features. However, when she is shown pictures of her father, Jennifer is unable to recognize who it is, even though she can see clearly. Use your understanding of the functioning brain to account for Jennifer's strange pattern of experience.
ANSWER:

10. A series of strokes has damaged regions of Mr. Sklar's temporal lobes. He can still clearly hear what others are saying, but he now has trouble comprehending spoken language. Use your understanding of the brain's association areas to explain why the stroke damage could leave Mr. Sklar's hearing unaffected while interfering with his ability to identify the meaning of spoken words.
ANSWER:

11. Janet was in an automobile accident as a child but seems to have fully recovered as an adult. Explain the role of plasticity in her recovery.

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TB1 Chapter 02: Essay

ANSWER:

12. Describe how an understanding of both a normally functioning brain and a split brain enables us to better appreciate the fact that most information processing takes place outside of conscious awareness.
ANSWER:

13. Describe what is meant by parallel processing and sequential processing and explain why the simultaneous occurrence of both parallel and sequential processing illustrates our two-track mind.
ANSWER:

14. Steve works a graveyard shift at his current place of employment and always feels tired and sleep deprived. Explain how this work pattern is affecting his circadian rhythm.
ANSWER:

15. Identify the different sleep stages, and describe what occurs during each stage.
ANSWER:

16. Compare and contrast the five theories that are used to help explain our need for sleep.
ANSWER:

17. Outline the effects of sleep deprivation that are discussed in the text.
ANSWER:

18. Compare and contrast the major sleep disorders that are discussed in the text.
ANSWER:

19. Andre, a college junior, has difficulty falling asleep at night and therefore avoids going to bed until very late at night. Before he retires for the night, he tries to wear himself out by doing 100 push-ups. Before getting into bed he eats some cake, takes a couple of sleeping pills, and then reviews the assignments of his early morning class. What specific advice would you give Andre to help him fall asleep?
ANSWER:

20. Clarissa was present when there was an active shooter at a concert. Describe the dreams she was likely to have the night after the shooting, and explain why she would have those dreams.
ANSWER:

21. Marco studied all evening for a chemistry test scheduled for the following morning. That night he dreamed that he accurately copied a female classmate's correct answers to the test questions as they unexpectedly flashed before his eyes. Compare and contrast explanations of Marco's dream that might be provided by Freud's wish-fulfillment theory, by an information-processing theory, and by the theory that dreams are initiated by random neural activation.
ANSWER: