

Review #2

(<http://www.ApPsychology.net>)

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Questions

1. In which of the following parts of the brain would a lesion most likely result in aphasia?
 - a. corpus callosum
 - b. sensory cortex
 - c. hypothalamus
 - d. Wernicke's area

2. After 3 hours of playing a physically exhausting professional tennis match, Chitra began to experience a sense of physical exhilaration and pleasure. It is likely that her feelings were most directly linked to the release of:
 - a. dopamine.
 - b. acetylcholine.
 - c. endorphins.
 - d. serotonin.

3. The reticular formation is located in the:
 - a. brainstem.
 - b. limbic system.
 - c. somatosensory cortex.
 - d. motor cortex.

4. The most extensive regions of the brain, which enable judging and planning, are called the:
 - a. reticular formation.
 - b. projection areas.
 - c. sensory areas.
 - d. temporal lobes.
 - e. association areas.

5. The peripheral nervous system is to sensory neurons as the central nervous system is to:
 - a. motor neurons.
 - b. interneurons.
 - c. neurotransmitters.
 - d. the sympathetic nervous system.

6. The skeletal nervous system is a component of the _____ nervous system.
 - a. peripheral
 - b. autonomic
 - c. central
 - d. sympathetic
 - e. parasympathetic

7. The secretions of the pituitary gland are most directly regulated by the:
- a. reticular formation.
 - b. hypothalamus.
 - c. amygdala.
 - d. cerebellum.
8. Sensory neurons are an important part of the:
- a. limbic system.
 - b. reticular formation.
 - c. peripheral nervous system.
 - d. central nervous system.
 - e. sympathetic nervous system.
9. Which part of the human brain is most similar to the brain of a frog?
- a. the occipital lobe
 - b. the limbic system
 - c. the parietal lobe
 - d. the brainstem
10. Phineas Gage underwent a dramatic personality change after a tamping iron inflicted massive damage to his _____ lobe.
- a. frontal
 - b. temporal
 - c. occipital
 - d. parietal
11. The part of the left frontal lobe that directs the muscle movements involved in speech is known as:
- a. Wernicke's area.
 - b. the angular gyrus.
 - c. the amygdala.
 - d. Broca's area.
 - e. the reticular formation.
12. The motor cortex is located in the _____ lobe.
- a. occipital
 - b. temporal
 - c. frontal
 - d. parietal
13. The part of the peripheral nervous system that controls glandular activity and the muscles of internal organs is called the:
- a. skeletal nervous system.
 - b. reticular formation.
 - c. limbic system.

d. autonomic nervous system.

14. Endocrine glands secrete hormones directly into:

- a. synaptic gaps.
- b. the bloodstream.
- c. the limbic system.
- d. sensory neurons.
- e. interneurons.

15. In order to identify which of Lucy's brain areas was most active when she talked, neuroscientists gave her a temporarily radioactive form of glucose and a(n):

- a. CAT scan.
- b. PET scan.
- c. EEG.
- d. MRI.

16. Opiate drugs occupy the same receptor sites as:

- a. acetylcholine.
- b. curare.
- c. dopamine.
- d. endorphins.
- e. epinephrine.

17. The myelin sheath helps to increase the _____ of neural impulses.

- a. frequency
- b. intensity
- c. threshold
- d. speed

18. Split-brain patients have had their _____ surgically cut.

- a. cerebral lobes
- b. limbic system
- c. corpus callosum
- d. sensory cortex
- e. reticular formation

19. The structure located atop the brainstem that directs messages to the brain's sensory receiving areas is called the:

- a. reticular formation.
- b. thalamus.
- c. hypothalamus.
- d. cerebellum.

20. When the release of ACh is blocked by certain chemical substances, the result is:

- a. depression.
- b. aggression.

- c. paralysis.
- d. schizophrenia.
- e. euphoria.

21. Heartbeat acceleration is to heartbeat deceleration as the _____ nervous system is to the _____ nervous system.

- a. somatic; autonomic
- b. autonomic; somatic
- c. central; peripheral
- d. sympathetic; parasympathetic
- e. parasympathetic; sympathetic

22. An x-ray photograph of the brain is called a(n):

- a. CAT scan.
- b. PET scan.
- c. EEG.
- d. lobotomy.

23. Sir Charles Sherrington observed that impulses took more time to travel a neural pathway than he might have anticipated. His observation provided evidence for the existence of:

- a. association areas.
- b. the limbic system.
- c. interneurons.
- d. synaptic gaps.
- e. neural networks.

24. Epinephrine and norepinephrine are released by the _____ glands.

- a. thyroid
- b. pituitary
- c. parathyroid
- d. adrenal
- e. thymus

25. The depolarization of a neural membrane creates a(n):

- a. action potential.
- b. myelin sheath.
- c. lesion.
- d. neural network.
- e. interneuron.

26. Stimulation of the reticular formation will cause a:

- a. sleeping cat to awaken.
- b. hungry cat to stop eating.
- c. violent cat to become passive.
- d. thirsty cat to drink.

27. With regard to the process of neural transmission, a refractory period refers to a time interval in which:

- a. chemical messengers traverse the synaptic gaps between neurons.
- b. positively charged atoms are pumped back outside a neural membrane.
- c. a brief electrical charge travels down an axon.
- d. an individual reflexively withdraws from a pain stimulus.

28. The chemical messenger at every synaptic gap between a motor neuron and a muscle is:

- a. epinephrine.
- b. acetylcholine.
- c. curare.
- d. dopamine.

29. The right hemisphere is superior to the left at:

- a. solving arithmetic problems.
- b. recognizing people's faces.
- c. understanding simple verbal requests.
- d. processing information in an orderly sequence.

30. A loss of physical coordination and balance is most likely to result from damage to the:

- a. hypothalamus.
- b. cerebellum.
- c. corpus callosum.
- d. amygdala.

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

- a. muscular coordination.
- b. language comprehension.
- c. speaking ability.
- d. visual perception.
- e. pain sensations.

32. The part of a neuron that transmits neural messages to other neurons, muscles, or glands is called the:

- a. axon.
- b. synapse.
- c. association area.
- d. dendrite.
- e. cell body.

33. A neural impulse is generated only when excitatory minus inhibitory signals exceed a certain:

- a. action potential.
- b. synapse.

- c. threshold.
- d. dendrite.
- e. EEG level.

34. The branching extensions of nerve cells that receive incoming signals from sensory receptors or from other neurons are called the:

- a. axons.
- b. synapses.
- c. cell bodies.
- d. dendrites.
- e. neurotransmitters.

35. The nineteenth-century theory that bumps on the skull reveal a person's abilities and traits is called:

- a. parapsychology.
- b. neuroscience.
- c. neuropsychology.
- d. phrenology.
- e. biological psychology.

36. Neural impulses may travel as rapidly as:

- a. sound waves.
- b. light waves.
- c. 200 miles per hour.
- d. electricity through a wire.

37. Increasing the intensity of a stimulus above the threshold will not similarly increase the intensity of a neural response to that stimulus. This highlights the nature of the:

- a. synaptic gap.
- b. myelin sheath.
- c. all-or-none response.
- d. parasympathetic nervous system.
- e. neurotransmitters.

38. The sensory cortex is located in the _____ lobe.

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

39. Neurotransmitters are released from vesicles located on knoblike terminals on the:

- a. dendrites.
- b. cell body.
- c. axon.
- d. myelin sheath.

40. To demonstrate that brain stimulation can make a rat violently aggressive, Professor Brown should electrically stimulate the rat's:

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

Answers

01d 02c 03a 04e 05b 06a 07b 08c 09d 10a 11d 12c 13d 14b 15b 16d 17d 18c 19b 20c
21d 22a 23d 24d 25a 26a 27b 28a 29b 30b 31d 32a 33c 34d 35d 36c 37c 38d 39c 40a