

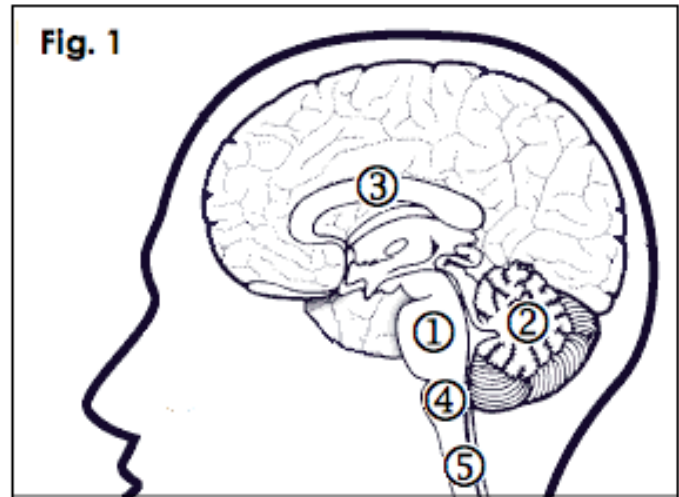
This sample test will have 20 questions. You can find the answers on the last page.

1. The view drawn in Fig. 1 shows the brain in the _____ plane.

- A. coronal
- B. horizontal
- C. sagittal
- D. transverse

2. The area of the brain illustrated in Fig. 1 which serves as the **major commissure connecting the right and left hemispheres** of the cortex is numbered as ____.

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5



3. The results of the experiments of **Charles Scott Sherrington** led him to conclude that _____.

- A. neural transmission must also involve a synapse, i.e., a space between neurons
- B. brain waves are responsible for varying levels of consciousness
- C. the temporal lobe of the brain was primarily involved in emotions
- D. reflexes are different in human beings compared to other animals like dogs

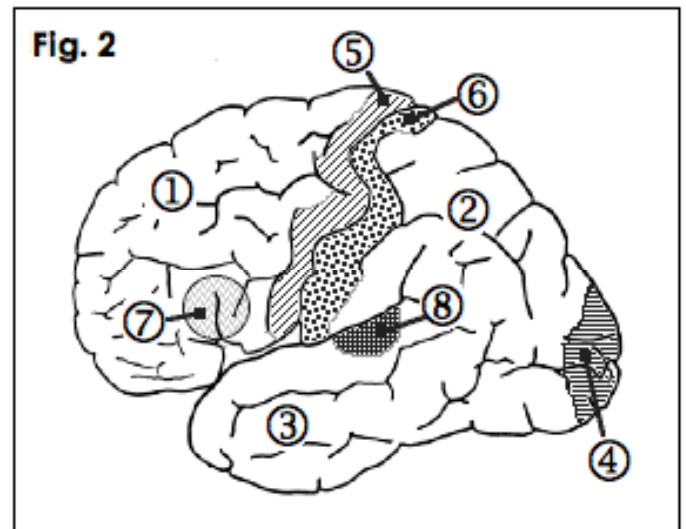
Questions 4 & 5 refer to the drawing of the brain shown in Fig. 2 to the right.

4. The area of the brain which sends out **motor instructions** to the voluntary muscles of the body is located at which of these areas?

- A. 4
- B. 5
- C. 6
- D. 7

5. Which of the lobes of the brain (numbered as 1, 2, 3, 4) is primarily responsible for processing **auditory** information from the ears?

- A. 1
- B. 2
- C. 3
- D. 4

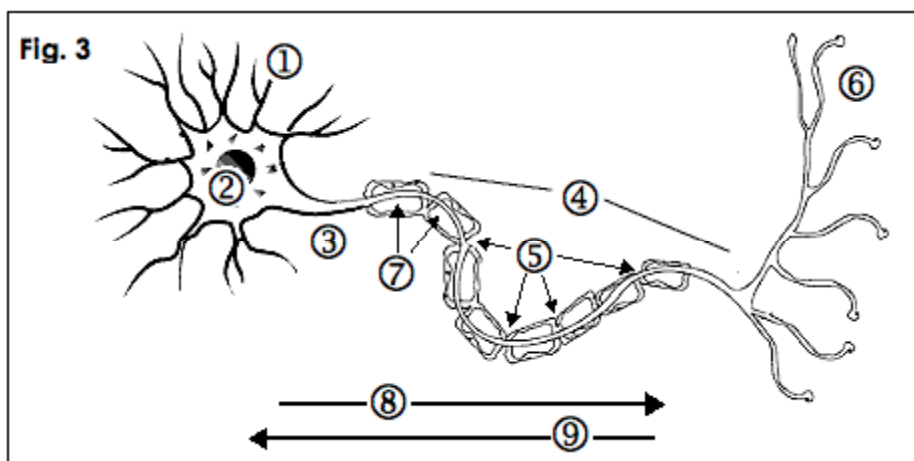


6. The **membrane** of the neuron is mostly composed of _____ with various _____ channels embedded in it.

- A. carbohydrates; protein
- B. proteins; lipid
- C. lipids; purine
- D. lipids; protein

7. Which type of explanation in psychology might describe the presence of a behavior in a particular species by showing how that behavior increased the **reproductive success** of the species?

- A. evolutionary
- B. ontogenetic
- C. physiological
- D. functional



8. The action potential is **first generated** at what point of the neuron as illustrated above in Figure 3? _____.

- A. 1
- B. 3
- C. 5
- D. 6

9. If you wanted to measure or estimate the **amount of heritability** for a particular trait, which one of these research approaches would be most helpful?

- A. examining the DNA of people with or without the trait
- B. comparing monozygotic against dizygotic twins for the presence of the trait
- C. interviewing different members of a family to ask about their home environment
- D. checking what neurotransmitter molecules might be associated with the trait

10. The **blood-brain barrier** is composed of _____ cells that prevent harmful materials from reaching brain tissue.

- A. endothelial
- B. articulated blocking
- C. glial
- D. mesotheric

11. The "**threshold of excitation**" which leads to the generation of an action potential is equivalent to roughly _____.

- A. +40 to +50 mV
- B. -70 mV
- C. -50 to -40 mV
- D. -90 mV

12. A **nerve** is basically composed of _____.
- A. a single neuron
 - B. the dendrites of many neurons
 - C. the axons of many neurons
 - D. the cell bodies (somas) of neurons
13. An **EPSP** results from _____.
- A. the entry of sodium ions into the postsynaptic membrane
 - B. the opening of sodium channels in the presynaptic neuronal membrane
 - C. the deactivation of cytoplasmic enzymes
 - D. the entry of chloride ions into or the exit of potassium ions from the postsynaptic membrane
14. Simultaneous weak stimuli at **different locations** produce a greater reflexive response than one of the stimuli by itself. What is this phenomenon called?
- A. the all-or-none law
 - B. spatial summation
 - C. temporal summation
 - D. Sherrington's Law
15. "**Second messengers**" carry their messages to _____.
- A. the surrounding glia
 - B. areas within the presynaptic cell
 - C. areas within the postsynaptic cell
 - D. the presynaptic membrane
16. **Reuptake** is the absorption of _____.
- A. neurotransmitters by the presynaptic neuron
 - B. neurotransmitters by the postsynaptic neuron
 - C. neurotransmitters by glial cells
 - D. nutrients and waste products by glial cells
17. A drug's likelihood to **attach itself to a receptor** is known as the drug's _____.
- A. affinity
 - B. efficacy
 - C. agonist effect
 - D. antagonist effect
18. The **central nervous system** (CNS) is composed of _____.
- A. the sympathetic and parasympathetic nervous systems
 - B. the somatic and autonomic nervous systems
 - C. all the nerves outside the brain and spinal cord
 - D. the brain and the spinal cord
19. Which part of the nervous system prepares the body for "**fight or flight**" activities?
- A. somatic
 - B. peripheral
 - C. sympathetic
 - D. parasympathetic
20. The **frontal** lobe of the brain is _____ to the **occipital** lobe.
- A. dorsal
 - B. anterior
 - C. superior
 - D. proximal

End of exam

Sample Test #1

Answer Key:

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