MATCHING: Match the correct term with each description. Write the letter of the term in the space provided. Two terms are not used. (3 points each)

a. cerebrum  
b. central nervous system  
c. hormones  
d. genes  
e. somatic nervous system  
f. autonomic nervous system  
g. cerebellum

1. Part of the nervous system that consists of the brain and the spinal cord
2. Part of the peripheral nervous system that is activated by touch and pain
3. Largest part of the brain, controlling functions such as thinking and memory
4. Substances in the body that stimulate growth and many kinds of reactions
5. Basic building blocks of heredity

MULTIPLE CHOICE: In the space provided, write the letter of the choice that best answers each question or completes each statement. (5 points each)

6. What part of a neuron carries messages away from a cell body?
   a. dendrite  
b. axon  
c. synapse  
d. cell body

7. Messages are transmitted from one neuron to another through the
   a. axon terminal of one neuron to the axon terminal of another neuron.  
b. dendrites of one neuron to the dendrites of another neuron.  
c. synapses of one neuron to the axon terminal of another neuron.  
d. axon terminal of one neuron to the dendrites of other neurons.

8. Which of the following is regulated by the autonomic nervous system?
   a. differentiating between hot and cold  
b. throwing a ball  
c. digesting food  
d. balancing on a balance beam

9. Which section of the brain is involved in vital functions such as breathing?
   a. hindbrain  
b. forebrain  
c. midbrain  
d. cerebrum

10. The left and right sides of the brain refer to which of the following?
    a. reticular activating system  
b. cerebral cortex  
c. cerebellum  
d. medulla
CHAPTER TEST, continued

11. Which of the following is an imaging technique used to study the brain?
   a. electrical stimulation of the brain
   b. CAT scan
   c. study of accidents and brain damage
   d. electroencephalogram

12. What does the body’s endocrine system consist of?
   a. brain and spinal cord
   b. cell body, axons, and dendrites
   c. glands that excrete hormones
   d. genes and chromosomes

13. Helping people deal with stressful situations is the role of the
   a. thyroid gland.
   b. pituitary gland.
   c. ovaries.
   d. adrenal glands.

14. Psychological traits in human beings, such as intelligence, are influenced
   a. only by environment.
   b. only by combinations of genes.
   c. by both genes and environment.
   d. by the genes of only one parent.

15. Which of the following reflects the “nature” approach to human psychology?
   a. Intelligence is determined largely by genetics.
   b. Where a person lives determines how the person behaves.
   c. Intelligence is determined by the kind of education a person receives.
   d. People’s family life helps determine who they will become.

SHORT ANSWER: Write your answers to the questions that follow on a separate sheet of paper. (5 points each)

16. Identify the purpose of the peripheral nervous system and its two main divisions.

17. Why is the cerebral cortex considered the part of the brain that makes people uniquely human?

18. What is the general purpose of kinship studies?

CRITICAL THINKING: Write your answers to the questions that follow on a separate sheet of paper. (10 points each)

19. Why does a spinal cord injury often result in paralysis?

20. What are the advantages and disadvantages of studying identical twins to determine the roles of heredity and environment on psychological traits?
Answers

1. a 2. c 3. b 4. e 5. d 6. b 7. a 8. c 9. c 10. a 11. a 12. d 13. b 14. d 15. b 16. A clinical psychologist handles serious psychological problems such as depression; a counseling psychologist deals with people with adjustment problems. 17. Developmental psychologists study the changes that occur throughout the life span and the relative influences of heredity and the environment on development. 18. Wundt, Watson, and Skinner conducted research in a lab; Freud's theories came from his interactions with his patients. 19. Both traditional behaviorists and social-learning theorists believe that learning influences behavior. According to behaviorists, learning is achieved through repetition and reinforcement. People's behaviors are based on what they have learned, not on conscious choice. Social-learning theorists, on the other hand, believe that learning is intentional and that behavior that is learned is influenced by people's values, abilities, and expectations. 20. Today's psychoanalysts focus less on the role of the unconscious and more on conscious choice and self-direction. Psychoanalytic theory no longer dominates the field as it once did.

1. b 2. a 3. f 4. e 5. d 6. b 7. a 8. c 9. b 10. c 11. b 12. d 13. c 14. d 15. c 16. by using a random or a stratified sample 17. to observe changes over time by comparing behavior of participants in different age groups 18. An independent variable is the factor that researchers manipulate to determine its effect; a dependent variable is a factor that depends on the independent variable. 19. In order for researchers to make accurate predictions about the population from which the sample was drawn, they need to select their samples scientifically to ensure that the samples represent the populations they are supposed to represent. 20. In naturalistic observation, scientists study people or animals in their natural environments; in laboratory observation, scientists study people or animals in a laboratory setting, enabling researchers to control aspects of the study.

1. b 2. c 3. a 4. c 5. d 6. b 7. d 8. c 9. a 10. b 11. b 12. c 13. d 14. c 15. a 16. The peripheral nervous system transmits messages between the central nervous system and all parts of the body. It is divided into the somatic nervous system, which deals with actions that a person controls, and the autonomic nervous system, which deals with actions that people do not control, such as breathing. 17. It is the part of the brain that deals with thinking, memory, language, emotions, complex motor functions, and perceptions. 18. to find out if a particular trait is influenced more by heredity or by environment; to study the roles that heredity and environment play in determining a trait 19. The spinal cord transmits messages between the brain and the muscles. If this connection is damaged, the spinal cord is unable to transmit the messages. As a result, the brain cannot tell the body to move. 20. An advantage to studying identical twins is that they have the same genetic makeup, so any differences between the two are likely to be the result of the environment. A disadvantage of studying identical twins is that they are often treated similarly and are brought up in the same environment. As a result, it is often difficult for scientists to determine whether similarities between the twins are due to heredity or to environment.