1. A change in the external or internal environment of an organism is known as

A. a response
B. an impulse
C. a synapse
D. a stimulus

2. The diagrams show various organ systems. Diseases that cause numbness and paralysis interfere most directly with the normal functioning of

A. system E
B. system G
C. system A
D. system D

3. When leg muscles respond to a stimulus by moving the foot, the response depends most directly on the functioning of

A. bronchioles
B. nephrons
C. capillaries
D. nerves
4. Increased perspiration, a higher body temperature, and a rapidly beating heart are all possible responses to a stressful situation. These body responses are most likely a direct result of the interaction of the

A. digestive and endocrine systems
B. digestive and respiratory systems
C. nervous and hormonal systems
D. nervous and reproductive systems

5.

The diagram represents the functional unit of a nervous system. Which structure secretes a neurotransmitter?

A. structure A
B. structure B
C. structure C
D. structure D

6. Nerve cells are essential to an animal because they directly provide

A. communication between cells
B. transport of nutrients to various organs
C. regulation of reproductive rates within other cells
D. an exchange of gases within the body

7. Two types of human cells are shown in the diagram below.

Cell A causes the cells at B to contract. This activity would be most useful for

A. lifting a book from a bookshelf
B. coordinating the functions of organelles
C. digesting food in the small intestine
D. carrying out the process of protein synthesis
8. Which substances are found on cell surfaces and respond to nerve and hormone signals?

A. starches and simple sugars  
B. subunits of DNA  
C. vitamins and minerals  
D. receptor molecules

9. Which diagram best represents the levels of organization in the human body?

A.  
B.  
C.  
D.  

10. Two primary agents of cellular communication are

A. chemicals made by blood cells and simple sugars  
B. hormones and carbohydrates  
C. enzymes and starches  
D. hormones and chemicals made by nerve cells
Answer Key 1: Nervous System

1. D
2. D
3. D
4. C
5. D
6. A
7. A
8. D
9. B
10. D