

## QUIZ 9

*E* 1. Exposure to stress activates the hypothalamo-pituitary-adrenocortical system as demonstrated by

- A. Increased secretion of corticotropin from the anterior pituitary in response to stress
- B. Increased secretion of corticotropin releasing hormone from the hypothalamus in response to stress
- C. Increased secretion of cortisol from the adrenal medulla in response to stress
- D. Both A and B
- E. All of the choices are correct

*B* 2. Which of the following acts to decrease blood glucose levels?

- A. Glucagon
- B. Insulin
- C. Growth hormone
- D. Epinephrine
- E. Cortisol

*E* 3. Which of the following statements is not true of the endocrine system?

- A. It is one of two major regulatory systems of the body
- B. It is composed of glands that secrete chemical messengers into the blood
- C. It is an important regulator of homeostatic mechanisms
- D. It influences and is influenced by the nervous system
- E. All of the choices are true

*E* 4. The major hormone responsible for mediating the body's response to stress is

- A. Thyroid hormone
- B. Growth hormone
- C. Testosterone
- D. Aldosterone
- E. Cortisol

*A* 5. Symptoms of untreated insulin-dependent diabetes mellitus include

- A. Hyperglycemia
- B. Reduced blood volume
- C. Depressed respiration
- D. Hyperglycemia and reduced blood volume
- E. All of the choices are correct.

6. The hormones secreted by the posterior pituitary include

- A. Vasopressin
- B. Corticotropin
- C. Oxytocin
- D. Vasopressin and corticotropin
- E. Vasopressin and oxytocin

7. Insulin

- A. Increases the uptake and utilization of glucose by muscle and adipose-tissue cells
- B. Increases the uptake and utilization of glucose by most nerve cells
- C. Decreases the uptake of amino acids by muscle cells
- D. Both A and B
- E. Both A and C

8. When plasma glucose concentration increases, the secretion of insulin is \_\_\_\_\_ and the secretion of glucagon is \_\_\_\_\_. However, an increase in sympathetic activity will cause \_\_\_\_\_ secretion of insulin and \_\_\_\_\_ secretion of glucagon.

- A. Decreased; increased; increased; decreased
- B. Increased; decreased; decreased; increased
- C. Increased; decreased; increased; decreased
- D. Increased; increased; decreased; increased
- E. Decreased; decreased; increased; unchanged

9. Which of the following is *not* a fate of absorbed glucose?

- A. It is converted to glycogen by liver cells
- B. It is converted to fatty acids and glycerol phosphate by adipose cells
- C. It is converted to glycogen by muscle cells
- D. It is converted to amino acids by liver cells
- E. It is converted to fatty acids and glycerol phosphate by liver cells

10. The "master gland" of the endocrine system is the

- A. Anterior pituitary gland
- B. Posterior pituitary gland
- C. Hypothalamus
- D. Pancreas
- E. Testis