

## Biology 211

### Practice Questions Exam 1

1. Amino acid-based hormones \_\_\_\_\_ to stimulate target gene activation.
  - a. directly bind to DNA molecules in the nucleus of the cell
  - b. bind to nuclear receptors which bind to DNA
  - c. bind to plasma membrane receptors and use a second messenger system
  - d. none of the above
2. The posterior pituitary and infundibulum together are known as the \_\_\_\_\_.
  - a. adenohypophysis
  - b. neurohypophysis
  - c. hypothalamus
  - d. thyroid gland
3. \_\_\_\_\_ is produced by the paraventricular nuclei of the hypothalamus and released by the posterior pituitary.
  - a. Oxytocin
  - b. Growth hormone
  - c. Melatonin
  - d. Calcitonin
4. Which of the following hormones is NOT produced by the anterior pituitary?
  - a. thyroid stimulating hormone
  - b. adrenocorticotrophic hormone
  - c. corticotropin releasing hormone
  - d. follicle stimulating hormone
5. \_\_\_\_\_ stimulates osteoclasts in bone to digest bone and release calcium to the blood.
  - a. Calcitonin
  - b. Thyroid stimulating hormone
  - c. Parathyroid hormone
  - d. Insulin
6. Mineralocorticoids are produced by cells of the \_\_\_\_\_ of the adrenal gland.
  - a. zona glomerulosa
  - b. zona fasciculata
  - c. zona reticularis
  - d. zona occludens

7. The formed elements of blood include all of the following EXCEPT:
- erythrocytes
  - leukocytes
  - plasma
  - platelets
8. All of the following are factors associated with the development of anemias EXCEPT:
- an insufficient number of red blood cells
  - decreased hemoglobin content of red blood cells
  - abnormal hemoglobin
  - increased production of the hormone erythropoietin
9. White blood cells occupy approximately \_\_\_\_\_ of the volume of whole blood.
- 20%
  - 40%
  - 60%
  - < 1%
10. \_\_\_\_\_ are also known as polymorphonuclear leukocytes (PMNs).
- Neutrophils
  - Basophils
  - Monocytes
  - Lymphocytes
11. The final stage of hemostasis is:
- clot retraction
  - platelet plug formation
  - coagulation
  - fibrinolysis
12. Preformed antibodies that act against erythrocytes carrying ABO antigens not present on one's own cells are known as \_\_\_\_\_.
- Rh factors
  - agglutinins
  - thrombins
  - fibrins
13. In which of the following tissues would lymph capillaries be most likely to be found?
- bones
  - teeth
  - central nervous system
  - loose connective tissue

14. Lacteals are present in the \_\_\_\_\_.
- a. heart
  - b. lungs
  - c. liver
  - d. intestinal mucosa
15. Follicles are found mainly in the \_\_\_\_\_ of the lymph node.
- a. medulla
  - b. cortex
  - c. capsule
  - d. sinuses
16. Which of the following is NOT a function of the spleen?
- a. Production of thymosins for the maturation of T cells
  - b. Production of red blood cells
  - c. Storage of breakdown products of red blood cells
  - d. Storage of blood platelets

Answers: c, b, a, c, c, a, c, d, d, a, c, b, d, d, b, a