1. Which of the following is true of the endocrine system but not the nervous system?
   A) directs long term processes such as pregnancy and puberty
   B) communicates via chemical signals
   C) regulates activities of muscles and glands
   D) A and B are correct.
   E) A, B and C are correct.

2. Which of the following statements about the endocrine system is NOT correct?
   A) It uses hormones, which are transported by the blood, to communicate with distant tissues.
   B) Its hormones must bind to specific receptor sites in order to have effects on a tissue.
   C) It targets are limited to muscles, glands and nerves.
   D) It may take seconds, hours, or days to respond to a stimulus.
   E) Its actions may last seconds, hours, or days.

3. The anterior pituitary gland responds to gonadotropin releasing hormone (GnRH), but the posterior pituitary gland does not. Why?
   A) Only anterior pituitary gland is permeable to GnRH.
   B) Only the anterior pituitary gland is vascular.
   C) Only the anterior pituitary gland is connected by neurons to the hypothalamus.
   D) Only the anterior pituitary gland is connected to a duct carrying GnRH.
   E) Only the anterior pituitary gland has receptors for GnRH.

4. Each of the following is a lipid-soluble hormone EXCEPT:
   A) aldosterone
   B) thyroid hormone
   C) insulin
   D) nitric oxide
   E) cortisone

5. Which of the following classes of hormones is water-soluble?
   A) eicosanoids
   B) amines
   C) peptides
   D) proteins
   E) All of these are correct.

6. What do T3 and T4 have in common with epinephrine and norepinephrine?
   A) They are all water-soluble.
   B) They are all lipid-soluble.
   C) They are all derived from the amino acid tyrosine.
   D) They are all made by both the nervous and endocrine systems.
   E) They are all made by the adrenal glands.

7. Which of the following is not a 2nd messenger?
   A) G protein
   B) IP3
   C) Ca2+
   D) DAG
8. Calcitonin and parathyroid hormones have opposite effects on blood Ca\textsuperscript{2+} level, therefore they are considered to be
   A) synergists
   B) permissive
   C) antagonist
   D) repressive
   E) agonistic

9. The hypothalamus
   A) is a link between the endocrine and nervous systems.
   B) release oxytocin and ADH into the blood but do not produce them.
   C) regulates the posterior pituitary gland via releasing and inhibiting hormones.
   D) A and B are correct.
   E) A, B and C are correct.

10. The pituitary gland
    A) lies in the cribiform plate of the ethmoid bone.
    B) consists of two lobes, the adenohypophysis and the neurohypophysis.
    C) develops from outgrowths of endoderm.
    D) A and B are correct.
    E) A, B and C are correct.

11. Which of the following is NOT associated with hGH?
    A) secreted by the most numerous cells in the adenohypophysis
    B) increase protein synthesis
    C) stimulate production and release of insulin-like growth factors
    D) decrease lipolysis
    E) spare glucose for use by the nervous system

12. Which of the following is correct?
    A) Only females produce prolactin.
    B) Increased levels of stress may cause increased secretion of ACTH.
    C) MSH is required for normal thyroid function in humans.
    D) LH inhibits ovulation.
    E) TSH stimulates calcitonin production.

13. The posterior pituitary gland
    A) is also called the adenohypophysis.
    B) contains pituicytes and the axons of neurons that originate in the hypothalamus.
    C) synthesizes ADH and OT.
    D) releases ADH and OT into the hypophyseal artery.
    E) All of these are correct.

14. In order to synthesize thyroid hormones, which materials must be available?
    A) iodide
    B) tyrosine (or its precursor, phenylalanine)
    C) other amino acids required for thyroglobulin synthesis
    D) A and B are correct.
    E) A, B and C are correct.

15. Which of the following would NOT be a possible outcome of elevated TSH secretion?
    A) increased TRH synthesis
B) increased T3/T4 synthesis
C) increased body temperature
D) decreased blood cholesterol levels
E) increased lipolysis

Use the following to answer questions 16-18.
Choose the answer that best matches the description or term.
A) ACTH
B) FSH, LH
C) hGH
D) PRL
E) TSH

16. from lactotrophs, stimulates secretion of milk by mammary glands

17. from gonadotrophs, stimulate gamete production and secretion of estrogen or testosterone from gonads

18. from corticotrophs, stimulates secretion of hormones from adrenal cortex

Use the following to answer questions 19-20.
Choose the answer that best matches the description or term.
A) calcitonin
B) calcitriol
C) parathyroid hormone
D) T3/T4
E) TSH

19. principal cells; stimulates osteoclasts

20. parafollicular cells; inhibits osteoclasts

Answer Key - self quiz ch 18
1. A
2. C
3. E
4. C
5. E
6. C
7. A
8. C
9. A
10. B
11. D
12. B
13. B
14. E
15. A
16. D
17. B
18. A
19. C
20. A