1. The ANS provides the chief nervous control in which of the following activities?
   a. following a moving object with the eyes
   b. removing a hand reflexively from a hot object
   c. typing
   d. digesting food
   e. writing an essay

2. When a pregnant female lies on her back, the weight of the uterus and developing fetus can compress the inferior vena cava, resulting in _____.
   a. erratic tremor and cramps in pelvic and leg muscles
   b. sudden hypertension and large amounts of protein in the urine
   c. decreased blood flow to the placenta, leading to oxygen starvation of the fetus
   d. decreased venous return in the lower limbs, leading to varicose veins
   e. increased production of lactic acid by cramping abdominal uterine muscles

3. Which of the following about gray rami is FALSE?
   a. They carry preganglionic neurons from the anterior rami to trunk ganglia.
   b. They contain only sympathetic nerve fibers.
   c. They carry impulses from sympathetic trunk ganglia to spinal nerves.
   d. They are located at all levels of the vertebral column.
   e. They contain only unmyelinated axons.

4. How long after fertilization does implantation of an embryo usually occur?
   a. 30 minutes  b. 1 day  c. 3 days  d. 1 week  e. 3 weeks

5. Which of the following does NOT accurately describe mammary gland structure?
   a. They are modified sweat glands.
   b. Milk in a lactiferous sinus passes through a lactiferous duct before reaching the nipple.
   c. Lobes of the gland are separated by suspensory ligaments arising from deep fascia.
   d. Each lobe typically has its own lactiferous duct.
   e. The primary determinant of breast size is the amount of adipose tissue, not the amount of glandular tissue.

6. Which of the following most accurately describes endocrine system function?
   a. It reaches more types of cells and organs than does the nervous system.
   b. It has a shorter duration of action than does the nervous system, but typically reacts more rapidly to stimulation.
   c. It controls effector organs by releasing neurotransmitters into the blood.
   d. b & c
   e. a, b & c

7. Which of the following endocrine glands is also an exocrine gland?
   a. hypothalamus  b. ovary  c. pancreas  d. thyroid  e. adrenal

8. The pelvic splanchnic nerve contains ____ axons.
   a. sympathetic preganglionic
   b. sympathetic postganglionic
   c. parasympathetic preganglionic
   d. parasympathetic postganglionic

9. Which endocrine organ is physically 4 separate organs?
   a. pancreas  b. thyroid  c. parathyroid  d. adrenal  e. pituitary
10. Preganglionic neurons of the autonomic nervous system have their cell bodies in _____.
   a. anterior horns of spinal cord gray matter
   b. lateral horns of spinal cord gray matter
   c. terminal ganglia
   d. posterior root ganglia
   e. sympathetic chain ganglia

11. Which two fetal membranes contribute to early blood cell formation, but play little role in nutrition or support in humans?
   a. amnion & yolk sac
   b. allantois & yolk sac
   c. yolk sac & chorion
   d. chorion & amnion
   e. amnion & allantois

12. Postganglionic neurons of the parasympathetic nervous system have their cell bodies in _____.
   1. sympathetic chain ganglia
   2. posterior root ganglia
   3. prevertebral ganglia
   4. lateral horns of spinal cord gray matter
   5. anterior horns of spinal cord gray matter
   a. 1 & 3  b. 3 only  c. 2 only  d. 4 & 5  e. none of the previous

13. Way back when you were just a little embryo, you obtained most of your nutrition _____.
   a. from the placenta
   b. from endometrial cells and secretions
   c. by exchange across chorionic villi
   d. a & c
   e. a, b & c

14. The hypophyseal portal system transports hormones from the ____ to the ____.
   a. neurohypophysis; adenohypophysis
   b. hypothalamus; anterior pituitary
   c. posterior pituitary; anterior pituitary
   d. hypothalamus; pineal gland
   e. none of the previous

15. The puerperium _____.
   a. refers to the post-delivery recovery period
   b. is the branch of medicine dealing with pregnancy
   c. is another term for parturition
   d. refers to the entire period the developing child is in the female reproductive tract
   e. none of the above

16. The sympathetic division of the PNS is characterized by _____.
   a. ganglia which are close to the CNS and distant from the effector
   b. craniosacral outflow
   c. short preganglionic fibers and long postganglionic fibers
   d. a & b
   e. a & c
17. The anterior ramus of a spinal nerve may carry axons of _____.
   a. somatic motor neurons
   b. sympathetic postganglionic neurons
   c. parasympathetic preganglionic neurons
   d. a & b
   e. a, b & c

18. Mesoderm gives rise to _____.
   a. muscle  b. bone  c. cartilage  d. b & c  e. a, b & c

19. Somatic motor pathways are different from autonomic motor pathways because _____.
   a. somatic pathways utilize a single motor neuron, whereas autonomic require two
   b. only somatic pathways exit from the spinal cord via anterior roots
   c. only somatic pathways reach visceral effectors
   d. somatic pathways involve a ganglion, but autonomic do not
   e. only somatic pathways can cause muscle contraction