

Regulation Chapter Questions

Ch48-49 Nervous Questions

1. What are the parts of a neuron?
2. What is resting membrane potential?
3. Why is the membrane potential -70mV ?
4. Explain the steps of how to send an action potential down a neuron. Including a description of threshold.
5. What are the parts of a synapse?
6. Explain the steps of how signals are sent from one neuron to another.
7. What are the parts of the brain that do the following functions OR what is the function of the part of the brain?
 - a. Vision
 - b. Hearing
 - c. Muscle movement
 - d. Abstract thought and emotions
 - e. Forebrain (cerebrum), midbrain (brainstem) and hindbrain (cerebellum)
 - f. Right and left cerebral hemispheres in humans
8. What are the parts of a reflex arc?
9. Give an example of the impact of pesticides, neurotoxins, or poisons on signal transduction pathways of cell communication.

Ch 45 Endocrine Questions

1. How is the endocrine system similar to the nervous system?
2. What is a hormone?
3. Explain the main types of signaling that occur in the body (the 5 different intercellular communications).
4. Describe the pathway for the water-soluble hormones and the lipid-soluble hormones.
5. How can the same hormone have very different effects on different parts of the body?
6. Explain how glucose levels are maintained in the body using insulin and glycogen (define negative feedback).
7. Explain one positive feedback mechanism.
8. What hormones are involved with invertebrate control and what do they do?
9. Create a chart to list the major hormones, functions, and the glands they are released from.