

Physiology Test Questions - Muscular System

Mr. Gunther

1. How does muscle tissue contribute to homeostasis?
2. What is the primary function of muscle?
3. Describe the structure, function, and location of skeletal muscle.
4. Describe the structure, function, and location of cardiac muscle.
5. Describe the structure, function, and location of smooth muscle.
6. The ability to respond to stimuli by producing action potentials is a property of muscle tissue and is called:
7. The ability of a muscle tissue to stretch without being damaged is called:
8. A muscle fiber (myofiber) is a muscle
9. What is superficial fascia? What is its relationship to blood vessels and nerves?
10. What is deep fascia
11. The outermost extension of deep connective tissue that surrounds a muscle is the :
12. What is a tendon? What are its functions? How is it related to fascia?
13. Which of the following is NOT true?
14. What kind of nerves control skeletal muscle contraction?
15. How does a neuron contact and connect with muscle fibers?
16. Skeletal myofibers are developed from what kind of cells?
17. An adult has more muscle mass than a child. How did that increase in muscle mass occur?
18. What are transverse tubules?
19. What is muscular atrophy?
20. Which of the following accurately describes the filaments of skeletal muscle tissue?
21. What is a sarcomere? Describe each of the following: H zone, I band, A band, M line, Z disc.
22. What are thick filaments and what are they composed of?
23. What are thin filaments and what are they composed of?
24. Describe the action of a sarcomere during muscle contraction
25. Place the events of a contraction cycle in the order in which they occur.
26. How is excitation of the sarcolemma coupled to the contraction of a muscle fiber?
27. What is rigor mortis?
28. What is a neuromuscular junction (NMJ)?
29. Place the events at the neuromuscular junction (NMJ) in the order in which they occur:
30. What is anaerobic cellular respiration?
31. What is aerobic cellular respiration
32. What factor can contribute to muscle fatigue?
33. What is a twitch contraction?
34. What is wave summation in a muscle fiber?
35. What is motor unit recruitment?
36. What is muscle tone?
37. What are isotonic contractions and isometric contractions?
38. Describe the properties of cardiac muscle tissue.
39. What are myofibrils?