

A.4.6. Motor Units – MCQ's

1. In a typical motor unit, three action potentials are generated quickly after each other. The resulting contraction resulting from such an activity is labelled:
 - a. temporal summation
 - b. spatial summation
 - c. temporary summation
 - d. temporal and spatial summation combined
 - e. motor summation

2. When three motor units each fire one action potential simultaneously, the resulting contraction will then be called:
 - a. temporal summation
 - b. spatial summation
 - c. temporary summation
 - d. temporal and spatial summation combined
 - e. motor summation

3. When three motor units each fire three action potentials in quick succession, the resulting contraction will then be called:
 - a. temporal summation
 - b. spatial summation
 - c. temporary summation
 - d. temporal and spatial summation combined
 - e. motor summation

4. This question relates to the functional anatomy of the axons in and around the spinal cord. Which of the following statements is correct?
 - a. The axons in the ventral root run towards the ventral horn
 - b. The axons in the ventral horn run towards the ventral root
 - c. The axons in the dorsal root run towards the ventral horn
 - d. The axons in the dorsal horn run towards the ventral root

5. In a typical skeletal muscle, there are approximately 5000 muscle fibres and 500 motor units. How much, on average, is the size of a typical motor unit in this muscle?
 - a. 5000
 - b. 500
 - c. 100
 - d. 10
 - e. 1

Answers:

1. a.
2. b.
3. d.
4. b.
5. d.