

Sports Medicine Mastery Challenge

Sports Medicine · Answer Key · 8 Questions

1. What is the primary physiological adaptation responsible for the "second wind" phenomenon experienced during prolonged exercise?

- A) Increased oxygen debt repayment
- B) Shift to anaerobic metabolism
- C) Improved lactate clearance and increased aerobic energy supply**
- D) Enhanced parasympathetic nervous system activation

2. Which of the following bones is most commonly fractured in a "styloid fracture" associated with a fall on an outstretched hand?

- A) Scaphoid**
- B) Lunate
- C) Radius
- D) Ulna

3. The "unhappy triad" of knee injuries, often sustained in sports involving sudden changes in direction, classically involves damage to which three structures?

- A) Anterior Cruciate Ligament (ACL), Medial Collateral Ligament (MCL), and Medial Meniscus**
- B) Posterior Cruciate Ligament (PCL), Lateral Collateral Ligament (LCL), and Lateral Meniscus
- C) ACL, MCL, and Lateral Meniscus
- D) PCL, MCL, and Medial Meniscus

4. What is the term for the medical condition characterized by a sudden, severe decrease in blood flow to the brain, causing temporary neurological dysfunction, often referred to as a "mini-stroke"?

- A) Cerebral Palsy
- B) Transient Ischemic Attack (TIA)**
- C) Stroke (Cerebrovascular Accident - CVA)
- D) Migraine Aura

5. Which muscle group is primarily responsible for hip extension, a fundamental movement in activities like running and jumping?

- A) Quadriceps femoris
- B) Hamstrings
- C) Gluteus maximus**
- D) Adductor magnus

6. The "RICE" protocol for acute soft tissue injuries stands for Rest, Ice, Compression, and what?

- A) Elevation**
- B) Exercise
- C) Examination
- D) Engagement

7. What is the main function of the Achilles tendon?

- A) To flex the foot at the ankle
- B) To extend the foot at the ankle (plantarflexion)**
- C) To invert the foot
- D) To evert the foot

8. Which type of cartilage is found cushioning the ends of bones in synovial joints, facilitating smooth movement and shock absorption?

- A) Fibrocartilage
- B) Elastic cartilage
- C) Hyaline cartilage**
- D) Perichondrium