

## Muscles Of The Lower Extremity Quiz Answer Key PDF

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**What is the longest muscle in the human body?**

**A. Sartorius ✓**

C. Vastus Lateralis

D. Semitendinosus

C. Iliopsoas

**Describe the functional importance of the gluteal muscles in everyday activities.**

**The gluteal muscles are important for supporting the pelvis, enabling hip movement, and providing strength during activities like walking, running, and climbing.**

**Discuss the clinical significance of the popliteus muscle in knee function.**

**The popliteus muscle is clinically significant as it initiates knee flexation by unlocking the knee from full extension and stabilizes the joint during dynamic activities.**

**What are the implications of a hamstring injury on lower extremity function?**

**Hamstring injuries can lead to decreased range of motion, muscle weakness, and increased risk of re-injury, ultimately compromising overall lower extremity function.**

**What strategies can be employed in rehabilitation to address muscle imbalances in the lower extremity?**

**Strategies include: 1) Strengthening weak muscle groups through resistance training, 2) Stretching tight muscles to improve flexibility, 3) Incorporating balance and proprioception exercises, and 4) Utilizing functional movement patterns to enhance overall coordination and stability.**

**Which nerve innervates the anterior thigh muscles?**

- A. Sciatic Nerve
- C. Obturator Nerve
- D. Superior Gluteal Nerve
- C. Femoral Nerve ✓**

**Which muscle group is located in the posterior compartment of the thigh?**

- A. Quadriceps
- C. Adductors
- D. Calf Muscles
- C. Hamstrings ✓**

**Which muscle assists in both hip and knee movements?**

- A. Sartorius ✓**
- C. Rectus Femoris
- D. Vastus Medialis
- C. Semimembranosus

**Which muscle is responsible for unlocking the knee joint?**

- A. Popliteus ✓**
- C. Soleus
- D. Tensor Fasciae Latae
- C. Iliopsoas

**Which gluteal muscle is primarily responsible for hip abduction?**

- A. Gluteus Maximus
- C. Gluteus Minimus
- D. Tensor Fasciae Latae
- C. Gluteus Medius ✓**

**Which muscles contribute to plantarflexation of the foot? (Select all that apply)**

**A. Gastrocnemius** ✓

**C. Soleus** ✓

D. Tibialis Anterior

C. Fibularis Longus

**Which muscles are involved in stabilizing the pelvis? (Select all that apply)**

**A. Gluteus Medius** ✓

**C. Adductors** ✓

D. Quadriceps

C. Iliopsoas

**Explain the role of the iliopsoas muscle in lower extremity movement.**

**The iliopsoas muscle, composed of the iliacus and psoas major, plays a vital role in hip flexion, allowing for movements like walking, running, and climbing by flexibly lifting the thigh towards the body.**

**Which muscles are involved in hip extension? (Select all that apply)**

**A. Gluteus Maximus** ✓

C. Iliopsoas

**D. Hamstrings** ✓

C. Tensor Fasciae Latae

**Which muscles are innervated by the sciatic nerve? (Select all that apply)**

**A. Biceps Femoris** ✓

**C. Semitendinosus** ✓

D. Vastus Intermedius

**C. Semimembranosus** ✓

**Which of the following muscles are part of the quadriceps group? (Select all that apply)**

**A. Rectus Femoris** ✓

**C. Vastus Lateralis** ✓

D. Biceps Femoris

**C. Vastus Medialis ✓**

**Which muscle is primarily responsible for knee extension?**

A. Biceps Femoris

**C. Rectus Femoris ✓**

D. Gluteus Maximus

C. Gastrocnemius

**How does the femoral nerve contribute to the movement of the lower extremity?**

**The femoral nerve contributes to the movement of the lower extremity primarily by innervating the quadriceps muscle, enabling knee extension.**

**What are common injuries associated with the lower extremity muscles? (Select all that apply)**

**A. Strains ✓**

**C. Tendonitis ✓**

D. Fractures

**C. Tears ✓**

**Which artery supplies blood to the anterior compartment of the thigh?**

A. Popliteal Artery

C. Posterior Tibialis Artery

D. Inferior Gluteal Artery

**C. Femoral Artery ✓**