Gross Anatomy Dry Laboratory Lower Body Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. Which muscle is involved in lateral rotation of the thigh and is innervated by the posterior division of the obturator nerve?

A. Obturator externus

B. Obturator internus

C. Superior gemellus

D. Inferior gemellus

2. The lateral malleolar groove has attachments to which tendons?

A. fibular brevis (tendon) and fibularis longus (tendon)

B. tibialis anterior (tendon)

C. gastrocnemius (tendon)

D. soleus (tendon)

3. The pubic symphysis allows which degree of movement?

A. No Movement

B. Moderate Movement

C. Slight Movement

D. Free Movement

4. The base of the patella has what attached to it?

A. Patellar Tendon

B. Common Quadriceps Tendon

C. Inguinal Ligament

D. Medial Patellar Retinaculum

5. What is the joint classification of the superior tibiofibular joint?

A. plane

B. slight movement

C. fibrous

D. synovial

6. Which muscle is innervated by the nerve to quadratus femoris?

A. Inferior gemellus

B. Superior gemellus

C. Obturator internus

D. Obturator externus

7. The obturator externus action is what?

A. Lateral rotation

B. Medial rotation

C. Abduction

D. Flexion

8. The soleus does what action?

A. Dorsiflexion

B. Plantarflexion

C. Inversion

D. Eversion

9. Which muscle attaches to the ischial tuberosity and is part of the hamstring group?

A. Gracilis

B. Semitendinosus

C. Gluteus Maximus

D. Adductor Longus

10. Which statement best describes the action of the sartorius muscle?

A. Flexes abducts and laterally rotates thigh at hip

B. Extends thigh at hip

C. Adducts thigh

D. Flexes knee

Answers

1. A
2. A
3. C
4. B
5. D
6. A
7. A
8. B
9. B
10. A

Explanations

1. Which muscle is involved in lateral rotation of the thigh and is innervated by the posterior division of the obturator nerve?

A. Obturator externus

B. Obturator internus

C. Superior gemellus

D. Inferior gemellus

Lateral rotation of the thigh is produced by a group of deep hip rotators, and nerve supply helps distinguish them. The muscle that both laterally rotates the thigh and is innervated by the posterior division of the obturator nerve is the obturator externus. It originates from the external surface of the obturator membrane and margins of the obturator foramen and inserts on the trochanteric fossa of the femur. Its action is to externally rotate the thigh, especially when the hip is extended, and it also helps stabilize the femoral head in the acetabulum. Other nearby lateral rotators, like the obturator internus and the gemelli, are innervated by the nerve to obturator internus (or the nerve to quadratus femoris), not the posterior division of the obturator nerve, which is what makes obturator externus the correct choice here.

2. The lateral malleolar groove has attachments to which tendons?

A. fibular brevis (tendon) and fibularis longus (tendon)

B. tibialis anterior (tendon)

C. gastrocnemius (tendon)

D. soleus (tendon)

The lateral malleolar groove on the distal fibula serves as the track behind the outer ankle for the peroneal (fibularis) tendons as they pass around the malleolus. The tendons that have attachments/paths here are the fibularis longus and fibularis brevis. The longus tendon travels behind the lateral malleolus in this groove and then goes under the foot to its insertions, while the brevis tendon runs in the groove behind the malleolus toward the base of the 5th metatarsal, both stabilized by the peroneal retinacula. The other tendons listed belong to regions or insertions not associated with this groove: tibialis anterior goes to the medial foot, and gastrocnemius and soleus join via the Achilles tendon to the heel.

3. The pubic symphysis allows which degree of movement?

A. No Movement

B. Moderate Movement

C. Slight Movement

D. Free Movement

Movement at the pubic symphysis is slight. This joint is a secondary cartilaginous joint connected by a fibrocartilaginous disc and reinforced by strong ligaments, which restricts motion to a small amount of gliding and slight rotation. This limited mobility helps absorb forces during walking and allows a tiny amount of pelvic expansion during childbirth, but it does not permit moderate or free movement. (During pregnancy, hormones can increase laxity modestly, yet the motion remains very limited.)

4. The base of the patella has what attached to it?

A. Patellar Tendon

B. Common Quadriceps Tendon

C. Inguinal Ligament

D. Medial Patellar Retinaculum

The base (superior border) of the patella is where the common quadriceps tendon attaches. This tendon is the shared tendon of the quadriceps femoris group (rectus femoris plus vastus muscles) that envelops the patella from above and integrates into the extensor mechanism. From the inferior pole, the patellar ligament extends down to the tibial tuberosity. The medial patellar retinaculum runs along the medial edge, not the base, and the inguinal ligament has no attachment to the patella.

5. What is the joint classification of the superior tibiofibular joint?

A. plane

B. slight movement

C. fibrous

D. synovial

This joint is a synovial joint. It is formed by the articulation between the fibular head and the lateral tibial condyle and is enclosed by a capsule that contains a synovial membrane and fluid, with articular cartilage on the contacting surfaces. The surfaces are relatively flat, which allows mainly a small gliding (plane-type) movement between the bones as the ankle moves. It's held together by ligaments, notably the anterior and posterior superior tibiofibular ligaments, and the interosseous membrane contributes to stability, all of which are features of a true synovial joint. This distinguishes it from a fibrous joint, which would lack a synovial cavity, and explains why the inferior tibiofibular joint is not the correct comparison here.

6. Which muscle is innervated by the nerve to quadratus femoris?

A. Inferior gemellus

B. Superior gemellus

C. Obturator internus

D. Obturator externus

The nerve to the quadratus femoris supplies two nearby hip lateral rotators: the quadratus femoris itself and the inferior gemellus. This shared innervation is what ties these two muscles together in many anatomy questions. Among the muscles listed, the inferior gemellus receives input from the nerve to quadratus femoris, which is why it's the correct pick. The superior gemellus gets its nerve supply from the nerve to obturator internus, and the obturator externus is supplied by the obturator nerve. The pattern here is that the nerve to quadratus femoris specifically targets quadratus femoris and inferior gemellus, making inferior gemellus the correct answer.

7. The obturator externus action is what?

A. Lateral rotation

B. Medial rotation

C. Abduction

D. Flexion

The obturator externus primarily performs external (lateral) rotation of the thigh at the hip. Its tendon runs from the outer surface of the obturator membrane and inserts into the trochanteric fossa of the femur, pulling the femur posterolaterally to rotate it outward. This action helps rotate the thigh and also stabilizes the femoral head in the acetabulum. It is not a flexor or abductor of the hip, and it does not medially rotate the thigh, which is why lateral rotation is the best description of its main action.

8. The soleus does what action?

A. Dorsiflexion

B. Plantarflexion

C. Inversion

D. Eversion

The soleus is a powerful plantarflexor of the ankle. It sits in the posterior leg and inserts into the calcaneus via the Achilles tendon, working with the gastrocnemius as part of the triceps surae to push the foot downward. Plantarflexion means pointing the toes downward or standing on tiptoe, as opposed to dorsiflexion, which lifts the foot toward the shin. Inversion and eversion are movements at the subtalar joint that turn the sole medially or laterally, not primary actions of the soleus. The soleus is especially important for standing and endurance activities because it remains effective regardless of knee position (the gastrocnemius crosses the knee and is less effective when the knee is flexed), whereas plantarflexion becomes limited if those knee-dependent muscles are not optimally lengthened.

9. Which muscle attaches to the ischial tuberosity and is part of the hamstring group?

A. Gracilis

B. Semitendinosus

C. Gluteus Maximus

D. Adductor Longus

The key idea is that several hamstring muscles share a common origin on the ischial tuberosity, and this origin links directly to which muscle attaches there. Semitendinosus originates from the ischial tuberosity and travels down the medial thigh to insert on the proximal medial tibia, forming part of the pes anserinus. Its role includes hip extension and knee flexion, consistent with the hamstring group's function. Gracilis arises from the inferior pubic ramus and inserts on the proximal medial tibia, so it does not attach to the ischial tuberosity and is not part of the hamstring group. Gluteus maximus originates from the ilium and sacrum and inserts on the gluteal tuberosity and IT band, not from the ischial tuberosity. Adductor longus comes from the pubis and inserts on the femur, also not related to the ischial tuberosity or the hamstrings.

10. Which statement best describes the action of the sartorius muscle?

A. Flexes abducts and laterally rotates thigh at hip

B. Extends thigh at hip

C. Adducts thigh

D. Flexes knee

The action being tested focuses on what the sartorius does at the hip joint. Because this muscle runs obliquely across the front of the thigh—from the anterior superior iliac spine to the medial surface of the tibia—it pulls the femur in three directions at the hip: it flexes the thigh, pulls it outward from the midline (abduction), and rotates it laterally. That combination is what you'd expect from a muscle crossing the hip diagonally and acting across the joint in multiple planes. It can also assist knee flexion when the leg is already flexed, which is why the tendon crosses to the medial tibia and the muscle is nicknamed the tailor's muscle for the cross-legged position. So the statement that best describes the sartorius' action is that it flexes, abducts, and laterally rotates the thigh at the hip. The other listed ideas describe actions of other muscles (hip extension, thigh adduction) or a different action (knee flexion) that don't capture the full hip-action profile of the sartorius.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://grossanatomydrylablowerbody.examzify.com

We wish you the very best on your exam journey. You've got this!