

Gross Anatomy II Palmer Exam 4 Practice (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

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- 1. Which plexus supplies the lower limb and forms within the posterior abdominal wall around the psoas muscle?**
 - A. Sacral plexus**
 - B. Lumbar plexus**
 - C. Brachial plexus**
 - D. Coccygeal plexus**

- 2. What is the lateral border of the deep perineal space?**
 - A. Obturator internus fascia**
 - B. Inferior fascia of urogenital diaphragm**
 - C. Inferior obturator internus fascia**
 - D. Lateral perineal fascia**

- 3. The organs that pass through the urogenital hiatus include urethra, rectum, and vagina. Which of the following does not pass through?**
 - A. Uterus**
 - B. Urethra**
 - C. Rectum**
 - D. Vagina**

- 4. What is the distribution of the pudendal nerve?**
 - A. Structures in the perineum; sensory branches to external genitalia; muscular branches to perineal muscles; external urethral sphincter; external anal sphincter**
 - B. Structures in the lower limb only**
 - C. Motor innervation to the gluteus maximus**
 - D. Visceral innervation to bladder and rectum only**

- 5. Where is the uterovesical pouch located?**
 - A. Between the bladder and uterus; anterior to uterus**
 - B. Between uterus and rectum**
 - C. Between bladder and rectum**
 - D. Surrounding the ovary**

- 6. Which statement is true about pubococcygeus composition?**
- A. In females, pubococcygeus comprises puborectalis and pubovaginalis.**
 - B. In females, pubococcygeus comprises puborectalis and puboprostaticus.**
 - C. In males, pubococcygeus comprises puborectalis and pubovaginalis.**
 - D. In males, pubococcygeus comprises pubovaginalis and puboprostaticus.**
- 7. The dorsal, paired cylindrical erectile tissue is the:**
- A. Corpus cavernosum**
 - B. Corpus spongiosum**
 - C. Buck's fascia**
 - D. Tunica albuginea**
- 8. Where is the anterior thoracolumbar fascia located?**
- A. Lateral to pectoralis major**
 - B. Attached to iliac crest, anterior to lumbar transverse processes and 12th rib**
 - C. Surrounds kidneys**
 - D. Deep to the diaphragm**
- 9. Identify the layer of pelvic fascia that lines the inner aspect of pelvic muscles, forms the wall and floor, and is continuous with transversalis and iliopsoas fascia.**
- A. Parietal pelvic fascia**
 - B. Visceral pelvic fascia**
 - C. End-abdominal fascia**
 - D. Peritoneum**
- 10. Which statement about the lateral arcuate ligament extension is correct?**
- A. From L1 TP to lower border of 12th rib**
 - B. From L2 TP to 12th rib**
 - C. From L1 TP to upper border of 12th rib**
 - D. From L1 TP to 11th rib**

Answers

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

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Explanations

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1. Which plexus supplies the lower limb and forms within the posterior abdominal wall around the psoas muscle?

- A. Sacral plexus
- B. Lumbar plexus**
- C. Brachial plexus
- D. Coccygeal plexus

The main concept is that the network innervating the lower limb while forming in the posterior abdominal wall around the psoas major is the lumbar plexus. This plexus is made by the ventral rami of L1 to L4 (sometimes with a contribution from T12) and runs on or within the fibers of psoas major in the retroperitoneal space. From this location it gives off nerves that supply the thigh and for the lower limb, notably the femoral nerve and obturator nerve, as well as other branches to the abdominal wall and groin. Because it lies on the psoas and has direct projections into the lower limb, it's the one described by the statement. The sacral plexus, by contrast, forms in the pelvic region on the front of the piriformis and provides nerves to the posterior thigh, leg, and foot after contributions from L4-S4; it isn't formed around the psoas in the posterior abdominal wall. The brachial plexus serves the upper limb, and the coccygeal plexus is a small tail-end network.

2. What is the lateral border of the deep perineal space?

- A. Obturator internus fascia
- B. Inferior fascia of urogenital diaphragm
- C. Inferior obturator internus fascia**
- D. Lateral perineal fascia

The deep perineal space is bordered on the sides by the fascia that invests the obturator internus muscle. The specific layer that forms the lateral wall is the inferior obturator internus fascia, which lies closest to the perineal membrane and closes off the space laterally. The inferior fascia of the urogenital diaphragm defines the floor (perineal membrane) rather than the side, and the other terms refer to different structures or layers that do not constitute the lateral boundary.

3. The organs that pass through the urogenital hiatus include urethra, rectum, and vagina. Which of the following does not pass through?

- A. Uterus**
- B. Urethra
- C. Rectum
- D. Vagina

The urogenital hiatus is the anterior opening in the pelvic floor through which the urinary and genital structures pass. In females, that gap transmits the urethra and the vagina. The uterus, while connected to the cervix and vagina, stays above the pelvic floor in the pelvic cavity and does not traverse this hiatus. The rectum lies posteriorly and exits through the anal canal, not through the urogenital hiatus. So, the uterus is the structure that does not pass through.

4. What is the distribution of the pudendal nerve?

- A. Structures in the perineum; sensory branches to external genitalia; muscular branches to perineal muscles; external urethral sphincter; external anal sphincter**
- B. Structures in the lower limb only**
- C. Motor innervation to the gluteus maximus**
- D. Visceral innervation to bladder and rectum only**

The pudendal nerve supplies the perineum with both motor and sensory fibers. It carries somatic motor fibers to perineal muscles and to the external anal and external urethral sphincters, and it provides sensory innervation to the skin and external genitalia of the perineal region. That means its distribution includes structures in the perineum, sensory branches to the external genitalia, and muscular branches to perineal muscles as well as the sphincters. It does not primarily innervate the lower limb, it does not motor-innervate the gluteus maximus (that's the inferior gluteal nerve), and its role in bladder and rectum function is via autonomic pathways rather than direct visceral innervation.

5. Where is the uterovesical pouch located?

- A. Between the bladder and uterus; anterior to uterus**
- B. Between uterus and rectum**
- C. Between bladder and rectum**
- D. Surrounding the ovary**

In the female pelvis, the peritoneum forms specific potential spaces between pelvic organs. The uterovesical pouch (vesicouterine pouch) is the space between the urinary bladder and the uterus, lying anterior to the uterus because the bladder sits in front of the uterus. This reflects how the peritoneal lining folds from the bladder up to the uterus, creating a pocket in front of the uterus. By contrast, the space between the uterus and the rectum is the rectouterine pouch (the pouch of Douglas), and a space between the bladder and rectum is not the uterovesical pouch. The ovary is not enclosed by a distinct peritoneal pouch.

6. Which statement is true about pubococcygeus composition?

- A. In females, pubococcygeus comprises puborectalis and pubovaginalis.**
- B. In females, pubococcygeus comprises puborectalis and puboprostaticus.**
- C. In males, pubococcygeus comprises puborectalis and pubovaginalis.**
- D. In males, pubococcygeus comprises pubovaginalis and puboprostaticus.**

The pubococcygeus is a portion of the levator ani that includes fibers around the anorectal region (puborectalis) plus a sex-specific slip that reinforces the urogenital area. In females, the distal component that aids vaginal support is pubovaginalis. So, together, puborectalis and pubovaginalis constitute the pubococcygeus in females. In males, the corresponding distal slip is puboprostaticus, not present in females. This makes the statement describing females as having puborectalis plus pubovaginalis the correct one.

7. The dorsal, paired cylindrical erectile tissue is the:

- A. Corpus cavernosum**
- B. Corpus spongiosum**
- C. Buck's fascia**
- D. Tunica albuginea**

Two dorsal cylindrical erectile tissues are the corpora cavernosa; they are the paired structures responsible for penile erection, filling with blood to produce rigidity. Each corpus cavernosum is wrapped in its own tough fibrous capsule (tunica albuginea), and together they run along the top (dorsal) side of the penis. In contrast, the corpus spongiosum is a single ventral erectile body that surrounds the urethra and enlarges to form the glans; it is not the paired dorsal tissue. Buck's fascia is the deep penile fascia surrounding the erectile bodies, not an erectile tissue itself, while the tunica albuginea is the fibrous capsule around each corpus cavernosum (and around the corpus spongiosum), not the erectile tissue.

8. Where is the anterior thoracolumbar fascia located?

- A. Lateral to pectoralis major
- B. Attached to iliac crest, anterior to lumbar transverse processes and 12th rib**
- C. Surrounds kidneys
- D. Deep to the diaphragm

The anterior layer of the thoracolumbar fascia sits in the posterior abdominal wall as a strong sheet that encases the psoas major and quadratus lumborum. It attaches laterally to the iliac crest and extends medially to the transverse processes of the lumbar vertebrae and to the inner surface of the 12th rib, lying in front of those lumbar muscles. This placement—anchored to the iliac crest and positioned anterior to the lumbar transverse processes and the 12th rib—matches the description of the anterior thoracolumbar fascia, making it the best choice. The other options describe structures or relationships that don't apply to this fascia: it does not envelop the kidneys (renal fascia does), it isn't located deep to the diaphragm, and it isn't merely lateral to the pectoralis major.

9. Identify the layer of pelvic fascia that lines the inner aspect of pelvic muscles, forms the wall and floor, and is continuous with transversalis and iliopsoas fascia.

- A. Parietal pelvic fascia**
- B. Visceral pelvic fascia
- C. End-abdominal fascia
- D. Peritoneum

Lining the inner aspect of the pelvic muscles and forming the pelvic walls and floor is the parietal pelvic fascia. This layer, part of the endopelvic fascia, covers the pelvic walls and floor and, as it extends upward, remains continuous with the transversalis fascia of the abdomen and, laterally, with the fascia over the iliopsoas muscle. This connection helps integrate abdominal and pelvic compartments and supports the pelvic viscera. The visceral pelvic fascia, by contrast, surrounds pelvic organs rather than lining the walls, and the peritoneum covers the cavity rather than forming the pelvic wall itself.

10. Which statement about the lateral arcuate ligament extension is correct?

- A. From L1 TP to lower border of 12th rib**
- B. From L2 TP to 12th rib
- C. From L1 TP to upper border of 12th rib
- D. From L1 TP to 11th rib

The lateral arcuate ligament extension is the fascial band that arches over the quadratus lumborum, running from the transverse process of the first lumbar vertebra (L1) to the lower border of the twelfth rib. This attachment pattern explains its position forming the lateral arch of the diaphragm's extensions into the posterior abdominal wall. The other options misstate either the vertebral level (L2) or the rib border (upper border or the 11th rib), which is why they are not correct.

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://grossanatomy2palmer4.examzify.com>

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

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