NHI Eastern Kinesiology 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 group functions as the knee extensor?

A. Hamstrings

B. Gastrocnemius

C. Quadriceps femoris

D. Iliopsoas

2. The origin of the biceps brachii includes which structures?

A. Coracoid Process and Supraglenoid Tubercle of Scapula

B. Infraglenoid Tubercle and Acromion

C. Intertubercular Groove

D. Lateral Epicondyle

3. Which muscle acts as the antagonist to horizontal adduction of the shoulder?

A. Pectoralis Major, Deltoid (Anterior)

B. Latissimus Dorsi, Teres Major

C. Deltoid (Posterior)

D. Serratus Anterior, Pectoralis Minor

4. Semitendinosus action includes which of the following?

A. Flex the knee, medially rotate the flexed knee, extend the hip, medially rotate the hip, tilt pelvis posteriorly

B. Flex the knee, laterally rotate the knee, extend the hip, laterally rotate the hip

C. Extend the knee, medially rotate the hip

D. Flex the knee, medially rotate the hip, extend the knee

5. The supraspinatus originates from which area?

A. Infraspinatus fossa

B. Supraspinatus fossa of the scapula

C. Subscapular fossa

D. Coracoid process

6. In neck extension, which muscles act as antagonists?

- **A. SCM and Scalenes**
- **B. Trapezius and Levator Scapulae**
- **C. Latissimus Dorsi**
- **D. Pectoralis Major**

7. Which muscle is primarily responsible for elevating the scapula and upwardly rotating the scapula?

- **A. Trapezius**
- **B. Pectoralis minor**
- **C. Rhomboids**
- **D. Serratus anterior**

8. Which term refers to the rounded end of a long bone?

- **A. Condyle**
- **B. Epicondyle**
- **C. Fossa**
- **D. Foramen**

9. Levator scapula inserts on which part of the scapula?

- **A. Superior angle**
- **B. Lateral border**
- **C. Medial border of the scapula, between the superior portion of the spine of the scapula**
- **D. Inferior angle**

10. Semimembranosus originates from which structure?

- **A. Ischial tuberosity**
- **B. Proximal, medial tibial shaft**
- **C. Condyles of the femur**
- **D. Head of fibula**

Answers

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

Explanations

1. Which muscle group functions as the knee extensor?

A. Hamstrings

B. Gastrocnemius

C. Quadriceps femoris

D. Iliopsoas

The action that straightens the knee comes from the quadriceps femoris group. Located at the front of the thigh, this four-part muscle (rectus femoris and vastus lateralis, medialis, and intermedius) pulls on the patellar tendon. When they contract, the tendon pulls the tibia forward, extending the knee joint and straightening the leg. This group is the primary knee extensor, essential for standing up, kicking, and jumping. The other muscles don't extend the knee: the hamstrings on the back of the thigh bend the knee; the gastrocnemius crosses the knee but mainly acts to plantarflex the foot (and may assist knee flexion in certain positions rather than extension); the iliopsoas acts to flex the hip, not the knee.

2. The origin of the biceps brachii includes which structures?

A. Coracoid Process and Supraglenoid Tubercle of Scapula

B. Infraglenoid Tubercle and Acromion

C. Intertubercular Groove

D. Lateral Epicondyle

The biceps brachii has two heads with distinct scapular attachments, so its origins are on the coracoid process and the supraglenoid tubercle. The short head attaches to the coracoid process, while the long head attaches to the supraglenoid tubercle, and these two origins together form the muscle's proximal attachment. The infraglenoid tubercle is for the triceps, not the biceps; the acromion is not an origin for the biceps; the intertubercular groove is just the pathway the tendon travels after origin, and the lateral epicondyle is a distal humeral site for forearm extensors.

3. Which muscle acts as the antagonist to horizontal adduction of the shoulder?

A. Pectoralis Major, Deltoid (Anterior)

B. Latissimus Dorsi, Teres Major

C. Deltoid (Posterior)

D. Serratus Anterior, Pectoralis Minor

Moving the arm horizontally across the chest (toward the midline) is horizontal adduction. The opposing action—horizontal abduction—is mainly produced by the posterior deltoid. So, the posterior fibers of the deltoid are the main antagonist to horizontal adduction because they drive the arm back out to the side in the transverse plane, opposing the across-the-chest movement. Other muscles listed aren't the primary antagonists here. The pectoralis major and the anterior deltoid are key contributors to horizontal adduction, not its opposite. Latissimus dorsi and teres major help with adduction and internal rotation, so they don't oppose horizontal adduction. Serratus anterior and pectoralis minor mainly stabilize or move the scapula rather than directly counteracting horizontal shoulder movement.

4. Semitendinosus action includes which of the following?

A. Flex the knee, medially rotate the flexed knee, extend the hip, medially rotate the hip, tilt pelvis posteriorly

B. Flex the knee, laterally rotate the knee, extend the hip, laterally rotate the hip

C. Extend the knee, medially rotate the hip

D. Flex the knee, medially rotate the hip, extend the knee

The semitendinosus is a two-joint muscle of the posterior thigh that crosses both the hip and knee. Its actions reflect that dual role: it helps bend the knee and, when the knee is flexed, it tends to rotate the tibia inward (medial rotation). At the same time, because it crosses the hip posteriorly, contracting it assists in extending the hip. This same muscle can contribute to a medial rotation of the thigh when the hip is flexed and tends to tilt the pelvis backward (posterior tilt) with its pull on the pelvis and thigh. So the sequence of actions—flex the knee, medial rotation of the flexed knee, extend the hip, and assist in medial rotation of the hip along with posterior pelvic tilt—fits the known behavior of the semitendinosus. The other described movements (lateral rotation of either the knee or hip, or knee extension) don't align with how this muscle functions.

5. The supraspinatus originates from which area?

A. Infraspinatus fossa

B. Supraspinatus fossa of the scapula

C. Subscapular fossa

D. Coracoid process

Muscle origin is where a muscle begins and stays fixed during movement. The supraspinatus starts from the supraspinatus fossa of the scapula, the hollow area above the spine on the scapula's posterior surface. It then travels to insert on the greater tubercle of the humerus and helps initiate the first part of arm abduction. The other bony areas listed correspond to different muscles: the infraspinatus fossa houses the infraspinatus, the subscapular fossa houses the subscapularis, and the coracoid process serves as an attachment for several muscles like the coracobrachialis, the short head of the biceps brachii, and pectoralis minor.

6. In neck extension, which muscles act as antagonists?

A. SCM and Scalenes

B. Trapezius and Levator Scapulae

C. Latissimus Dorsi

D. Pectoralis Major

When you extend the neck, the opposing muscles are the neck flexors. The sternocleidomastoid and the scalene muscles are the primary neck flexors; they bring the chin toward the chest and assist with sideways bending. In the act of extension, these muscles would lengthen and, if activated, counter the motion, providing control and opposition. The other listed muscles aren't the main antagonists to neck extension—they're more involved with shoulder girdle or trunk movements and don't directly oppose neck extension in the same way.

7. Which muscle is primarily responsible for elevating the scapula and upwardly rotating the scapula?

A. Trapezius

B. Pectoralis minor

C. Rhomboids

D. Serratus anterior

Elevating the scapula is done mainly by the upper fibers of the trapezius, and upward rotation of the scapula involves a coordinated action where the trapezius (upper and lower fibers) works with the serratus anterior. Among a single muscle, the trapezius best fits both actions: its upper fibers lift the scapula, and its lower fibers contribute to upward rotation as the scapula tilts and rotates upward during arm elevation. The serratus anterior does upward rotation strongly but does not elevate the scapula, so it isn't the primary muscle for both movements. The rhomboids retract and downwardly rotate; pectoralis minor depresses and downwardly rotates. Therefore, the trapezius is the best answer for both elevating and upwardly rotating the scapula.

8. Which term refers to the rounded end of a long bone?

A. Condyle

B. Epicondyle

C. Fossa

D. Foramen

In long bones, the rounded end that forms part of a joint is called a condyle. Condyles are the smooth, rounded surfaces that articulate with the corresponding area on the neighboring bone, allowing movement at the joint—think of the knee where the femoral condyles meet the tibia. An epicondyle is a bump just above a condyle and mainly serves as a site for muscle and ligament attachments. A fossa is a shallow depression on the bone that can accommodate a condyle or other structures. A foramen is a hole through the bone for vessels and nerves. So the rounded end of a long bone is the condyle.

9. Levator scapula inserts on which part of the scapula?

A. Superior angle

B. Lateral border

C. Medial border of the scapula, between the superior portion of the spine of the scapula

D. Inferior angle

The main idea is understanding where the levator scapulae attaches on the scapula and how that location lets it lift the shoulder girdle. This muscle runs from the upper cervical transverse processes and inserts along the medial border of the scapula, specifically between the superior angle and the base of the spine. That insertion spot gives it a vertical pull on the medial border, which elevates the scapula when it contracts. It can also assist in downward rotation of the scapula when the shoulder girdle is fixed. If it attached to the superior angle, the lateral border, or the inferior angle, the direction of pull would change and its primary action would not be scapular elevation.

10. Semimembranosus originates from which structure?

A. Ischial tuberosity

B. Proximal, medial tibial shaft

C. Condyles of the femur

D. Head of fibula

The main idea here is where the semimembranosus starts on the body. Semimembranosus is a hamstring muscle, and its proximal attachment is the ischial tuberosity on the pelvis. This origin position allows the muscle to cross the hip and knee joints, enabling hip extension and knee flexion. The distal attachment is on the posteromedial aspect of the medial tibial condyle, not the medial tibial shaft. The other options don't match this proximal origin: the medial tibial shaft is related to insertion, the femoral condyles aren't origins for this muscle, and the fibular head is associated with the short head of the biceps femoris. Hence, the correct origin is the ischial tuberosity.

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://nhieasternkinesiology.examzify.com

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