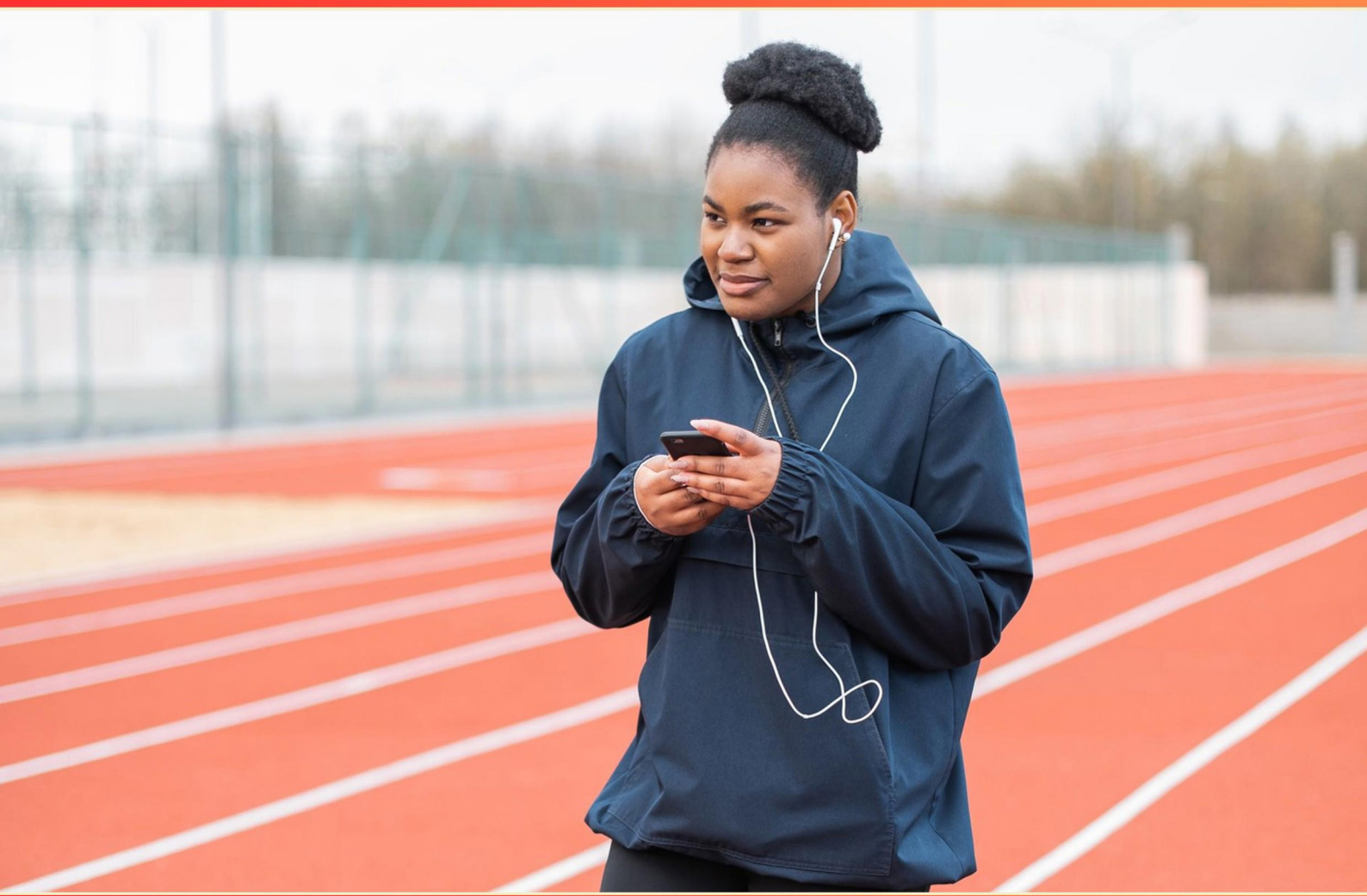
NSCA SPRINTING AND RUNNING PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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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.

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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!

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Questions

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1. Describe the early stages of sprint drill progression.

A. Activation and simple drills such as A-skips; proceed to A-/B-skips, knee-tuck, bounds; then faster drills with load and volume adjustments.

B. Begin with full sprints and finish with activation drills.

C. Only do static stretching before drills.

D. Start with complex plyometrics and skip simpler drills.

2. First two strides of acceleration sprinting consist of which phases?

A. Support and Flight phase

B. Drive and Float

C. Impact and Recovery

D. Collision and Release

3. In Maximum Velocity late support concentric plantar flexion, what is the primary effect?

A. Aids in propulsion.

B. Propels center of gravity forward.

C. Absorbs landing shock.

D. Rotates trunk for takeoff.

4. What is vertical stiffness and why is it important for sprint performance?

A. It refers to how the body resists vertical displacement under force; higher stiffness supports more effective ground force transfer and faster accelerations.

B. It measures forward lean angle of the trunk.

C. It describes the elasticity of the Achilles tendon only.

D. It is the same as running cadence.

5. What term describes a series of running strides that repeatedly launch the athlete's body as a projectile at maximal acceleration or velocity over brief distances and durations?

A. Sprinting

B. Running

C. Jumping

D. Walking

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6. What is one technique used to correct bouncing with vertical sways in maximum velocity running?

A. Hitting chalk marks at regular intervals during practice.

B. Increasing vertical jump height during drills.

C. Running with shoes that have higher heels.

D. Reducing training volume.

7. Which statement describes the recommended training to improve ankle function for better leg extension at high speed?

A. Ankle joint work in forward movement, running and hopping, running and jumping, bouncing, special strengthening

B. Calf raises only

C. Hip flexor drills

D. Core stability work

8. What is a key distinction in start-phase versus drive-phase cues?

A. Start-phase cues emphasize block positioning and initial force; drive-phase cues emphasize maintaining forward angle, knee drive, and hip extension after break from blocks.

B. Start-phase cues emphasize landing mechanics; drive-phase cues emphasize breath control.

C. Start-phase cues emphasize finishing sprint; drive-phase cues emphasize deceleration.

D. Start-phase cues ignore block setup; drive-phase cues ignore knee drive.

9. Which leg has the greater influence on starting velocity in sprinting start?

A. Front leg

B. Rear leg

C. Both equally

D. Unknown

10. A push-off angle of 52 degrees would occur during which sprinting phase?

A. Forward support phase

B. Rear support phase

C. Flight phase

D. Recovery phase

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Answers

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

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Explanations

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1. Describe the early stages of sprint drill progression.

A. Activation and simple drills such as A-skips; proceed to A-/B-skips, knee-tuck, bounds; then faster drills with load and volume adjustments.

B. Begin with full sprints and finish with activation drills.

C. Only do static stretching before drills.

D. Start with complex plyometrics and skip simpler drills.

The main idea here is to prepare the body gradually for sprinting by building neuromuscular readiness and reinforcing mechanics before increasing speed. You start with activation and simple drills like A-skips to wake up the muscles, improve hip flexor and ankle control, and establish a clean posture and forward lean. From there, you progress to more specific drills that still emphasize technique but add a bit more dynamic challenge—A-/B-skips, knee-tuck, and bounds—to refine knee drive, ankle stiffness, and arm action while maintaining good form. Once those patterns feel smooth and reliable, you move into faster drill variations that introduce a light loading or higher volume to stress the technique under increased speed without sacrificing mechanics. This stepwise approach reduces injury risk and ensures the sprint pattern is well-established before hammering at full speed. Starting with full sprints, doing only static stretching, or jumping straight into complex plyometrics without building the basics tends to undermine technique and can raise the risk of injury because the body isn't yet prepared to handle higher demands or coordinate the movement efficiently.

2. First two strides of acceleration sprinting consist of which phases?

A. Support and Flight phase

B. Drive and Float

C. Impact and Recovery

D. Collision and Release

In sprinting, a stride has two main phases: the foot is in contact with the ground (support) and the foot is off the ground (flight) between contacts. During the first steps of acceleration, you spend time pushing off the ground to generate forward force (support) and then briefly time in the air before the next contact (flight). This alternating pattern—ground contact (support) followed by a period airborne (flight)—is why the first two strides of acceleration consist of Support and Flight. The other labels aren't the standard way this rhythm is described in sprint mechanics, so they don't fit as naturally with how acceleration starts and how force is applied through the stride.

3. In Maximum Velocity late support concentric plantar flexion, what is the primary effect?

A. Aids in propulsion.

B. Propels center of gravity forward.

C. Absorbs landing shock.

D. Rotates trunk for takeoff.

During late support, the ankle plantar flexors contract concentrically to push the ground backward. That action creates a reaction force with a forward component, which drives the body forward and increases the forward velocity of the center of mass. The primary effect here is propulsion—the push-off that supplies the forward impulse needed for sprint speed. Absorbing landing shock comes mainly from the eccentric actions earlier in stance, not from this concentric plantar flexion, and rotating the trunk for takeoff is a separate, less direct consequence of overall sprint mechanics. In maximal velocity sprinting, powerful concentric plantar flexion at late stance provides the key propulsive impulse that speeds you up.

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4. What is vertical stiffness and why is it important for sprint performance?

A. It refers to how the body resists vertical displacement under force; higher stiffness supports more effective ground force transfer and faster accelerations.

B. It measures forward lean angle of the trunk.

C. It describes the elasticity of the Achilles tendon only.

D. It is the same as running cadence.

Vertical stiffness describes how much the body resists vertical compression when the foot pushes into the ground. In sprinting, the leg acts like a spring: energy is stored as you land and must be released quickly to propel you forward. When vertical stiffness is optimal, the system resists downward collapse just enough to shorten ground contact time and channel more of the ground reaction force into forward propulsion. This makes each step more effective at driving you forward, supporting faster accelerations and higher sprint speeds, especially in the early phase of a race. It's about the whole leg-spring system, not just one tissue, like the Achilles tendon. Techniques and training that enhance reactive strength and improve how the leg absorbs and reuses impact—such as plyometrics and sprint-specific conditioning—can help tune vertical stiffness to an efficient level. The other ideas—trunk forward lean, or cadence alone—are distinct aspects of technique or rhythm and do not define vertical stiffness, while stiffness is not equivalent to cadence.

5. What term describes a series of running strides that repeatedly launch the athlete's body as a projectile at maximal acceleration or velocity over brief distances and durations?

A. Sprinting

B. Running

C. Jumping

D. Walking

Sprinting is about moving at maximal speed with explosive, repeated strides that push the body off the ground so there's a brief flight phase between steps. Over short distances, athletes accelerate to top speed and try to maintain it, using very quick ground contact times and powerful push-offs. This exactly fits the idea of repeatedly launching the body as a projectile at maximal acceleration or velocity over brief distances and durations. Walking lacks a flight phase and maximal effort, running is a broader term not specific to the top-speed, and jumping involves vertical projection without the continuous sequence of running strides.

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6. What is one technique used to correct bouncing with vertical sways in maximum velocity running?

A. Hitting chalk marks at regular intervals during practice.

B. Increasing vertical jump height during drills.

C. Running with shoes that have higher heels.

D. Reducing training volume.

In maximum velocity running, the goal is to minimize vertical movement and keep the sprint forward-focused, so the athlete's stride becomes more horizontal and efficient. Using chalk marks placed at regular intervals on the track gives a concrete target for each step, helping the runner feel and reproduce a consistent cadence. When the sprinter aims to touch or pass those marks with each foot strike, it trains timing and foot placement to occur more quickly and with less vertical bounce. The marks act as immediate feedback that promotes shorter ground contact with a stronger forward impulse, which reduces upward motion and keeps velocity more stable. Other approaches don't directly address rhythm and contact timing in the same way: increasing vertical jump height tends to emphasize vertical power, changing footwear alters mechanics in a broad, not targeted, way, and reducing training volume is a programming change rather than a cue-driven drill for improving mechanics during sprinting.

7. Which statement describes the recommended training to improve ankle function for better leg extension at high speed?

A. Ankle joint work in forward movement, running and hopping, running and jumping, bouncing, special strengthening

B. Calf raises only

C. Hip flexor drills

D. Core stability work

Training specificity for ankle function during fast leg extension means you need to train the ankle through movements that resemble sprinting, starting from basic ankle work in forward motion and progressing to dynamic, sprint-like tasks. The described progression—ankle work during forward movement, then running and hopping, then running and jumping, then bouncing, plus targeted strengthening—provides the necessary combination of strength, power, and neuromuscular control at high speeds. This builds the ankle's ability to plantarflex forcefully and rapidly during each ground contact, improving push-off and leg extension in sprinting. Calf raises alone miss the dynamic, sport-specific context of sprinting and don't train the ankle through the coordinated actions and speed required in high-speed leg extension. Hip flexor drills emphasize hip drive rather than ankle function, and core stability work, while important for overall mechanics, doesn't directly enhance ankle performance during rapid extension at speed.

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8. What is a key distinction in start-phase versus drive-phase cues?

A. Start-phase cues emphasize block positioning and initial force; drive-phase cues emphasize maintaining forward angle, knee drive, and hip extension after break from blocks.

B. Start-phase cues emphasize landing mechanics; drive-phase cues emphasize breath control.

C. Start-phase cues emphasize finishing sprint; drive-phase cues emphasize deceleration.

D. Start-phase cues ignore block setup; drive-phase cues ignore knee drive.

In sprint starts, you focus on two distinct timeframes: the moment you are in the blocks and the first steps out (start phase), and the subsequent steps as you drive toward maximum acceleration (drive phase). The best choice captures that start-phase cues center on getting out of the blocks with proper block setup and delivering a strong initial force for a powerful, horizontal push. Then, as you break from the blocks, drive-phase cues shift to sustaining acceleration by keeping a forward body angle and actively driving the knee while the hip extends to propel you forward. This emphasis matters because the forces and mechanics that produce a clean, explosive start are different from those that continue the acceleration once you're moving. The other options mix in elements that aren't the main focus of these phases—landing mechanics and breath control, finishing or deceleration, or ignoring block setup and knee drive—so they don't align with how start and drive cues are traditionally distinguished.

9. Which leg has the greater influence on starting velocity in sprinting start?

A. Front leg

B. Rear leg

C. Both equally

D. Unknown

Starting velocity in a sprint start is determined by the horizontal impulse generated in the first push off the blocks. The front leg plays the dominant role because its extension happens through a direction that closely aligns with forward propulsion. As the hips and knee extend, the front leg generates a strong forward thrust, converting muscle force into forward momentum more effectively and helping the center of mass move quickly into acceleration. The rear leg also contributes to propulsion, but its force vector tends to be more upward or vertical and its horizontal component is smaller at that immediate moment. That makes its influence on the very first velocity less than that of the front leg. So, the front leg has the greater impact on initial starting velocity, with both legs contributing as you drive through the start and into the acceleration phase.

10. A push-off angle of 52 degrees would occur during which sprinting phase?

A. Forward support phase

B. Rear support phase

C. Flight phase

D. Recovery phase

During sprinting, propulsion happens while a foot is in contact with the ground in the stance phase, with the rear leg doing most of the pushing-off effort. A push-off angle around 52 degrees describes how the rear leg extends and presses against the ground as it drives the body forward. This occurs in the rear support portion of the stance phase, when the back foot is still planted and actively propelling, before the leg enters the flight phase. The flight phase has both feet off the ground, so no push-off angle is produced, and the recovery phase involves the leg swinging forward without pushing off.

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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:

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

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