New York State Certificate of Competency (CoC) Class B Pyrotechnician License Practice Exam (Sample)

Study Guide

BY EXAMZIFY

Everything you need from our exam experts!

Table of Contents

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. If a wet or damaged shell is found, what action should be taken?

A. Do not attempt to dry or fix shell, contact the supplier for disposal instructions.

B. Dry the shell and reuse immediately.

C. Return to storage.

D. Discard in regular trash.

2. What is the minimum display radius for ground displays?

A. 50 feet

B. 75 feet

C. 60 feet

D. 100 feet

3. What term means debris produced or expelled by the functioning of a pyrotechnic device capable of causing injury or damage?

A. Fallout Area

B. No Fire Current

C. Hazardous Debris

D. Aerial shells

4. What pre-event document identifies hazards and defines the controls planned to mitigate them?

A. A risk assessment or job safety analysis (JSA).

B. A marketing plan.

C. An equipment lease agreement.

D. A weather advisory.

5. Which device described as a fountain may produce a shower of colored sparks and possibly a whistling effect or smoke and has a maximum of 75 g in a cylindrical tube?

A. Cone Fountain

B. Cylindrical Fountain

C. Illuminating Torch

D. Aerial Salute

6. Ground display pieces shall have a minimum display radius of how many feet?

A. 50 feet

B. 75 feet

C. 60 feet

D. 100 feet

7. During an electrically fired show, the shooter should be in direct contact with whom at all times?

A. The Loader

B. The Operator

C. The Supervisor

D. The Technician

8. How many shells can a shooter safely manually fire?

A. Five per minute

B. 15 per minute

C. 10 per minute

D. 20 per minute

9. What is the primary purpose of maintaining a safe perimeter around storage areas for pyrotechnic devices?

A. to allow spectators closer.

B. to maintain a safe perimeter around storage and minimize exposure to spectators.

C. to reduce weather effects.

D. to increase on-site access.

10. Single break Aerial Salute shells shall not exceed what diameter?

A. 3 inches

B. 5 inches

C. 7 inches

D. 4 inches

Answers

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

Explanations

1. If a wet or damaged shell is found, what action should be taken?

A. Do not attempt to dry or fix shell, contact the supplier for disposal instructions.

B. Dry the shell and reuse immediately.

C. Return to storage.

D. Discard in regular trash.

Wet or damaged shells are unstable and must not be dried, repaired, or reused. Moisture can affect the shell's internal timing, chemical stability, and structural integrity, leading to misfires, unpredictable ignition, or a rupture. The safest course is to stop handling the shell, isolate and label the area, and contact the supplier for disposal instructions—the manufacturer knows the approved, compliant way to render it safe. Drying or returning to storage would not address the underlying instability, and disposing of it in regular trash creates a hazard to people and the environment. Following the supplier's disposal instructions minimizes risk and ensures proper handling.

2. What is the minimum display radius for ground displays?

A. 50 feet

B. 75 feet

C. 60 feet

D. 100 feet

Ground displays carry the risk of sparks, embers, and debris reaching spectators, even when effects are aimed at the ground. Setting a safe, minimum radius creates a clear buffer zone around the device so that bystanders stay far enough away to avoid injury in case of misfires or excessive projection of material. The established minimum for ground displays is 75 feet, which provides that protective margin between the display and the audience. Distances like 50, 60, or 100 feet do not align with this standard minimum, though actual requirements can vary with circumstances and local regulations.

3. What term means debris produced or expelled by the functioning of a pyrotechnic device capable of causing injury or damage?

A. Fallout Area

B. No Fire Current

C. Hazardous Debris

D. Aerial shells

Hazardous debris refers to the fragments and byproducts produced or expelled by a pyrotechnic device that can injure people or damage property. Recognizing this term helps you plan safety measures, such as appropriate distances, personal protective equipment, and cleanup procedures, because the debris itself poses a real risk after firing. It's not about the area where debris lands (that would be the fallout area), nor a term like no fire current, and aerial shells are the devices that produce debris rather than the debris itself.

4. What pre-event document identifies hazards and defines the controls planned to mitigate them?

A. A risk assessment or job safety analysis (JSA).

B. A marketing plan.

C. An equipment lease agreement.

D. A weather advisory.

Identifying hazards and setting up protective controls before work begins is proactive safety planning. A pre-event document that does this is a risk assessment, often paired with a job safety analysis. It goes through each planned task, lists what could cause harm, and specifies protective measures to reduce risk. In a pyrotechnic operation, that means evaluating hazards from handling and staging fireworks, ignition sources, heat, sparks, smoke, crowd interactions, weather, and nearby structures or utilities. The document then defines controls such as establishing exclusion zones and spectator distances, using appropriate PPE, having a trained fire watch, securing permits, planning transport and storage, and laying out emergency procedures and communication plans. The goal is to prevent incidents by making risk decisions before actions take place. Other documents like marketing plans, equipment lease agreements, or weather advisories do not provide the step-by-step hazard identification and risk controls needed for a safe event.

5. Which device described as a fountain may produce a shower of colored sparks and possibly a whistling effect or smoke and has a maximum of 75 g in a cylindrical tube?

A. Cone Fountain

B. Cylindrical Fountain

C. Illuminating Torch

D. Aerial Salute

Fountain-type pyrotechnics are ground-based devices designed to emit a shower of sparks from a fixed position. When a device is described as a fountain and may produce colored sparks along with a whistling sound or smoke, you're looking at a fountain effect. The clue about a maximum of 75 g in a cylindrical tube specifically identifies cylindrical fountains, since the cylindrical form is regulated to a 75-gram limit. That combination—ground-based fountain action plus a cylindrical tube with a 75 g charge—points to the cylindrical fountain. A cone fountain is also a fountain, but it's shaped and regulated differently, not described as a cylindrical-tube device. An illuminating torch is intended for illumination and not a fountain effect. An aerial salute produces a loud report or shells in the sky, not a ground-based fountain with sparks.

6. Ground display pieces shall have a minimum display radius of how many feet?

A. 50 feet

B. 75 feet

C. 60 feet

D. 100 feet

Ground display pieces need a safety buffer around the device because their effects spread across the ground toward the audience. A minimum display radius of 75 feet creates a reliable circle of space so spectators and nonessential staff stay far enough away from sparks, embers, and any misdirected flames. This distance is chosen to balance safety with practicality for most venues, ensuring a consistent standard that reduces risk during displays. A smaller radius wouldn't provide adequate clearance, while a larger radius is more conservative than required by the standard.

7. During an electrically fired show, the shooter should be in direct contact with whom at all times?

A. The Loader

B. The Operator

C. The Supervisor

D. The Technician

The shooter should stay in direct contact with the operator—the person who runs and monitors the electrical firing system. The operator is responsible for arming the circuits, checking for any faults or misfires, testing continuity, and issuing fire or abort commands. Being in direct contact allows instant communication about timing, status, and safety, so any problem can be addressed immediately and the show can be stopped if needed. The loader places devices, the supervisor oversees safety and coordination, and the technician maintains equipment; none of them take on the real-time firing control in the same way the operator does, which is why the shooter stays in direct contact with the operator.

8. How many shells can a shooter safely manually fire?

A. Five per minute

B. 15 per minute

C. 10 per minute

D. 20 per minute

The idea is safe firing rate: you need enough time between shots to visually confirm ignition and to let the previous shell clear the firing area. Manually firing shells requires the operator to watch each shell ignite, ensure it clears the mortar or launch area, and then prepare for the next shot without rushing. A moderate, steady pace provides that window for observation, safety checks, and safe reset between shots, while still keeping the show moving. If you push the pace too hard, the risk of misfires, delayed ignitions, or a shell landing in the wrong place increases, and heat can build up in the firing hardware. This approach—keeping a controllable, measured interval between shots—best supports safe operation.

9. What is the primary purpose of maintaining a safe perimeter around storage areas for pyrotechnic devices?

A. to allow spectators closer.

B. to maintain a safe perimeter around storage and minimize exposure to spectators.

C. to reduce weather effects.

D. to increase on-site access.

Maintaining a safe perimeter around storage areas creates a buffer zone to protect people from potential pyrotechnic hazards. Pyrotechnic devices can ignite unexpectedly or explode, releasing heat, pressure, and flying debris. By keeping spectators at a distance and restricting access to trained personnel, the risk of injury is greatly reduced and responders have space to work if something goes wrong. Weather effects aren't addressed by a perimeter, and increasing on-site access would undermine safety. The primary purpose is to maintain a safe perimeter and minimize exposure to spectators.

10. Single break Aerial Salute shells shall not exceed what diameter?

A. 3 inches

B. 5 inches

C. 7 inches

D. 4 inches

The main idea is safety and equipment limits for high-energy aerial effects. A single-break aerial salute shell is designed to burst in one burst, so its size directly affects how much explosive mass is carried and how much energy is released in the air. Regulating the diameter helps ensure the shell can be fired safely from standard professional mortars, with manageable backpressure, reliable breaking, and reduced risk to bystanders and equipment. Five inches is the established maximum diameter for these shells, balancing effectiveness with safety. Shells larger than this would require bigger mortars, more handling precautions, and could pose greater hazards, while smaller diameters are still effective but represent a lower-energy option.

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://nystatecocclassbpyro.examzify.com

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