SOAR Academy Practice Exam (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. What radiations can the RAD EYE detect and what capability does it have regarding the radiation source?

A. Only gamma radiation

B. Only neutron radiation

C. Gamma and neutron; can identify source type

D. No radiation detected

2. What is the maximum vertical time stated for using the Yates Spec PAK harness?

A. No time limit

B. No more than 15 minutes vertically

C. No more than 7 minutes vertically

D. No more than 5 minutes vertically

3. Which MX908 mode is used to increase sensitivity for trace detection?

A. Hazard mode

B. Hunter mode

C. Calibration mode

D. Sleep mode

4. Which statement describes the RAD meter's detectors?

A. It only detects gamma radiation

B. It detects beta radiation only

C. It detects alpha, beta, and gamma radiation

D. It detects neutron radiation only

5. What are the PID (VOC) alarm setpoints?

A. Low 100; High 200

B. Low 25; High 75

C. Low 50; High 100

D. Low 60; High 120

6. What is the CSR rope rescue bag length?

A. 200 ft

B. 300 ft

C. 400 ft

D. 600 ft

7. What is the rating of harness tool loops?

A. 5 kg

B. 20 kg

C. 2 kg

D. 10 kg

8. In hazmat identification, the minimum PPE level is typically:

A. Maximum Level A PPE; approach with infrared thermography

B. Minimum Level B PPE; approach with MultiRae, Ludlum, and pH paper

C. Level C PPE; no instrumentation

D. No PPE required; use only gloves

9. To determine if a liquid will float, which result indicates a lower than water specific gravity?

A. If product sinks in water, it will float

B. If product floats, SG > 1.5

C. If less than 1.0 specific gravity, it will float

D. If greater than 2.0, it will vaporize

10. MBS stands for what?

A. Maximum Breaking Strength

B. Median Breaking Strength

C. Minimum Breaking Strength

D. Mechanical Breaking Strength

Answers

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

Explanations

1. What radiations can the RAD EYE detect and what capability does it have regarding the radiation source?

A. Only gamma radiation

B. Only neutron radiation

C. Gamma and neutron; can identify source type

D. No radiation detected

The key idea is that this device can sense two main kinds of radiation—gamma rays and neutrons—and it uses the patterns in both channels to infer what kind of radiation source is present. Gamma rays give energy-specific signatures that point to particular isotopes, while neutrons provide a different kind of signal that helps distinguish materials that might emit neutrons or that don't produce gamma rays. By weighing the relative amounts, energies, and timing of the signals from both types, the RAD EYE can identify the source category—whether it's a gamma emitter, a neutron source, or a combination. That dual-detection capability and the ability to classify the source type is what sets this option apart. If it only detected one type of radiation, or claimed no radiation at all, it wouldn't offer the same source-identification capability.

2. What is the maximum vertical time stated for using the Yates Spec PAK harness?

A. No time limit

B. No more than 15 minutes vertically

C. No more than 7 minutes vertically

D. No more than 5 minutes vertically

The important idea here is how long you can remain suspended in a vertical position while using the Yates Spec PAK harness. The device's guidelines specify a maximum of seven minutes of vertical time. This limit exists because staying suspended can lead to medical risks like suspension trauma, so keeping the vertical exposure short helps protect you and ensures you can be rescued or repositioned promptly. In practice, plan your vertical work so you stay within seven minutes, and have a rescue or horizontal/repositioning plan ready before you exceed that limit. The other timeframes don't match the harness' stated guidance, which is why seven minutes is the correct choice.

3. Which MX908 mode is used to increase sensitivity for trace detection?

A. Hazard mode

B. Hunter mode

C. Calibration mode

D. Sleep mode

Detecting trace amounts relies on making the detector respond to very small signals. Hunter mode is the setting that boosts sensitivity and tunes the instrument to pick up these faint signals. It typically raises the gain and adjusts the signal processing to emphasize low-level detections, improving the chance of detecting traces without ignoring them. In contrast, Hazard mode is meant for high-concentration or dangerous items and may limit sensitivity to prevent false alarms, Calibration mode resets or tunes the device to a known baseline for accuracy, and Sleep mode reduces power by turning down most functions, making it unsuitable for active trace detection. So Hunter mode is the best choice when the goal is to detect trace amounts.

4. Which statement describes the RAD meter's detectors?

A. It only detects gamma radiation

B. It detects beta radiation only

C. It detects alpha, beta, and gamma radiation

D. It detects neutron radiation only

Rad meters are designed to monitor the main types of ionizing radiation you'd encounter in practice. Their detectors—often a Geiger-Maüller tube or a similar sensor—respond to alpha particles, beta particles, and gamma rays. Alpha detection depends on having a thin window since alpha particles don't travel far, beta particles produce ionization as they pass through the detector, and gamma rays interact to create ionization within the detector material. Because a typical RAD meter aims to measure exposure from all three of these common radiation types, describing the detectors as detecting alpha, beta, and gamma radiation is the most accurate. Neutron detection requires different sensors, which is why neutron-only is not fitting.

5. What are the PID (VOC) alarm setpoints?

A. Low 100; High 200

B. Low 25; High 75

C. Low 50; High 100

D. Low 60; High 120

In a PID VOC monitor, you typically configure two alarm levels to manage risk: a low alarm for early warning and a high alarm for immediate action. The pair of setpoints at 50 and 100 creates a clear escalation. The low threshold at 50 gives advance notice as concentrations rise, so operators have time to investigate, ventilate, or take precautions before the situation worsens. The high threshold at 100 then triggers urgent actions or evacuation if needed, preventing exposure from reaching hazardous levels. This spacing helps balance sensitivity with reliability, avoiding nuisance alarms that would occur if the low threshold were set too high and preventing delayed response if the high threshold were set too low. In practice, these values are often expressed in ppm, aligning with common VOC reporting on PID instruments, though the exact units depend on the instrument's configuration.

6. What is the CSR rope rescue bag length?

A. 200 ft

B. 300 ft

C. 400 ft

D. 600 ft

Knowing the rope length in a CSR rope rescue bag is about balancing reach with portability. A 300-foot rope provides enough length to reach most victims and set up standard rescue configurations—belays, prusik progressions, and anchor systems—without needing to carry multiple ropes or bags. If the rope were shorter, like 200 feet, you'd often have to improvise or bring extra rope to reach the casualty, wasting valuable time. On the other hand, ropes that are much longer, such as 400 or 600 feet, add unnecessary bulk and weight and complicate rope management in many real-world scenarios. So, 300 feet is chosen because it covers common rescue distances while keeping the kit practical to transport and use.

7. What is the rating of harness tool loops?

A. 5 kg

B. 20 kg

C. 2 kg

D. 10 kg

Tool loops on a harness are rated to indicate how much weight they're built to safely support. The correct rating is the one that matches what you typically need to carry—enough room for common hand tools and a little extra for shifting or swinging, while still staying within the design limits of the harness and loop. That balance ensures you can clip on what you usually use without risking failure of the loop or attachment during work or movement. If the rating were too low, ordinary tools wouldn't fit safely; if it were higher, it wouldn't align with how the equipment is designed to behave in real use. So the rating that fits typical tool needs with a safe margin is the appropriate choice.

8. In hazmat identification, the minimum PPE level is typically:

A. Maximum Level A PPE; approach with infrared thermography

B. Minimum Level B PPE; approach with MultiRae, Ludlum, and pH paper

C. Level C PPE; no instrumentation

D. No PPE required; use only gloves

When approaching an unknown hazmat release to identify what you're dealing with, you need protection for both your respiratory system and your skin, plus the ability to collect real-time data. Level B PPE provides that balance: a splash-resistant suit with a hood and a powered or supplied-air respirator, giving reliable protection against vapors and splashes while still allowing you to use field instruments. That combination is essential because identification relies on instruments such as a MultiRae gas monitor to detect airborne contaminants, a Ludlum detector if there's a concern about radiological material, and pH paper for quick chemical characterization. Higher protection (Level A) is typically unnecessary for initial identification and can hinder mobility, while Level C PPE without instrumentation or no PPE at all would leave you vulnerable to unknown hazards.

9. To determine if a liquid will float, which result indicates a lower than water specific gravity?

A. If product sinks in water, it will float

B. If product floats, SG > 1.5

C. If less than 1.0 specific gravity, it will float

D. If greater than 2.0, it will vaporize

Specific gravity compares a liquid's density to water. Water has a density of 1.0 in this scale, so a liquid will float only if its density is lighter than water, meaning its SG is less than 1.0. When the SG is below 1.0, the liquid is less dense than water and will ride on top rather than sink. If the SG is above 1.0, the liquid is denser than water and tends to sink. The idea of vaporization isn't related to density or floatation, so it doesn't inform whether a liquid will float.

10. MBS stands for what?

A. Maximum Breaking Strength

B. Median Breaking Strength

C. Minimum Breaking Strength

D. Mechanical Breaking Strength

MBS stands for minimum breaking strength. This is the smallest force at which a component, such as a rope or strap, is guaranteed to fail in testing. It provides a conservative baseline for safety: you design systems with a safety factor above the MBS so the actual operating loads never approach the point of failure. For example, if a rope's MBS is 10,000 N and a safety factor of 5 is used, the working load limit becomes 2,000 N, meaning the system should not be loaded above that to stay within safe limits. The other phrases aren't standard ratings used for safety design. Maximum breaking strength would denote the largest force the item can endure before breaking, which isn't the rating used for ensuring safe operation. Median breaking strength isn't a typical, meaningful specification in this context, and mechanical breaking strength isn't a recognized term here.

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://soaracademy.examzify.com

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