NSW Deputy Coal Mine Practice Exam (Sample)

Study Guide

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. How should hazardous energy be controlled before equipment maintenance in accordance with good practice?

A. Notify the supervisor and continue work with caution.

B. De-energise only the electrical circuit.

C. Isolate energy sources, apply lockout/tagout, test to verify zero energy, and secure against re-energisation.

D. Use a temporary workaround to avoid maintenance.

2. What items are generally found in a Fire Depot?

A. 5 x hoses of 38mm x 30m; Dividing Branch; 2 x Nozzles (Fog and Jet); Spare O Rings; Spanner; 2 x Dry chemical 80ABE.

B. Water pump and generator.

C. First aid kit only.

D. Ladders and cones.

3. What is the purpose of a strict permit to work system in a coal mine?

A. To manage payroll for high-risk tasks.

B. To document safety meetings only.

C. To track equipment maintenance schedules.

D. To control high-risk activities by authorising work, specifying safety requirements, and ensuring appropriate controls are in place before work begins.

4. Which term best describes the Return Airway?

A. Any part of an intake that is on the return side within 100 m outbye of the most inbye completed C/Ts.

B. The main intake shaft.

C. Ventilation network control.

D. Air in the mine refuge chamber.

5. When must notifiable incidents be reported and how are investigations handled?

A. Notified as soon as practicable; investigations initiated; follow-up reporting completed.

B. Notified annually.

C. Only after a fatality.

D. No formal process.

6. What are you looking for during underground inspections?

A. A comprehensive checklist including gas, ventilation, roadway conditions, signs, equipment, and safety systems.

B. Only gas readings.

C. Only signage.

D. Only electrical wiring.

7. How should record keeping be maintained to support regulatory compliance?

A. Only incident reports.

B. Maintain accurate, up-to-date records of risk assessments, SWMS, training, incident reports, maintenance, audits, and inspections, accessible for audits.

C. Only training records.

D. Only audits and inspections.

8. How should the mine manage heat stress and worker fatigue?

A. Increase shifts to complete tasks faster.

B. Provide rest breaks, hydration, cooling measures, and adjust rosters to limit exposure.

C. Rely on self-monitoring without breaks.

D. Only provide cooling if temperatures exceed threshold.

9. What percentage is listed for Intake Air in the gas concentration requirements?

A. 0.25%

B. 2.0%

C. 1.25%

D. 5%

10. Which features must electrical equipment have to be considered suitable for use in hazardous mine areas?

A. Hazardous area rating, appropriate IP rating, intrinsic safety where needed

B. Low price and ease of replacement.

C. Wireless capability only.

D. Decorative appearance.

Answers

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

Explanations

1. How should hazardous energy be controlled before equipment maintenance in accordance with good practice?

A. Notify the supervisor and continue work with caution.

B. De-energise only the electrical circuit.

C. Isolate energy sources, apply lockout/tagout, test to verify zero energy, and secure against re-energisation.

D. Use a temporary workaround to avoid maintenance.

Hazardous energy control before maintenance relies on a robust lockout/tagout process to prevent any energy from moving or restoring while work is being done. The essential steps are to first identify all sources of energy that could affect the equipment—electrical, mechanical, hydraulic, pneumatic, thermal, and stored energy. Then isolate those sources at their points of control so the equipment cannot be re-energised. Apply locking devices (like padlocks) and clear tags to all isolation points, ensuring that only the person who applied the lock can remove it, and that the tag communicates who is responsible and why maintenance is underway. Next, test to verify there is zero energy present with appropriate testing equipment before any work begins. Finally, secure against re-energisation, using group locks or other controls as needed so the equipment cannot be re-energised unintentionally while maintenance is completed. This approach is superior because it provides a verifiable dead state and prevents unexpected energising that could injure workers, rather than merely telling someone to be careful or only disabling one energy form. Notifying a supervisor and continuing with caution leaves energy sources active or potentially re-energised; de-energising only the electrical circuit ignores other energy forms; and temporary workarounds fail to reliably isolate and prevent re-energisation.

2. What items are generally found in a Fire Depot?

A. 5 x hoses of 38mm x 30m; Dividing Branch; 2 x Nozzles (Fog and Jet); Spare O Rings; Spanner; 2 x Dry chemical 80ABE.

B. Water pump and generator.

C. First aid kit only.

D. Ladders and cones.

The main idea here is understanding what a Fire Depot is stocked with to enable rapid and effective firefighting in a mining environment. The items listed reflect the core kit you'd expect to find there: multiple hoses of a standard size and length to reach the fire, a dividing branch to split the water supply into several outlets, and different types of nozzles (fog for cooling and coverage, jet for direct attack) to handle varying fire scenarios. Having spare O-rings and a spanner ensures quick maintenance and repairs to hoses and fittings on site, keeping the system operational under pressure. The dry chemical extinguishers (80ABE) provide immediate, versatile suppression for common mine hazards, including electrical or small fuel-related fires. Other options don't provide the full firefighting capability you'd need from a depot. A water pump and generator might be useful in a broader response setup, but they aren't the standard, ready-to-deploy firefighting kit stored in a depot. A first aid kit alone doesn't address fire suppression, and ladders and cones are safety tools rather than the essential firefighting equipment kept for rapid response.

3. What is the purpose of a strict permit to work system in a coal mine?

A. To manage payroll for high-risk tasks.

B. To document safety meetings only.

C. To track equipment maintenance schedules.

D. To control high-risk activities by authorising work, specifying safety requirements, and ensuring appropriate controls are in place before work begins.

The concept being tested is how formal risk control is applied to high-risk tasks in mining. A strict permit to work is a formal authorisation system that ensures any high-risk activity is properly planned and controlled before it starts. It assigns responsibility, requires a hazard assessment, and sets the exact safety conditions that must be in place, such as isolating energy sources, gas testing, ventilation requirements, fire precautions, rescue arrangements, and clear communication. Only when these controls are confirmed and documented can the work proceed, and the permit can specify what must be done if conditions change. This is why the correct choice is about authorising work, detailing safety requirements, and ensuring appropriate controls exist before work begins. The other options miss the core purpose: payroll management, documenting safety meetings, or tracking maintenance schedules do not provide the proactive, task-level risk controls needed for high-risk mining activities.

4. Which term best describes the Return Airway?

A. Any part of an intake that is on the return side within 100 m outbye of the most inbye completed C/Ts.

B. The main intake shaft.

C. Ventilation network control.

D. Air in the mine refuge chamber.

In underground mine ventilation, air moves from the intake network toward the working faces and then returns back toward the surface. A Return Airway is the portion of the intake that has become part of the path carrying air back, i.e., it lies on the return side. The boundary used is within 100 metres outbye of the most inbye completed crosscuts (C/Ts). This definition captures which sections are already part of the returning flow rather than supplying fresh air, which matters for monitoring gas levels, controlling airflow, and safety procedures. The other options describe a source of fresh air (the main intake shaft), a system function (ventilation network control), or air inside a safety refuge chamber, none of which define the pathway that carries used air back to the surface.

5. When must notifiable incidents be reported and how are investigations handled?

A. Notified as soon as practicable; investigations initiated; follow-up reporting completed.

B. Notified annually.

C. Only after a fatality.

D. No formal process.

Prompt reporting of notifiable incidents, followed by a formal investigation and then follow-up reporting, is the standard approach. Notifiable incidents are serious events defined by safety regulations that require immediate action to protect people and prevent recurrence. You must notify as soon as practicable—don't wait for a scheduled time or for more information—so regulators can respond quickly and risk controls can be put in place. Once the incident is notified, an investigation is initiated to determine what happened, why it happened, and what corrective actions are needed. The investigation is carried out systematically, gathering evidence, interviewing people, and analyzing contributing factors. After the investigation, follow-up reporting is completed to document the findings, the corrective actions taken, implementation timelines, and any further regulatory reporting requirements. Annual reporting would delay essential safety responses; not all notifiable incidents involve fatalities, so waiting for a fatality misses the broader scope of events that require immediate attention; and there is a formal process in place for notification, investigation, and reporting.

6. What are you looking for during underground inspections?

A. A comprehensive checklist including gas, ventilation, roadway conditions, signs, equipment, and safety systems.

B. Only gas readings.

C. Only signage.

D. Only electrical wiring.

During underground inspections you're aiming for a comprehensive view of safety, not a single detail. Gas readings are essential, but they're only part of the picture. You also need to verify that ventilation is effectively removing hazards, roadways and supports are in good condition, signage and warnings are present and readable, equipment is available and functioning, and safety systems (alarms, escape procedures, communication) are in place and working. Using a full checklist that covers gas, ventilation, roadway conditions, signs, equipment, and safety systems ensures a systematic, consistent assessment and helps you spot and address any gaps before they become incidents. Focusing only on gas, or only on signage, or only on electrical wiring, misses other critical risks and isn't sufficient for safe underground operation.

7. How should record keeping be maintained to support regulatory compliance?

A. Only incident reports.

B. Maintain accurate, up-to-date records of risk assessments, SWMS, training, incident reports, maintenance, audits, and inspections, accessible for audits.

C. Only training records.

D. Only audits and inspections.

Maintaining regulatory compliance hinges on having a complete, current record set that covers all the key safety and operational areas, not just isolated documents. The strongest approach is to keep accurate, up-to-date records of risk assessments, Safe Work Method Statements (SWMS), training, incident reports, maintenance, audits, and inspections, and ensure they're accessible for audits. This full suite lets regulators see that risks are properly assessed and controlled, workers are properly trained, equipment is maintained, incidents are documented and investigated, and corrective actions are tracked after audits and inspections. Keeping only incident reports or only training records, or focusing solely on audits and inspections, misses important parts of how safety is managed day to day and during ongoing operations. A complete, accessible record system across these areas provides the evidence needed to demonstrate ongoing compliance and effective safety management.

8. How should the mine manage heat stress and worker fatigue?

A. Increase shifts to complete tasks faster.

B. Provide rest breaks, hydration, cooling measures, and adjust rosters to limit exposure.

C. Rely on self-monitoring without breaks.

D. Only provide cooling if temperatures exceed threshold.

Managing heat stress and fatigue relies on a proactive, layered approach that reduces heat load and supports workers to recover. The best approach combines rest breaks, hydration, cooling measures, and roster adjustments to limit exposure. Regular breaks give the body time to shed heat and recover from exertion; staying hydrated maintains blood volume and supports sweating, which helps regulate temperature; cooling measures like shaded rest areas, fans, cooling devices, and easy access to cold drinks directly reduce body heat and make work safer and more comfortable; and adjusting rosters—rotating workers, spacing high-heat tasks, and sequencing work to cooler periods—keeps exposure within safer limits and helps workers acclimatize. Together, these steps prevent heat-related illness and maintain performance. Increasing shifts would raise heat exposure and fatigue; relying on self-monitoring without breaks isn't reliable and can miss early signs of heat strain; cooling only when a threshold is reached is reactive rather than protective.

9. What percentage is listed for Intake Air in the gas concentration requirements?

A. 0.25%

B. 2.0%

C. 1.25%

D. 5%

Gas concentration requirements set a safe ceiling on how much gas can be present in the air that enters the mine, so the fresh intake air won't carry dangerous levels into working areas. For methane in intake air, the limit is 0.25% (2,500 ppm). This is a conservative value chosen because methane's explosive range starts much higher, and keeping intake air well below that threshold provides a comfortable safety margin for measurement variability and potential gas migration in the ventilation system. The other higher figures would not meet the safety standard for intake air and could allow unsafe gas levels to enter the mine.

10. Which features must electrical equipment have to be considered suitable for use in hazardous mine areas?

A. Hazardous area rating, appropriate IP rating, intrinsic safety where needed

B. Low price and ease of replacement.

C. Wireless capability only.

D. Decorative appearance.

Electrical equipment used underground in hazardous areas must be designed to prevent ignition and withstand the conditions present. The main features you look for are a hazardous area rating appropriate to the zone, an IP rating that shows it can resist dust and moisture intrusion, and intrinsic safety where required to limit the energy available even in a fault. The hazardous area rating confirms the equipment is tested and approved for use in explosive gas or dust atmospheres. The IP rating ensures that dust and water cannot reach live parts. Intrinsic safety keeps electrical energy so low that even if a fault occurs, it cannot ignite the surrounding atmosphere. Price, wireless capability alone, or decorative appearance do not address ignition risk and thus do not guarantee suitability for hazardous areas.

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://nswdepcoalmine.examzify.com

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