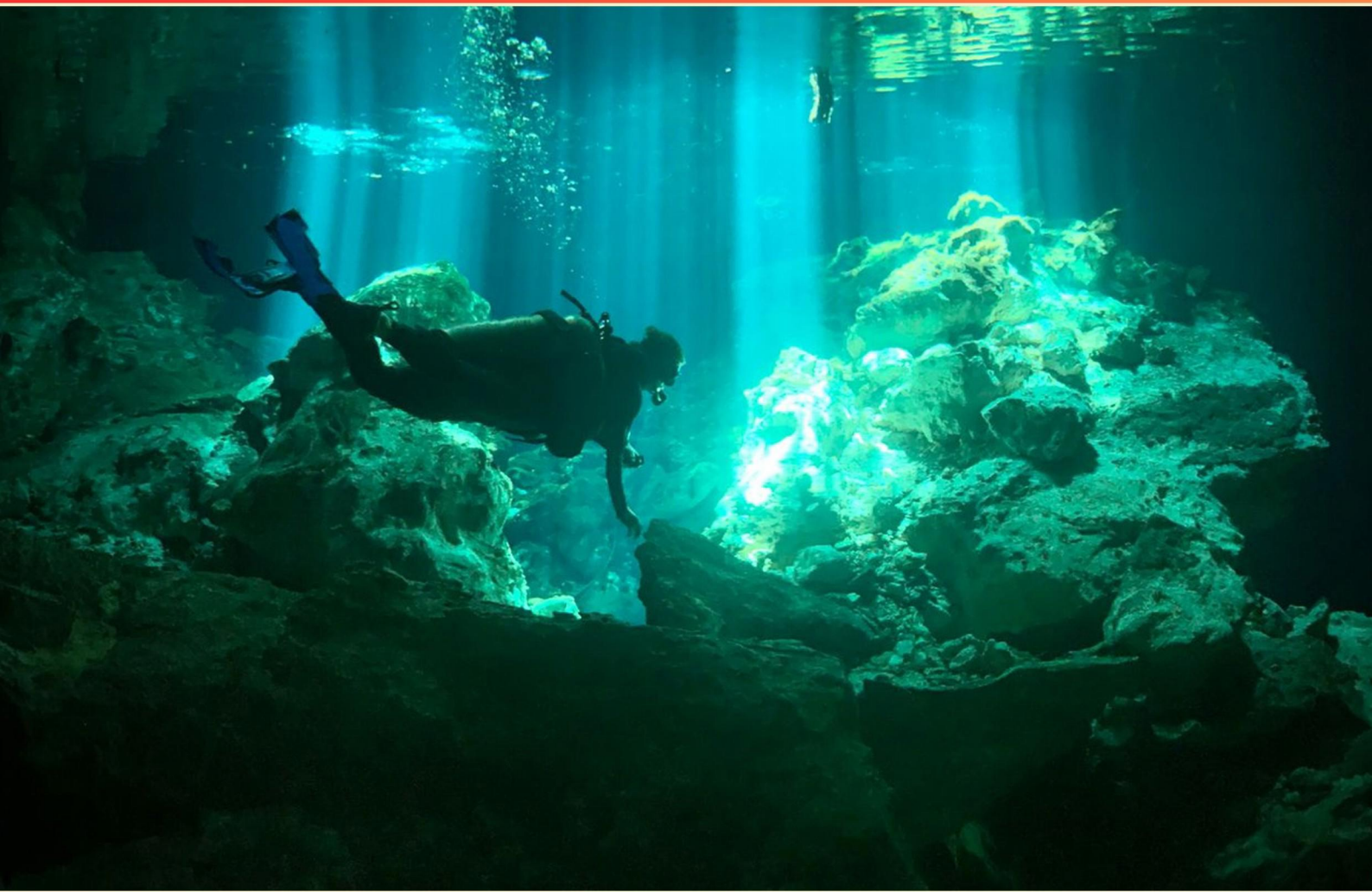


# SSI DECOMPRESSION DIVING PRACTICE TEST (SAMPLE)

## STUDY GUIDE



## SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR  
THE FULL VERSION STUDY GUIDE

<https://ssidecompressiondiving.examzify.com>



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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

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- 1. Which of the following factors can increase the risks of decompression illness?**
  - A. Environmental pressure changes
  - B. All answers are correct
  - C. Length of dive
  - D. Temperature fluctuations
- 2. In dive planning, what is an essential component to avoid decompression sickness?**
  - A. Surface interval time
  - B. Oxygen exposure limits
  - C. Depth and duration of previous dives
  - D. All of the above
- 3. What condition occurs when gases separate out of solution and form bubbles in the body?**
  - A. Barotrauma
  - B. Decompression sickness
  - C. Hypoxia
  - D. Hypercapnia
- 4. What is the cylinder capacity of an 580 cylinder filled to 3000 psi?**
  - A. 60 cuft
  - B. 80 cuft
  - C. 100 cuft
  - D. 120 cuft
- 5. What is the average ascent depth for Dive Profile A?**
  - A. 50 Feet
  - B. 70 Feet
  - C. 83 Feet
  - D. 100 Feet

- 6. Why is it easier to give hand signals with one hand?**
- A. It is more efficient
  - B. It ensures clearer communication
  - C. All answers are correct
  - D. It reduces confusion
- 7. What is the hand signal for "How Much Gas?"**
- A. An open palm with fingers held straight
  - B. Fingers pointed downward, showing number of tanks
  - C. From an open palm, the fingers are curled towards the wrist several times
  - D. A fist with a thumbs up
- 8. What is the first part of the pre-dive procedure?**
- A. Equipment check
  - B. Dive plan overview
  - C. Environmental evaluation
  - D. Buddy check
- 9. What factor affects the selected level of conservatism during the dive planning process?**
- A. Equipment quality
  - B. Water temperature
  - C. Predisposing personal factors
  - D. Depth of the dive
- 10. What should be done immediately if a diver exhibits signs of an arterial gas embolism?**
- A. Give them food and water
  - B. Maintain calm and monitor breathing
  - C. Transport them to a recompression chamber immediately
  - D. Perform CPR



## **Answers**

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

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## **Explanations**

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**1. Which of the following factors can increase the risks of decompression illness?**

- A. Environmental pressure changes
- B. All answers are correct**
- C. Length of dive
- D. Temperature fluctuations

*The accurate selection reflects the understanding that various factors can collectively elevate the risks associated with decompression illness. Each factor listed plays a role in increasing the likelihood of this condition, which occurs due to the formation of nitrogen bubbles in the body when a diver ascends too quickly or improperly. Environmental pressure changes can significantly impact a diver's risk by altering the nitrogen absorption in the body. When descending or ascending, the pressure around a diver fluctuates, which can affect how nitrogen is off-gassed or absorbed. The length of the dive is another crucial factor, as longer dives increase the amount of nitrogen that can accumulate in a diver's tissues. Extended exposure at depths can make it more challenging for the body to safely eliminate this nitrogen when ascending. Temperature fluctuations can also influence decompression risk. Cold temperatures can constrict blood vessels, potentially limiting the body's ability to circulate blood efficiently and thus, to off-gas nitrogen effectively. Warm temperatures tend to promote vasodilation and possibly lead to increased nitrogen absorption, making both extremes potentially hazardous. Given that all of these factors contribute to the complexities of decompression theory, the choice acknowledges that the interplay of these various elements can compound the risks associated with diving, leading to a greater potential for decompression illness if not managed*

**2. In dive planning, what is an essential component to avoid decompression sickness?**

- A. Surface interval time
- B. Oxygen exposure limits
- C. Depth and duration of previous dives
- D. All of the above**

*In dive planning, all components play a crucial role in avoiding decompression sickness. Each factor contributes to understanding and mitigating the risks involved in diving. Surface interval time is vital because it provides the body with the opportunity to off-gas nitrogen absorbed during a dive. Adequate surface intervals allow divers to safely return to the water or ascend after a series of dives without exceeding no-decompression limits, reducing the risk of decompression sickness. Oxygen exposure limits are also important because exceeding these limits can lead to oxygen toxicity and other health issues. Being mindful of the amount of oxygen a diver is exposed to at different depths helps ensure a safe diving experience. The depth and duration of previous dives factor into dive planning as well, since the cumulative effects of nitrogen absorption can increase the risk of decompression sickness. Monitoring these elements helps divers stay within safe limits and manage the ascent profile. Therefore, the essential components encompass all aspects of diving planning, ensuring divers are well-informed and prepared to avoid decompression sickness effectively.*

### 3. What condition occurs when gases separate out of solution and form bubbles in the body?

- A. Barotrauma
- B. Decompression sickness**
- C. Hypoxia
- D. Hypercapnia

*Decompression sickness, often referred to as "the bends," occurs when gases that were dissolved in a diver's body fluids come out of solution and form bubbles as a result of a rapid decrease in pressure during ascent. When a diver descends, the pressures increase, allowing more nitrogen and other gases to dissolve in the body. If the ascent is too rapid, the sudden drop in pressure can cause these dissolved gases to form bubbles, leading to various symptoms that may include joint pain, dizziness, shortness of breath, and in severe cases, it can be life-threatening. This condition is related specifically to the handling of gases and pressure, distinguishing it from other dive-related issues such as barotrauma, which involves physical injury due to pressure changes; hypoxia, a deficiency in oxygen supply; and hypercapnia, an excess of carbon dioxide in the bloodstream. Understanding this process is crucial for divers to ensure safe ascent practices and prevent such health risks.*

### 4. What is the cylinder capacity of an 580 cylinder filled to 3000 psi?

- A. 60 cuft
- B. 80 cuft**
- C. 100 cuft
- D. 120 cuft

*To determine the cylinder capacity of a 580 cylinder filled to 3000 psi, it's important to recognize that a common standard for dive cylinders is the "580" designation, which typically refers to a cylinder that can hold 80 cubic feet of gas when filled to its full rated pressure, which is often 3000 psi for many aluminum cylinders used in scuba diving. The correct answer being 80 cuft aligns with the standard specifications for this type of cylinder. In practical diving terms, an 80 cuft cylinder filled to 3000 psi has sufficient volume to provide adequate breathing gas for the diver for recreational dives while allowing for safe ascent and possible safety stops. In essence, knowing the standard capacity helps divers make informed decisions while planning their dives—particularly in relation to the duration and the amount of gas needed for safe returns to the surface.*

### 5. What is the average ascent depth for Dive Profile A?

- A. 50 Feet
- B. 70 Feet
- C. 83 Feet**
- D. 100 Feet

*The average ascent depth for Dive Profile A being 83 feet indicates a calculated value often derived from analyzing the specific depths reached during a dive and the time spent at those depths. This average is significant in understanding how depth impacts no-decompression limits and the physiological effects of diving. In calculating the average ascent depth, all depths where the diver spent time are considered, and the mean is found. This is particularly useful for ensuring that divers can plan their ascents safely, adhering to safe ascent rates and allowing adequate time for any necessary decompression stops based on their total exposure to pressure. Understanding this value helps divers estimate how they should conduct their dives to maximize safety and enjoyment, ensuring they recognize the potential risks associated with deeper dives and the necessity of appropriate ascent practices.*

## 6. Why is it easier to give hand signals with one hand?

- A. It is more efficient
- B. It ensures clearer communication
- C. All answers are correct**
- D. It reduces confusion

*Giving hand signals with one hand is generally considered easier for several reasons that contribute to effective underwater communication. Using one hand allows a diver to maintain better control of their buoyancy and body positioning, which is crucial while diving. This means that the diver can use the other hand for stability or to manipulate equipment without losing balance or control of their movement. This efficiency in using one hand facilitates clearer signaling, as the diver can create deliberate and distinct gestures without any additional movements that could obscure the message. Moreover, using a single hand for signaling can enhance clarity in communication. Underwater environments can often be challenging due to visibility issues and the inherent noise of water currents. When a diver signals with one hand, it simplifies the interaction and reduces the likelihood of misinterpretation, ensuring that the intended message is clearly understood by the other diver. Additionally, making signals with one hand can significantly reduce confusion during communication. Hand signals are meant to be clear and concise. If both hands are used, there's potential for mixed signals or for gestures that could be easily mistaken for one another, especially when visibility is limited. By standardizing the signaling to one hand, divers streamline their communication, which is essential for effective teamwork and safety underwater. These factors all contribute to a*

## 7. What is the hand signal for "How Much Gas?"

- A. An open palm with fingers held straight
- B. Fingers pointed downward, showing number of tanks
- C. From an open palm, the fingers are curled towards the wrist several times**
- D. A fist with a thumbs up

*The hand signal for "How Much Gas?" is indicated by an open palm with fingers curled towards the wrist several times. This signal effectively communicates the inquiry about the diver's air supply in a clear and intuitive way. The curling motion of the fingers towards the wrist suggests the action of wanting to know the remaining gas in the tank. This is especially important in diving to ensure safety and proper communication between divers. While the other options may represent different concepts or signals entirely, they do not convey the specific question about gas supply. For example, an open palm with fingers held straight might be used for different inquiries or greetings, fingers pointed downward showing the number of tanks could imply the number of tanks available without specifically addressing gas levels, and a fist with a thumbs up typically represents a positive affirmation or 'okay' signal rather than a request for information about gas. Thus, the chosen hand signal, with its distinctive curling action, is the most accurate representation of the question "How Much Gas?" in diving communication.*

## 8. What is the first part of the pre-dive procedure?

- A. Equipment check
- B. Dive plan overview
- C. Environmental evaluation**
- D. Buddy check

*The first part of the pre-dive procedure is the environmental evaluation. This step is crucial because it involves assessing the conditions in which the dive will take place, such as water temperature, visibility, weather conditions, and potential hazards like currents or marine life. By evaluating the environment, divers can make informed decisions about the dive site, understand what to expect during the dive, and adjust their plans accordingly to ensure safety. Conducting an environmental evaluation helps divers prepare not only for their immediate surroundings but also to anticipate any challenges they may face underwater. This step sets the foundation for creating a comprehensive dive plan that takes into account the specific conditions of the dive location. Having an understanding of the environment allows divers to adjust their equipment, gas mixtures, and overall dive strategy to manage risks effectively. While equipment checks, dive plan overviews, and buddy checks are all important components of the pre-dive procedure, they build upon the understanding gained from the environmental evaluation. It is essential to know the conditions before proceeding with planning how to dive safely.*

## 9. What factor affects the selected level of conservatism during the dive planning process?

- A. Equipment quality
- B. Water temperature
- C. Predisposing personal factors**
- D. Depth of the dive

*The selected level of conservatism during the dive planning process is significantly influenced by predisposing personal factors. These factors can include a diver's health status, experience level, and individual susceptibility to decompression sickness. For instance, if a diver has a history of diving-related issues, pre-existing medical conditions, or is relatively inexperienced, they may need to adopt a more conservative approach to diving. This can involve limiting depth, shortening bottom times, or incorporating additional safety stops to minimize the risk of decompression sickness. While equipment quality, water temperature, and depth of the dive are important considerations in dive planning, they do not directly pertain to the diver's personal attributes and how they might adjust their dive plan accordingly. Personal factors are unique to each diver and play a crucial role in determining the level of risk they are willing to take on during their dives.*

**10. What should be done immediately if a diver exhibits signs of an arterial gas embolism?**

- A. Give them food and water
- B. Maintain calm and monitor breathing
- C. Transport them to a recompression chamber immediately**
- D. Perform CPR

*When a diver exhibits signs of an arterial gas embolism, immediate action is critical due to the life-threatening nature of the condition. The correct response is to transport the diver to a recompression chamber as soon as possible. An arterial gas embolism occurs when gas bubbles enter the bloodstream, potentially leading to severe complications such as stroke or embolism. The primary treatment for this condition is hyperbaric oxygen therapy, which is administered in a recompression chamber. This therapy helps reduce the size of the gas bubbles, provides the body with oxygen under pressure, and assists in healing damaged tissues. While monitoring breathing and maintaining calm are important for the diver's overall management, they are not sufficient to address the serious medical emergency presented by an arterial gas embolism. Similarly, giving food and water is neither appropriate nor helpful in this critical situation. Performing CPR may be necessary in the case of cardiac arrest, but the first step when recognizing symptoms of an arterial gas embolism is to ensure swift transport to a recompression facility for appropriate treatment. Therefore, immediate action towards recompression is the priority.*



## 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](mailto:hello@examzify.com).

Or visit your dedicated course page for more study tools and resources:

<https://ssidecompressiondiving.examzify.com>

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

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