MK-20 / KM-37 Portable Surface Supplied Diving Systems Practice Test (Sample)

Study Guide

BY EXAMZIFY

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. Don’t worry about getting everything right, 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, and take breaks to retain information better.

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.

7. Use Other Tools

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 is the maximum depth supported by the stackable compressed air rack assembly for two divers and one standby?

A. 100 FSW

B. 130 FSW

C. 150 FSW

D. 200 FSW

2. What does FADS3 stand for in diving terminology?

A. Floating Air Dive System 3

B. Flyaway Dive System 3

C. Fixed Air Delivery System 3

D. Fast Access Diving System 3

3. What type of operation does the FADS3 primarily support?

A. Underwater exploration

B. Chamber operations and dive missions

C. Search and recovery missions

D. Surface supply rescue operations

4. How should the diver respond to experiencing a rapid pressure change?

A. Ascend immediately

B. Equalize pressure in the ears and ascend slowly

C. Hold their breath

D. Begin using their breathing apparatus

5. What should the overbottom pressure be set to when diving with the MK20 scuba?

A. 150 PSIG

B. 135 PSIG

C. 120 PSIG

D. 100 PSIG

6. Why is it imperative that the head cushion fits properly?

A. To ensure comfort during long dives

B. To ensure a good seal to the oral nasal

C. To improve communication with surface crew

D. To prevent helmet dislocation

7. What action is advised if a diver feels cold during the dive?

A. Continue diving and pace themselves

B. Signal for assistance and ascend if necessary to warmer waters

C. Use heat packs available in the diving gear

D. Complete the dive time and address it afterward

8. In what current must extra weight be added when diving with an MK20 in open water?

A. Above 1.0 knots

B. Above 1.5 knots

C. Above 2.0 knots

D. Above 2.5 knots

9. In which scenarios should a diver abort a dive?

A. When the water temperature changes

B. In case of equipment failure, poor visibility, or personal distress

C. Only if they feel tired

D. When they reach the planned depth

10. What is the purpose of the condensate drain valve in the air supply rack assembly?

A. To filter impurities

B. To control gas pressure

C. To relieve excess pressure

D. To enhance air quality

Answers

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

Explanations

1. What is the maximum depth supported by the stackable compressed air rack assembly for two divers and one standby?

A. 100 FSW

B. 130 FSW

C. 150 FSW

D. 200 FSW

The maximum depth supported by the stackable compressed air rack assembly for two divers and one standby is 130 feet of seawater (FSW). This depth is determined by the design and capability of the air compression system, as well as the pressures that the equipment can effectively handle while maintaining safety and operational efficiency for the divers involved. At 130 FSW, the system is engineered to provide adequate breathing gas supply and ensure that all safety protocols can be maintained during the dive. This includes proper air supply, the ability to manage buoyancy, and the provision of emergency responses if needed. Factors such as the need to prevent equipment failure under pressure and to ensure sufficient air supply for three personnel are design considerations that lead to establishing this depth limit. Understanding the operational limits imposed by equipment like the rack assembly is crucial for planning safe and effective diving operations, which is why this depth stands as the maximum for the approved setup.

2. What does FADS3 stand for in diving terminology?

A. Floating Air Dive System 3

B. Flyaway Dive System 3

C. Fixed Air Delivery System 3

D. Fast Access Diving System 3

FADS3 stands for "Flyaway Dive System 3." This term is used in the context of diving operations to refer to a specific type of diving equipment that is designed to be easily transportable and rapidly deployable. The "Flyaway" designation implies that this system can be quickly moved to different locations for diving missions, making it versatile for various underwater tasks. The purpose of such a system is to enable efficient and effective operations in diverse environments, often in response to urgent needs. This could include search and rescue missions, underwater inspections, or maintenance tasks where mobility is a significant advantage. In diving terminology, it is important to recognize how specific systems are categorized, as these classifications help professionals in the field understand their capabilities, functions, and applications in various diving scenarios.

3. What type of operation does the FADS3 primarily support?

A. Underwater exploration

B. Chamber operations and dive missions

C. Search and recovery missions

D. Surface supply rescue operations

The FADS3 (Family of Diver Augmented Systems 3) primarily supports chamber operations and dive missions because it is designed to provide a comprehensive surface-supplied diving system that can accommodate various operational needs. These systems facilitate deep-sea diving operations, allowing divers to remain at significant depths for extended periods while receiving support from surface personnel. The configuration of the FADS3 allows for simultaneous support operations during diving missions, ensuring divers can operate safely and efficiently under the specific environmental conditions experienced in underwater environments. This capability is crucial for chamber operations, where precise control over atmospheric conditions is needed to prevent issues like decompression sickness. By focusing on chamber operations and dive missions, the FADS3 emphasizes the critical elements of safety, communication, and operational effectiveness required in demanding underwater tasks.

4. How should the diver respond to experiencing a rapid pressure change?

A. Ascend immediately

B. Equalize pressure in the ears and ascend slowly

C. Hold their breath

D. Begin using their breathing apparatus

When a diver experiences a rapid pressure change, the appropriate response is to equalize pressure in the ears and ascend slowly. This approach helps to prevent barotrauma, which can occur if the pressure in the middle ear is not equalized with the surrounding water pressure. During a rapid ascent, the pressure on the diver's body decreases quickly, potentially leading to discomfort or injury. Equalizing the pressure in the ears—often achieved by performing the Valsalva maneuver, where the diver pinches their nose and attempts to breathe out—helps to balance the internal and external pressures. Following this, ascending slowly allows the body to adjust to the changing pressure gradually, reducing the risk of decompression sickness and other injuries associated with rapid changes in pressure. Holding their breath can be dangerous, as it may lead to lung overexpansion injuries if the diver ascends without allowing air to escape from their lungs. Ascending immediately without equalization also poses significant risks, including ear damage. Using a breathing apparatus is not necessary in this scenario unless the situation requires it, and proper procedures should always be followed to ensure safety during diving activities.

5. What should the overbottom pressure be set to when diving with the MK20 scuba?

A. 150 PSIG

B. 135 PSIG

C. 120 PSIG

D. 100 PSIG

The overbottom pressure for diving with the MK20 scuba is typically recommended to be set at 135 PSIG. This setting is crucial for ensuring adequate performance and safety under various diving conditions. The overbottom pressure is a measure that helps to counterbalance water pressure during a dive, thereby preventing any adverse effects such as barotrauma or equipment malfunction. Setting the pressure too low may not provide sufficient breathing gas flow or could hinder the operation of the diving system, while setting it too high could lead to unnecessary stress on the diving apparatus and could affect the diver's ability to manage their buoyancy effectively. Maintaining the overbottom pressure at 135 PSIG allows for optimal gas delivery and safety, ensuring that divers can focus on their tasks without the distraction of pressure-related issues.

6. Why is it imperative that the head cushion fits properly?

A. To ensure comfort during long dives

B. To ensure a good seal to the oral nasal

C. To improve communication with surface crew

D. To prevent helmet dislocation

The significance of the head cushion fitting properly relates directly to maintaining a good seal to the oral-nasal area. An effective seal is crucial in surface-supplied diving systems, as it prevents the ingress of water and ensures that the diver can communicate effectively and safely. A proper fit allows for the integrated systems, such as the communication apparatus and breathing gas supply, to function optimally without any leaks, which can compromise the diver's safety and performance underwater. This strong seal is also essential for preventing water from entering the helmet, which can lead to a dangerous situation if the diver is unable to manage the water intrusion while underwater. Therefore, ensuring that the head cushion fits correctly is fundamentally linked to the overall safety and functionality of the diving equipment.

7. What action is advised if a diver feels cold during the dive?

A. Continue diving and pace themselves

B. Signal for assistance and ascend if necessary to warmer waters

C. Use heat packs available in the diving gear

D. Complete the dive time and address it afterward

If a diver feels cold during the dive, signaling for assistance and ascending to warmer waters is the recommended action. Cold can lead to hypothermia and decreased performance, which can compromise the diver's safety. By signaling for assistance, the diver ensures that they have support in case they need help transitioning to a shallower depth or returning to the surface safely. Ascending to a warmer environment can help to mitigate the risks associated with cold exposure, allowing the diver to maintain their safety and effectiveness. It's essential to address cold exposure promptly, rather than trying to tough it out or relying solely on heat packs, which may not provide immediate relief or may not be effective depending on the severity of the cold. Completing the dive time without addressing the discomfort can lead to serious consequences, including impaired cognitive function and physical capabilities. Thus, seeking assistance and moving to a warmer area when feeling cold during the dive is a prudent and safety-focused choice.

8. In what current must extra weight be added when diving with an MK20 in open water?

A. Above 1.0 knots

B. Above 1.5 knots

C. Above 2.0 knots

D. Above 2.5 knots

When diving with an MK20 in open water, it is important to consider the influence of current on buoyancy and stability. Adding extra weight is critical when diving in currents that exceed 1.5 knots. This is due to the fact that stronger currents can create more drag on the diver, resulting in a potential loss of buoyancy control. By adding extra weight, divers enhance their ability to stay submerged and maneuver effectively in challenging conditions. If the current is too strong and not enough weight is applied, divers may struggle to maintain depth or may become excessively buoyant, which can lead to safety issues. Therefore, adding weight in currents greater than 1.5 knots ensures divers can effectively manage their position and remain safe during their dives.

9. In which scenarios should a diver abort a dive?

A. When the water temperature changes

B. In case of equipment failure, poor visibility, or personal distress

C. Only if they feel tired

D. When they reach the planned depth

Aborting a dive is critical for the safety and well-being of the diver. The correct scenario for a diver to abort a dive includes equipment failure, poor visibility, or personal distress. Each of these factors poses significant risks that can compromise safety underwater. Equipment failure is a primary reason to abort a dive because malfunctioning gear can lead to potentially life-threatening situations. For instance, if an air supply system fails, a diver could be at risk of running out of breathable air, necessitating an immediate ascent to the surface. Poor visibility can also create hazardous conditions, as it can disorient divers and lead to difficulty in navigating underwater. When visibility is compromised, divers may not be able to locate their exit route or may inadvertently approach danger zones, such as obstacles or other divers. Personal distress is equally important; if a diver feels anxious, panicked, or unwell, continuing the dive can exacerbate these feelings and lead to impaired judgment or capabilities. Recognizing personal limitations is crucial in ensuring a safe diving experience. In contrast to this comprehensive view of when to abort a dive, the other choices focus on conditions that either do not pose an immediate threat or are too subjective, such as fatigue or temperature changes. Fatigue should certainly be monitored, but

10. What is the purpose of the condensate drain valve in the air supply rack assembly?

A. To filter impurities

B. To control gas pressure

C. To relieve excess pressure

D. To enhance air quality

The condensate drain valve in the air supply rack assembly serves the important function of relieving excess pressure. As compressed air is stored, moisture and other contaminants can accumulate within the air supply system. Without a means to manage this buildup, pressure can increase to levels that may potentially damage the equipment or interfere with its operation. By allowing for the safe release of this excess pressure, the condensate drain valve helps maintain optimal performance and safety of the diving system. In the context of the other options, filtering impurities and enhancing air quality are related to different components within the air supply assembly, such as filters and air quality monitors, which are designed to remove particulates and ensure that the air delivered is safe to breathe. Controlling gas pressure is typically managed by regulators rather than a condensate drain valve, which is specifically focused on pressure relief in the context of excess moisture and condensate.

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://mk20km37portablesurface.examzify.com

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