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. 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 many different configurations can the MK3 Mod 0 lightweight dive system be arranged into?**

   A. 1

   B. 2

   C. 3

   D. 4

2. **What happens to the thermal fuse at elevated ambient temperatures?**

   A. It expands and seals

   B. It opens and relieves pressure

   C. It melts and causes a leak

   D. It becomes inactive

3. **What characterizes a non-preamplified communication assembly for the MK20?**

   A. It includes an external speaker

   B. It has permanently attached microphone amp connector

   C. It features a Nexus connector

   D. It requires a separate power source

4. **What is the rated working pressure for the MK20 hose?**

   A. 200 PSIG

   B. 220 PSIG

   C. 250 PSIG

   D. 300 PSIG

5. **Name one psychological effect divers may face during deep dives.**

   A. Increased euphoria or excitement

   B. Anxiety or claustrophobia

   C. Disconnection from reality

   D. Overconfidence in diving abilities

6. 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

7. What is an important feature of the preamplified communication assembly?

A. It operates without batteries

B. It requires manual setup before use

C. It enhances audio clarity for communication

D. It is cheaper to manufacture

8. What is the capacity of each flask in a stackable compressed air rack assembly regarding SCF of compressed air?

A. 191 scf

B. 250 scf

C. 300 scf

D. 450 scf

9. What should divers do if they experience dizziness or lightheadedness underwater?

A. Signal for assistance and begin a controlled ascent

B. Continue diving until pain increases

C. Swim to the nearest exit point

D. Ignore the symptoms and focus on the task

10. 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

Answers

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

Explanations

1. How many different configurations can the MK3 Mod 0 lightweight dive system be arranged into?

A. 1

B. 2

C. 3

D. 4

The MK3 Mod 0 lightweight dive system can be arranged into two different configurations, which allows it to adapt to various diving situations and operational needs. This versatility is crucial for performing different types of missions, such as search and recovery, inspection, or salvage diving. The two configurations typically refer to adjustments in the diving equipment set-up, such as the method of umbilical attachment or modifications in ballast arrangements. This adaptability enhances the functionality of the dive system, enabling divers to manage different underwater conditions and tasks effectively. Understanding the configurations is key to ensuring that divers can safely and successfully utilize the system for various operations.

2. What happens to the thermal fuse at elevated ambient temperatures?

A. It expands and seals

B. It opens and relieves pressure

C. It melts and causes a leak

D. It becomes inactive

In the context of thermal fuses, their primary purpose is to enhance safety by preventing equipment failure due to overheating. When temperatures exceed a certain threshold, the thermal fuse is designed to react by opening its circuit. This action effectively relieves pressure that may build up due to heat, protecting the surrounding elements from potential damage or hazard. Elevated ambient temperatures lead the thermal fuse to activate as a safety measure. By opening, the fuse interrupts the flow of electricity or the operation of a system, thereby preventing excessive heat buildup that could result in dangerous conditions. The other choices do not accurately describe the function of a thermal fuse. For example, expansion and sealing would imply an increase in pressure, whereas melting would suggest complete failure without managing the overheating condition. Inactivation of a thermal fuse would mean it fails to perform its duty when needed, which contradicts its safety design. Therefore, recognizing that opening and relieving pressure is the mechanism by which a thermal fuse protects systems is essential for understanding its role in safety protocols.

3. What characterizes a non-preamplified communication assembly for the MK20?

A. It includes an external speaker

B. It has permanently attached microphone amp connector

C. It features a Nexus connector

D. It requires a separate power source

A non-preamplified communication assembly for the MK20 is characterized by the permanently attached microphone amp connector. This design choice means that the assembly is simplified, avoiding the need for a preamplifier, which is often used in more complex communication systems to enhance the microphone's signal. Instead, a non-preamplified system relies on the inherent strength of the microphone signal and its direct integration with the other components of the diving system. The permanently attached connector allows for a streamlined assembly process and can reduce potential points of failure, ensuring that divers have reliable communication without the additional complexities of external power requirements or extra connectors that might introduce noise or failure points. Overall, this direct connection promotes efficiency in setup and usage, making it well-suited for the specific communication needs within the MK20 system.

4. What is the rated working pressure for the MK20 hose?

A. 200 PSIG

B. 220 PSIG

C. 250 PSIG

D. 300 PSIG

The rated working pressure for the MK20 hose is indeed 250 PSIG. This specification is crucial as it indicates the maximum pressure that the hose can safely handle during operations. Understanding this rating ensures divers and operators can assess the compatible equipment and the safety margins during diving activities. In diving applications, ensuring that hoses and other components can withstand high pressures is vital for maintaining safety under water. The MK20 system is designed to provide efficient breathing gas supply while mitigating risks associated with pressure-related failures. Thus, the 250 PSIG rating reflects the robust engineering and safety considerations put into the MK20 hose, enabling its use in various underwater environments without compromising the integrity of the system.

5. Name one psychological effect divers may face during deep dives.

A. Increased euphoria or excitement

B. Anxiety or claustrophobia

C. Disconnection from reality

D. Overconfidence in diving abilities

During deep dives, divers may experience anxiety or claustrophobia, which can arise due to various factors in the underwater environment. The confined spaces typical of diving, combined with the pressure and isolation of being underwater, can amplify feelings of unease. This can be particularly true for divers who are not accustomed to deep diving or those who may already have predispositions to anxiety in enclosed spaces. The psychological effects experienced by divers can significantly impact their performance and decision-making underwater. Recognizing these emotions and managing them is crucial for safety and efficiency during dives. This phenomenon highlights the importance of psychological preparedness and support as part of a diver's training regimen. Understanding that anxiety can manifest in different forms can help divers develop strategies to cope with these feelings, ensuring a safer diving experience.

6. 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.

7. What is an important feature of the preamplified communication assembly?

A. It operates without batteries

B. It requires manual setup before use

C. It enhances audio clarity for communication

D. It is cheaper to manufacture

The preamplified communication assembly is designed to enhance audio clarity for communication, which is crucial in diving operations. Underwater environments can introduce significant background noise and distortions that can make it difficult for divers to communicate effectively. By amplifying the audio signals, the assembly allows for clearer and more intelligible conversations, which is especially important for safety and coordination during dives. The ability to improve communication reduces misunderstandings and ensures that divers can effectively collaborate with each other and support teams on the surface or in support vessels, fostering a safer diving experience overall. This feature is essential in ensuring that divers can convey important information promptly and accurately, which is vital in an emergency or when instructions need to be relayed swiftly.

8. What is the capacity of each flask in a stackable compressed air rack assembly regarding SCF of compressed air?

A. 191 scf

B. 250 scf

C. 300 scf

D. 450 scf

The capacity of each flask in a stackable compressed air rack assembly is crucial for understanding the system's overall air supply capabilities. Each flask typically provides a specific amount of compressed air measured in standard cubic feet (SCF). In this case, the correct answer of 191 SCF aligns with standard specifications for such systems, which ensures they can meet operational requirements without exceeding their design. When air is compressed, its volume decreases, which means knowing the SCF is essential for planning dives and ensuring an adequate air supply throughout the diving operation. The 191 SCF capacity reflects a balance between size, weight, and usability, making it practical for portable diving systems that require efficiency in air delivery while remaining manageable for the divers and support personnel. Other options likely represent either higher capacities than typical for this kind of flask or miscalculated values that do not align with standard industry practices for portable surface-supplied diving systems. Understanding these specifications helps in planning dives, managing air resources, and ensuring safety in underwater operations.

9. What should divers do if they experience dizziness or lightheadedness underwater?

A. Signal for assistance and begin a controlled ascent

B. Continue diving until pain increases

C. Swim to the nearest exit point

D. Ignore the symptoms and focus on the task

If divers experience dizziness or lightheadedness underwater, signaling for assistance and beginning a controlled ascent is crucial for their safety. These symptoms can indicate a variety of potential issues, such as decompression sickness, hypoxia, or other physiological stressors that can compromise the diver's ability to function effectively and safely. By signaling for help, divers ensure that they can receive immediate support, which is vital in case their condition deteriorates. A controlled ascent allows them to safely rise to the surface or to a depth where they can receive aid without risking further injury or complications, such as sudden ascent-related injuries or exacerbating any underlying issue contributing to their symptoms. Maintaining a proper ascent rate is essential in avoiding pressure-related injuries. Continuing to dive or ignoring the symptoms could lead to more severe consequences, while swimming to the nearest exit point might not be safe if a diver becomes incapacitated. Therefore, the safest and most prudent action in such situations is to seek assistance immediately and prioritize a controlled ascent.

10. 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.

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!