

CDC MOBILE WATER SUPPLY PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://cdcmobilewatersupply.examzify.com>



Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	16

SAMPLE

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

SAMPLE

- 1. What is the most common type of valve found on lines?**
 - A. Gate Valve
 - B. Check Valve
 - C. Ball Valve
 - D. Butterfly Valve
- 2. What can affect the outcomes of the pumping test?**
 - A. The type of fuel used
 - B. The overall condition of the pump
 - C. The weather conditions
 - D. The operator's experience level
- 3. According to NFPA, how much water must an apparatus carry to be classified as a Mobile Water Supply (MWS) or Tender?**
 - A. 800 gallons
 - B. 1,000 gallons
 - C. 1,200 gallons
 - D. 1,500 gallons
- 4. What are the two primary types of apparatuses required for effective water shuttle operation?**
 - A. Fire truck and ambulance
 - B. Pumper and ladder truck
 - C. Pumper and MWS apparatus
 - D. Tank truck and utility vehicle
- 5. What defines a 'Venturi' in the context of fluid dynamics?**
 - A. A device for mixing fluids
 - B. A system to measure fluid velocity
 - C. A restriction that causes pressure variations
 - D. A pump used for liquid transfer

- 6. What type of valve uses a spring-loaded pilot valve?**
- A. Intake pressure relief valve
 - B. Discharge pressure relief valve
 - C. Flow control valve
 - D. Check valve
- 7. How many pumpers does IFSTA recommend for an effective water shuttle operation?**
- A. One pumper
 - B. Two pumpers
 - C. Three pumpers
 - D. Four pumpers
- 8. What type of fire pump is best suited for low viscosity fluids?**
- A. Centrifugal Pump
 - B. Piston Pump
 - C. Rotary Gear Pump
 - D. Positive Displacement Pump
- 9. A column of water 1"x1"x24" high exerts how much psi?**
- A. 0.434 psi
 - B. 0.868 psi
 - C. 1.2 psi
 - D. 1.0 psi
- 10. What is a feature of most screw-on type valves?**
- A. They have a thermal relief system
 - B. They feature a bleeder valve
 - C. They come with a built-in pressure gauge
 - D. They are adjustable

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is the most common type of valve found on lines?

- A. Gate Valve
- B. Check Valve
- C. Ball Valve**
- D. Butterfly Valve

The ball valve is the most common type of valve found on lines, primarily due to its distinctive features that make it advantageous in various applications. Ball valves consist of a spherical disc (the "ball") with a hole through the center, which allows for smooth and efficient flow when aligned with the pipeline. When the ball is turned 90 degrees, the flow is stopped, creating an effective seal. One of the key reasons for the popularity of ball valves is their ability to provide a reliable shut-off capability with minimal pressure drop. This characteristic makes them ideal for quick on/off operations. Moreover, ball valves require less torque to operate compared to other valve types, which simplifies handling and installation. In addition, ball valves are versatile and can be used across a wide range of applications, including water supply systems, gas distribution, and chemical processing. Their durability and resistance to wear also contribute to their frequent use in various industrial settings. Overall, the combination of efficient flow control, ease of use, and versatility explains why ball valves are the predominant choice for pipeline applications.

2. What can affect the outcomes of the pumping test?

- A. The type of fuel used
- B. The overall condition of the pump**
- C. The weather conditions
- D. The operator's experience level

The overall condition of the pump plays a crucial role in the outcomes of a pumping test. A pump that is well-maintained, free of leaks, and operating at its intended specifications will perform optimally, providing accurate and reliable results during the test. If the pump is in poor condition, it may result in reduced flow rates, increased energy consumption, and possible mechanical failures. This can lead to erroneous data, making it difficult to assess aquifer properties accurately. Factors such as the type of fuel used, weather conditions, and the operator's experience level do influence pump performance and outcomes, but they do so in less direct ways. For instance, while fuel type is important for the operation of certain types of pumps, it does not directly affect the fundamental metrics gathered during a pumping test in the way that the pump's condition does. Similarly, while weather conditions can impact overall testing conditions, they are less likely to change the fundamental efficacy of the pump system unless extreme. The operator's experience level can certainly affect how effectively the test is conducted, but if the pump itself is not in good working order, even an experienced operator may struggle to achieve reliable results. Therefore, the condition of the pump remains the most critical aspect affecting the outcomes of the pumping test.

3. According to NFPA, how much water must an apparatus carry to be classified as a Mobile Water Supply (MWS) or Tender?

- A. 800 gallons
- B. 1,000 gallons**
- C. 1,200 gallons
- D. 1,500 gallons

To be classified as a Mobile Water Supply (MWS) or Tender according to the National Fire Protection Association (NFPA) standards, an apparatus must carry at least 1,000 gallons of water. This requirement ensures that the vehicle is capable of providing sufficient water supply for firefighting operations, especially in areas where water sources may be limited or unavailable. The 1,000-gallon threshold allows for effective firefighting efforts by providing enough water to combat fires and support the needs of the operation. This classification is critical for ensuring that fire departments have the necessary resources to deal with emergencies efficiently. Thus, understanding this requirement helps in ensuring compliance with safety standards and operational effectiveness when deploying water supply apparatuses.

4. What are the two primary types of apparatuses required for effective water shuttle operation?

- A. Fire truck and ambulance
- B. Pumper and ladder truck
- C. Pumper and MWS apparatus**
- D. Tank truck and utility vehicle

The correct answer highlights the specific types of apparatuses that are essential for conducting an effective water shuttle operation, which is primarily focused on transporting water to firefighting sites, especially in areas lacking a reliable water supply. A pumper is critical in this context because it is designed to draw water from a source, such as a tank or natural body of water, and then pump it into hose lines for firefighting operations. This ensures that firefighters on the scene have a steady supply of water for extinguishing fires. The Mobile Water Supply (MWS) apparatus is equally important in a water shuttle operation. It is specifically built for transporting large quantities of water to the fire scene. The MWS apparatus can carry more water than standard fire trucks, enabling it to support sustained firefighting efforts without the need for frequent refills, making it particularly useful in extensive operations. Together, these two types of apparatus ensure that there is an efficient system in place for delivering water effectively and maintaining pressure for firefighting, which is crucial under emergency conditions. This focus on the specific types of vehicles used in water shuttle operations distinguishes the correct answer from others that mention different types of vehicles not primarily used in this context, such as ambulances or utility vehicles.

5. What defines a 'Venturi' in the context of fluid dynamics?

- A. A device for mixing fluids
- B. A system to measure fluid velocity
- C. A restriction that causes pressure variations**
- D. A pump used for liquid transfer

A 'Venturi' in the context of fluid dynamics is defined by its ability to create pressure variations due to a restriction in the flow area. This principle is fundamental in fluid mechanics, where the Venturi effect describes how fluid speed increases as it passes through a constricted section of a pipe, leading to a decrease in pressure according to Bernoulli's principle. This means that as the fluid flows through the narrower section (the Venturi), its velocity increases while its pressure decreases. This concept is commonly employed in various applications, such as carburetors in engines and flow meters, to measure the flow rate of liquids and gases. While mixing fluids and measuring fluid velocity are important aspects of fluid dynamics, they do not specifically characterize a 'Venturi' as effectively as the pressure variation caused by a restriction does. Additionally, a pump is an entirely different mechanism used for moving liquids and does not pertain directly to the principle behind the Venturi effect.

6. What type of valve uses a spring-loaded pilot valve?

- A. Intake pressure relief valve
- B. Discharge pressure relief valve**
- C. Flow control valve
- D. Check valve

The discharge pressure relief valve is designed to safeguard a system by releasing fluid when the pressure exceeds a predetermined level. The incorporation of a spring-loaded pilot valve enables precise control of the pressure at which this release occurs. The pilot valve responds to the system pressure, and when it reaches a threshold that exceeds the set limit, the pilot activates, allowing the main discharge valve to open. This mechanism ensures that excess pressure is vented safely, preventing potential damage to the system. Proper functioning of the discharge pressure relief valve is critical in maintaining operational safety and integrity, particularly in high-pressure applications. The design effectively balances the spring tension and the fluid pressure, making it an essential component in pressure regulation.

7. How many pumpers does IFSTA recommend for an effective water shuttle operation?

- A. One pumper
- B. Two pumpers**
- C. Three pumpers
- D. Four pumpers

For an effective water shuttle operation, the recommendation of two pumpers is based on the need to ensure an efficient and continuous flow of water during firefighting activities. Having two pumpers allows one pumper to be dedicated to drafting water from a source, such as a hydrant or a tanker, while the other pumper can be positioned to deliver water directly to the fire scene. This setup creates a seamless transition of water supply, minimizing downtime and ensuring that the firefighter's water needs are met consistently. Additionally, the use of two pumpers enhances redundancy in the operation. If one pumper encounters a problem, the other can continue to support the shuttle operation, preventing disruptions in water supply. This not only improves the effectiveness of the response but also increases the safety of personnel by ensuring that they have adequate resources available when needed. The number of pumpers recommended does not include the need for additional resources, which may be used for other tasks but focuses specifically on creating a reliable water supply system for firefighting through a structured shuttle operation. In this context, while the other options may suggest varying numbers of pumpers, two is recognized as the optimal balance between efficiency and redundancy in the water shuttle process, allowing for a well-coordinated effort in maintaining

8. What type of fire pump is best suited for low viscosity fluids?

- A. Centrifugal Pump**
- B. Piston Pump
- C. Rotary Gear Pump
- D. Positive Displacement Pump

A centrifugal pump is ideal for low viscosity fluids due to its design and operating principles. These pumps utilize a rotating impeller to impart energy to the fluid, creating a flow. The centrifugal force generated by the impeller effectively moves low viscosity fluids quickly and efficiently through the pump and into the discharge line. This pump type is particularly advantageous for scenarios where high flow rates are required and the fluid being pumped doesn't resist flow much, such as water or other similar liquids. The construction of centrifugal pumps allows for continuous operation, which is often necessary in fire fighting scenarios where a consistent supply of water is crucial. Although piston pumps and positive displacement pumps can handle various substances, they are generally more suited for fluids with greater viscosity or those requiring precise flow measurements. Rotary gear pumps are also better for thicker fluids, as they rely on the engagement of gears to move the fluid, which can create issues with low viscosity liquids that don't provide enough resistance to function effectively. Thus, the selection of a centrifugal pump enhances operational efficiency for low viscosity applications.

9. A column of water 1"x1"x24" high exerts how much psi?

- A. 0.434 psi
- B. 0.868 psi**
- C. 1.2 psi
- D. 1.0 psi

To determine how much pressure a column of water exerts in psi (pounds per square inch), you can use the formula that relates the height of the water column to the pressure it exerts. The pressure exerted by a column of water is given by the formula: $\text{Pressure (psi)} = \text{Height (ft)} \times \text{Density of water (lbs/ft}^3) / 144$. In this case, the height of the water column is 24 inches. First, convert this height into feet: 24 inches = 2 feet. The density of water is approximately 62.4 lbs/ft³. Applying the values to the formula gives: $\text{Pressure (psi)} = 2 \text{ ft} \times 62.4 \text{ lbs/ft}^3 / 144$. Calculating this results in approximately 0.86667 psi. When rounded, this value corresponds closely to 0.868 psi, making it the correct answer. Understanding this principle is crucial in hydrology and engineering contexts, as it demonstrates how the height of a water column directly influences the pressure at the base, which can be vital in applications like water supply systems, irrigation, and any operation involving water head pressure.

10. What is a feature of most screw-on type valves?

- A. They have a thermal relief system
- B. They feature a bleeder valve**
- C. They come with a built-in pressure gauge
- D. They are adjustable

A bleeder valve is a common feature of most screw-on type valves. This valve allows for the release of trapped air or pressure in the system, which can help to prevent leaks and ensure that the valve operates correctly. The function of the bleeder valve is particularly important in mobile water supply scenarios where maintaining proper pressure and preventing air locks in the lines can significantly affect performance and safety. In addition, the unique design of screw-on valves typically facilitates easy attachment to hoses or lines, and the presence of a bleeder valve enhances user control over the system, especially during startup or maintenance. While other features like thermal relief systems or built-in gauges may be present in some valve types, they are not universally associated with screw-on type valves as the bleeder valve is.

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://cdcmobilewatersupply.examzify.com>

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

SAMPLE