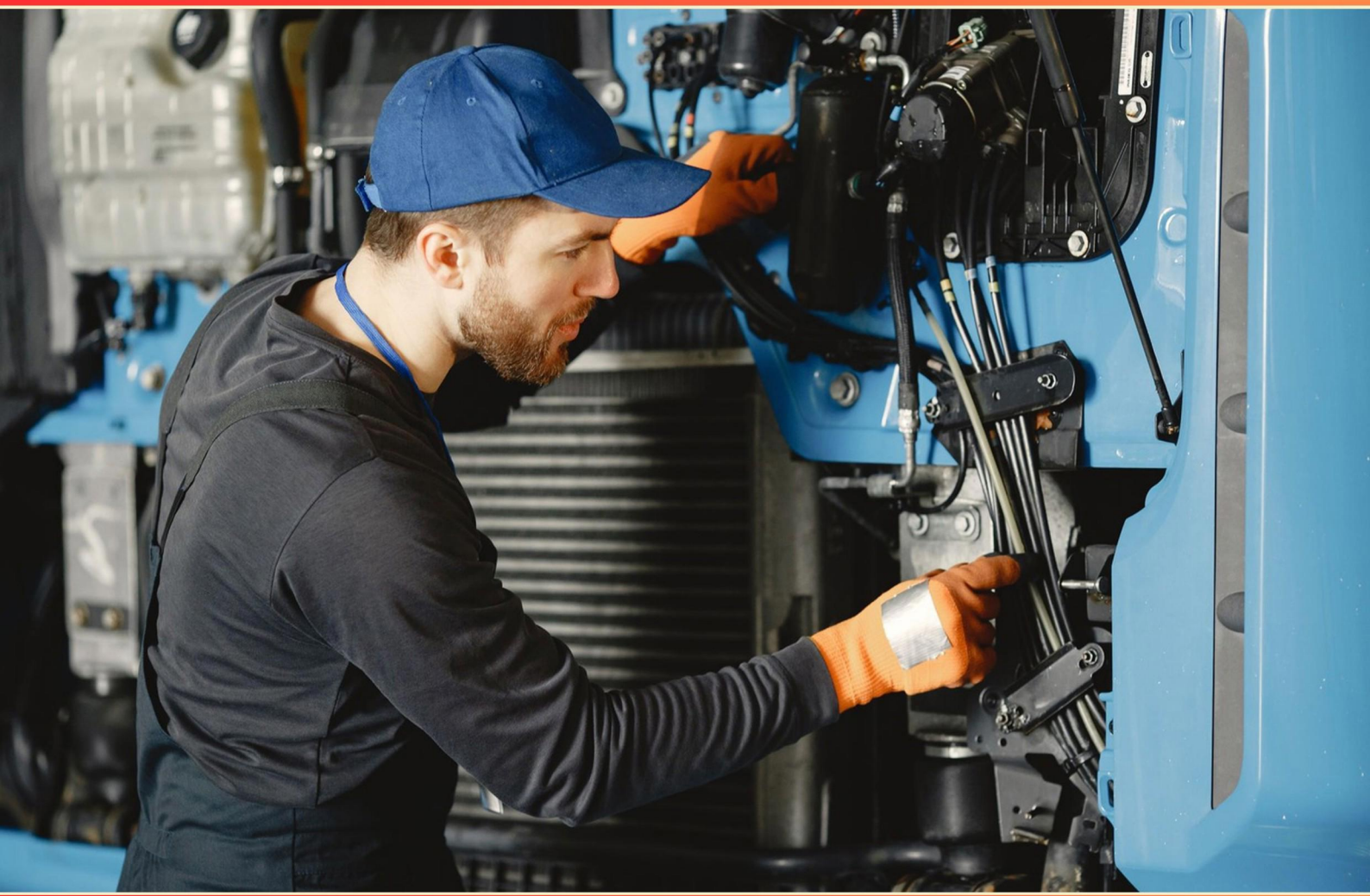
FLUID LINES AND FITTINGS PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://fluidlines.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 15

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. Which fitting is popular for connecting hydraulic lines on transport category aircraft?

A. Standard flare fittings

B. Permaswage fittings

C. Swaged fittings

D. MS flareless fittings

2. What does the material code letter 'D' following the AN number represent?

A. The fitting is made of aluminum

B. The fitting is made of stainless steel

C. The fitting is made of rubber

D. The fitting is made of steel

3. Can flexible hoses be used in high-pressure applications?

A. No, they are only for low-pressure applications

B. Yes, but they must be specifically rated for high-pressure use

C. Yes, but only if reinforced

D. No, they must be rigid for high pressure

4. A certain amount of slack must be left in a flexible hose during installation because, when under pressure, it _____.

A. expands in length and contracts in diameter

B. contracts in length and expands in diameter

C. remains unchanged

D. becomes brittle

5. What is the MS number designated for cross flareless tube fitting?

A. MS 21801

B. MS 21906

C. MS 23000

D. MS 21500

SAMPLE

6. Which material is prohibited in the construction of flexible fluid lines?

A. PVC

B. Pure rubber

C. Polyurethane

D. Silicone

7. What is a significant sign of wear in flexible hoses?

A. Cracks

B. Color fading

C. Increased thickness

D. Noisy operation

8. In what direction should a tube cutter be rotated after being placed into position?

A. Away from the open side

B. Towards the open side

C. Clockwise

D. Counterclockwise

9. What is the purpose of a fluid line support?

A. To enhance fluid mixing

B. To reduce stress and strain on hoses and fittings

C. To increase fluid temperature

D. To improve aesthetic organization

10. Which material is commonly used for hydraulic hoses?

A. Rubber

B. Plastic

C. Metal

D. Wood

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which fitting is popular for connecting hydraulic lines on transport category aircraft?

A. Standard flare fittings

B. Permaswage fittings

C. Swaged fittings

D. MS flareless fittings

Permaswage fittings are a popular choice for connecting hydraulic lines on transport category aircraft due to their reliability and performance in high-pressure environments. These fittings provide a robust and leak-free connection, which is critical in aviation applications where safety and reliability are paramount. The Permaswage system utilizes a unique design that allows for a permanent, crimped connection, making it ideal for harsh operating conditions typically encountered in aircraft hydraulic systems. Additionally, the installation of Permaswage fittings does not require special tools or processes that may be associated with other types of fittings, leading to more straightforward maintenance and assembly. Their ability to handle high-pressure hydraulics while maintaining a compact profile also makes them preferable for aircraft design, where space and weight savings are crucial factors. This makes Permaswage fittings particularly suited for the rigorous demands of aerospace hydraulics, ensuring that hydraulic systems function effectively throughout the life of the aircraft.

2. What does the material code letter 'D' following the AN number represent?

A. The fitting is made of aluminum

B. The fitting is made of stainless steel

C. The fitting is made of rubber

D. The fitting is made of steel

In the context of AN (Aerospace Standard) fittings, the material code letter 'D' indicates that the fitting is made of steel. This is significant in applications where the strength, durability, and corrosion resistance of fittings are crucial considerations, particularly in aerospace and automotive industries. Understanding these material codes is essential for ensuring compatibility and performance in various environments. Steel fittings are often preferred for their tensile strength and ability to withstand high-pressure situations and harsh conditions. This knowledge helps professionals in the field choose the appropriate fittings for their specific applications, ensuring optimal performance and safety in fluid line systems.

SAMPLE

3. Can flexible hoses be used in high-pressure applications?

A. No, they are only for low-pressure applications

B. Yes, but they must be specifically rated for high-pressure use

C. Yes, but only if reinforced

D. No, they must be rigid for high pressure

Flexible hoses can indeed be used in high-pressure applications, but it is crucial that they are specifically rated for such use. The design and materials of high-pressure hoses are engineered to withstand greater stresses and pressures without failing. These hoses often have reinforcement layers, special seals, or are made from materials that can resist the forces encountered in high-pressure situations. Therefore, using a flexible hose that is not rated for high pressure could lead to catastrophic failures, including leaks or ruptures. Hence, it is essential to ensure that any flexible hose utilized in a high-pressure application meets the appropriate specifications and industry standards. The other options do not accurately reflect the capabilities of flexible hoses in high-pressure contexts. While it is true that some flexible hoses are designed solely for low-pressure use, many are specifically engineered for high-pressure applications as well. Reinforcement alone doesn't guarantee suitability for high-pressure use; it's the certification and ratings that truly ensure safety and effectiveness. Lastly, while rigid connections are often preferred for high-pressure applications due to their inherent strength, it is a misconception that flexible hoses cannot also be effectively employed as long as they meet the required specifications.

4. A certain amount of slack must be left in a flexible hose during installation because, when under pressure, it _____.

A. expands in length and contracts in diameter

B. contracts in length and expands in diameter

C. remains unchanged

D. becomes brittle

When flexible hoses are under pressure, they behave in a way where they contract in length and expand in diameter. This characteristic is crucial for ensuring the longevity and proper function of the hose in a hydraulic or pneumatic system. As the internal pressure increases, the materials that make up the hose tend to stretch outwards, causing the diameter to increase. Simultaneously, the hose itself may shorten a bit as the material compresses under the tension of the pressure. If sufficient slack is not left during installation, the hose could become overly tight, leading to potential damage, kinking, or failure of the hose under operating conditions. Proper slack allows the hose to accommodate these dimensional changes without putting undue strain on the fittings or the hose itself. Therefore, leaving a certain amount of slack during installation is essential for ensuring optimal performance and safety of the fluid handling system.

SAMPLE

5. What is the MS number designated for cross flareless tube fitting?

A. MS 21801

B. MS 21906

C. MS 23000

D. MS 21500

The designation MS 21906 is specifically assigned to cross flareless tube fittings, which are essential components used in various fluid systems. This unique number indicates compliance with military specifications, ensuring a standard of quality and interoperability among fittings used in critical applications. Cross flareless fittings are designed to maintain a secure connection without the need for flares, which can be advantageous in terms of both installation and reliability, particularly in environments where space is limited or where vibrations are a concern. In contrast, the other designated numbers represent different types of fittings or specifications not related to cross flareless configurations. Thus, MS 21906 stands out as the correct designation for this particular category, emphasizing its accuracy in identifying the necessary fitting type for specific fluid handling requirements.

6. Which material is prohibited in the construction of flexible fluid lines?

A. PVC

B. Pure rubber

C. Polyurethane

D. Silicone

The use of pure rubber in the construction of flexible fluid lines is prohibited primarily due to its susceptibility to degradation when exposed to various fluids and environmental conditions. Pure rubber can swell, lose structural integrity, or even break down when it comes into contact with certain petroleum-based oils, chemicals, or extreme temperatures. This inherent weakness makes it less reliable for fluid transport applications where durability and resistance to chemical interaction are critical. In contrast, other materials such as PVC, polyurethane, and silicone are often used in fluid line applications due to their superior resistance to chemicals, varying temperatures, and physical stresses, making them better suited for maintaining the integrity and safety of the fluid transport systems.

7. What is a significant sign of wear in flexible hoses?

A. Cracks

B. Color fading

C. Increased thickness

D. Noisy operation

Cracks in flexible hoses are a significant sign of wear because they indicate that the material has deteriorated and is no longer capable of maintaining its integrity under pressure. Flexible hoses are typically made from materials designed to withstand bending and movement; however, over time, exposure to environmental factors such as heat, chemicals, or physical stress can lead to the formation of cracks. When cracks appear, they can compromise the hose's ability to contain fluids or gases, potentially leading to leaks or failures in the system. It's crucial to inspect hoses regularly for these defects, as they can be a precursor to more serious operational issues in fluid systems. Proper maintenance and timely replacement of hoses exhibiting cracks are essential to ensure safety and efficiency in fluid line systems. Other signs of wear, like color fading or increased thickness, might indicate deterioration but are not as directly impactful on functionality as the presence of cracks. Additionally, while noisy operation can suggest an issue with the fluid system, it does not specifically relate to the wear of flexible hoses.

SAMPLE

8. In what direction should a tube cutter be rotated after being placed into position?

A. Away from the open side

B. Towards the open side

C. Clockwise

D. Counterclockwise

When using a tube cutter, it is essential to rotate it towards the open side of the tube to ensure an effective cut. This technique allows the cutting wheel to maintain contact with the tube while leveraging the cutting pressure correctly. By positioning the cutter in this manner, the design facilitates a clean cut without slipping or damaging the tube material. The rotation towards the open side ensures that the cutting mechanism is aligned properly and can progressively bite into the material effectively. As the tool advances, it cuts through the tube steadily, minimizing the risk of creating jagged edges or compromising the integrity of the tubing. Understanding the design features of the cutter helps clarify this technique. The cutting wheel is engineered to perform best when it is directed towards the material being cut, which enhances efficiency and cut quality.

9. What is the purpose of a fluid line support?

A. To enhance fluid mixing

B. To reduce stress and strain on hoses and fittings

C. To increase fluid temperature

D. To improve aesthetic organization

The purpose of a fluid line support is primarily to reduce stress and strain on hoses and fittings. When fluid lines are properly supported, the weight of the hoses and any potential movement or vibrations are managed effectively. This minimizes the risk of damage or failure at connection points, which can occur if hoses are allowed to bend or droop excessively without adequate support. By alleviating stress, supports help maintain the integrity and longevity of the fluid lines and fittings, ensuring they operate efficiently and safely within their designed parameters. This is particularly important in applications where high pressures or fluctuating temperatures are involved, as any failure in the system could lead to leaks or catastrophic failures. While enhancing fluid mixing, increasing fluid temperature, or improving aesthetic organization might be relevant in specific contexts, they do not address the crucial operational necessity of managing the physical integrity of fluid systems as effectively as proper support does.

10. Which material is commonly used for hydraulic hoses?

A. Rubber

B. Plastic

C. Metal

D. Wood

Rubber is commonly used for hydraulic hoses due to its excellent flexibility, durability, and resistance to wear and tear. Its ability to withstand high pressures and temperatures makes it particularly suitable for hydraulic systems, where fluids are often transferred at high rates and under significant pressure. Rubber hoses can also be reinforced with additional materials, such as steel braiding, to enhance their strength and pressure capability. The versatility of rubber as a hose material allows for a range of applications in various industries, including automotive, aerospace, and manufacturing. Additionally, rubber can provide some level of resistance against certain chemicals and environmental factors, further extending its usability in hydraulic systems. Other materials, such as plastics and metals, may not provide the same level of performance or flexibility required for hydraulic hoses, and wood is unsuitable for such applications due to its lack of durability and inability to handle hydraulic fluids effectively.

SAMPLE

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://fluidlines.examzify.com

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

SAMPLE