

PIPEFITTER STAR PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://pipefitterstar.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.

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. High pressure condensate is piped to a _____.
 - A. Blow down tank
 - B. Overflow tank
 - C. Flash tank
 - D. Condensate receiver
2. What type of flame should be used to cut carbon steel?
 - A. Neutral
 - B. Oxidizing
 - C. Carbonizing
 - D. Extra hot
3. What issue may arise from a horizontal pipe not being properly supported?
 - A. Water hammer
 - B. Priming
 - C. Foaming
 - D. Flashing
4. Pneumatic transmitters operate at pressures between 3 and ____ psig.
 - A. 15
 - B. 25
 - C. 40
 - D. 100
5. What does hydronics refer to?
 - A. the science of hydro waves
 - B. the science of heat transfer using water
 - C. the science of the flow of water
 - D. the science of refrigerant flow
6. Which is the correct way to install wire rope clamps?
 - A. 1
 - B. 2
 - C. 3
 - D. 4

7. What component causes a pressure drop of high pressure liquid refrigerant?
- A. Compressor
 - B. Condenser
 - C. Evaporator
 - D. Expansion device
8. When hoisting a load with sharp edges, you should use ____.
- A. softener
 - B. shackle
 - C. block and tackle
 - D. grinder to round sharp edges
9. When should a soldered joint be tested for leaks?
- A. Immediately after soldering
 - B. After the joint has cooled
 - C. Within 10 minutes of soldering
 - D. Only before installation
10. When working inside of a confined space, the atmosphere must be monitored ____.
- A. before entering
 - B. continuously
 - C. after work begins
 - D. once per shift

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. High pressure condensate is piped to a ____.

- A. Blow down tank
- B. Overflow tank
- C. Flash tank**
- D. Condensate receiver

In a piping system, particularly in steam systems, high-pressure condensate is often directed to a flash tank. This is because a flash tank is specifically designed to handle high-pressure condensate, allowing it to expand and release any non-condensable gases that may have mixed with it. As the high-pressure condensate enters the flash tank, the reduction of pressure causes some of the liquid to vaporize, or "flash," transforming it into steam. This process not only helps in separating the steam from the liquid but also allows for the recovery of usable energy from the steam as it exits the tank. The condensate that emerges can then be sent back to the boiler or used for heating, enhancing overall system efficiency. The design and function of a flash tank make it an integral component in managing high-pressure condensate effectively, which is why this is the correct answer. Other options, while related to water and condensate management, do not serve the same purpose or function within this specific context.

2. What type of flame should be used to cut carbon steel?

- A. Neutral**
- B. Oxidizing
- C. Carbonizing
- D. Extra hot

Using a neutral flame is essential for cutting carbon steel because it provides the ideal balance of oxygen and acetylene, which results in a flame that is neither excessive in oxidizing nor in carburizing effects. This balance is crucial, as it ensures that the flame does not introduce unwanted reactions with the steel, such as oxidation or excessive carbides that could weaken the metal. The neutral flame typically has a defined inner cone and an outer envelope, where the inner cone reaches temperatures high enough for effective cutting, yet does not compromise the integrity of the steel being cut. This type of flame helps achieve clean cuts and prevents issues like warping or brittleness in the cut edges. When cutting with an oxidizing flame, where there is too much oxygen present, there is a risk of excessive burning through the material, leading to a rough cut and potential damage to the material. A carbonizing flame, which has an excess of acetylene, can also lead to problems by essentially adding carbon to the steel, potentially resulting in overly brittle cuts or degraded material. An extra hot flame might suggest an intensification of heat without specificity to the needs of carbon steel, risking burns or quality issues. Thus, the neutral flame stands out as the most suitable and effective choice for this

3. What issue may arise from a horizontal pipe not being properly supported?

A. Water hammer

B. Priming

C. Foaming

D. Flashing

When a horizontal pipe is not properly supported, water hammer can occur. Water hammer is a phenomenon that happens when a fluid in motion is forced to stop or change direction suddenly, causing shock waves to travel through the pipe. This situation can be exacerbated by the improper alignment or lack of support for the pipe, as it can lead to excessive movement or vibration of the piping system. Specifically, if the pipe is not adequately secured, the sudden pressure changes, such as those caused by valves closing quickly or pumps starting and stopping, can create a loud thumping noise and can potentially harm the piping system. This can lead to pipe damage, joint failure, or even leaks due to the stress placed on unsupported sections. In contrast, issues like priming, foaming, and flashing do not directly relate to the structural support of horizontal pipes. Priming involves the unwanted accumulation of liquid in a system due to incorrect pipe slope or configuration, foaming refers to bubbles in liquids that can lead to operational inefficiencies, and flashing typically involves the rapid vaporization of a liquid under pressure. These issues arise from different factors and do not stem from the lack of proper support for horizontal piping installations.

4. Pneumatic transmitters operate at pressures between 3 and ____ psig.

A. 15

B. 25

C. 40

D. 100

Pneumatic transmitters are instruments commonly used in various industrial applications to measure pressure, temperature, or other process variables, and they typically operate using air pressure as their signal medium. The standard operational pressure range for most pneumatic transmitters starts at a low point of about 3 psig and extends up to a maximum of approximately 15 psig. This range is crucial because it allows for effective signal transmission and processing while maintaining a balance between sensitivity and robustness. The choice of 15 psig aligns with the most common design specifications for pneumatic systems, which are engineered to operate efficiently within this pressure range. Operating beyond this limit can lead to performance issues or potential damage to the transmitter. The other options represent pressures significantly higher than what standard pneumatic transmitters are designed to handle effectively or what is typically used in practice, making them less suitable in this context.

5. What does hydronics refer to?

A. the science of hydro waves

B. the science of heat transfer using water

C. the science of the flow of water

D. the science of refrigerant flow

Hydronics refers to the science of heat transfer using water. It involves the use of water as a medium to transfer heat for heating and cooling applications in buildings. Hydronic systems often include components such as boilers, pumps, pipes, and radiators, which work together to provide efficient heating or cooling through the circulation of water. The focus on water as a heat transfer medium is what distinguishes hydronics from other systems, highlighting its effectiveness in maintaining comfortable indoor temperatures and its application in radiant heating and cooling systems.

6. Which is the correct way to install wire rope clamps?

A. 1

B. 2

C. 3

D. 4

The proper installation of wire rope clamps is crucial for ensuring load safety and effectiveness. The first method emphasizes the correct positioning of the clamp on the wire rope. This technique involves placing the "U" part of the clamp over the standing part of the wire rope and ensuring that the "saddle" of the clamp sits on the live or loaded portion of the rope. This setup is vital because the saddle must be in contact with the cable that carries the load, preventing slippage and ensuring that the clamp grips securely. Additionally, the installation should also include using the correct number of clamps for the diameter of the cable and ensuring that they are tightened to the manufacturer's specifications. Following this method mitigates risks of failure due to improper clamp installation, which can lead to accidents or equipment damage. In contrast, other methods may not secure the clamps properly, leading to potential hazards during lifting or rigging operations. Proper training on wire rope clamping procedures is essential to ensure safe and effective use in various applications.

7. What component causes a pressure drop of high pressure liquid refrigerant?

A. Compressor

B. Condenser

C. Evaporator

D. Expansion device

The expansion device is responsible for causing a pressure drop of high-pressure liquid refrigerant in a refrigeration system. This component regulates the flow of refrigerant from the condenser to the evaporator by reducing the pressure and allowing the refrigerant to expand. As the high-pressure liquid refrigerant passes through the expansion device, its pressure decreases, which results in a corresponding drop in temperature. This process is essential for the operation of the refrigeration cycle, as it prepares the refrigerant to absorb heat effectively in the evaporator. The refrigerant enters the evaporator at this lower pressure and temperature and evaporates by absorbing heat from the surroundings, which cools the space that the refrigeration system is intended to maintain. In contrast, the other components such as the compressor, condenser, and evaporator serve different roles in the refrigeration cycle. The compressor increases the refrigerant's pressure, the condenser removes heat from the refrigerant, and the evaporator is where heat absorption occurs. Each component contributes to the overall function of the refrigeration system, but it is the expansion device that specifically causes the significant pressure drop necessary for the cycle to continue effectively.

8. When hoisting a load with sharp edges, you should use _____.

- A. softener**
- B. shackle
- C. block and tackle
- D. grinder to round sharp edges

When hoisting a load with sharp edges, using a softener is crucial to protect both the load and the lifting equipment. A softener typically acts as a protective barrier or cushion between the load and the lifting apparatus. This helps prevent damage from sharp edges that could wear or cut through slings, cables, or ropes, ensuring a safer lifting process. In contexts where sharp edges are present, employing a softener mitigates the risk of slippage and failure, as it distributes the load more evenly and reduces stress points. This is particularly important in maintaining the integrity of the lifting system, as failure during a lift due to equipment wear or damage could lead to serious accidents or injuries. In contrast, a shackle, while useful in attaching loads to lifting devices, would not specifically address the issue of sharp edges. Similarly, block and tackle systems are designed for mechanical advantage in lifting but do not provide protective features for sharp edges. Rounding sharp edges with a grinder is not practical for all scenarios and could potentially modify the load in undesirable ways. Therefore, the use of a softener is the most effective and applicable solution in this situation.

9. When should a soldered joint be tested for leaks?

- A. Immediately after soldering
- B. After the joint has cooled**
- C. Within 10 minutes of soldering
- D. Only before installation

A soldered joint should be tested for leaks after the joint has cooled. This is important because immediately after soldering, the joint is still very hot, and any testing for leaks could lead to inaccurate results. The heat can cause the solder to expand, which may temporarily prevent a leak from being detected. Testing the joint once it has cooled allows the solder to contract and settle, providing a more accurate assessment of the integrity of the joint. Ensuring that the joint is cool also prevents potential injury and allows for a proper inspection of the soldered area, ensuring safety and reliability in plumbing systems.

10. When working inside of a confined space, the atmosphere must be monitored _____.

- A. before entering
- B. continuously**
- C. after work begins
- D. once per shift

Monitoring the atmosphere continuously in a confined space is crucial for ensuring the safety of workers. Confined spaces can have fluctuating conditions due to a variety of factors, such as chemical reactions, equipment operation, or changes in temperature. Continuous monitoring allows for real-time detection of hazards like toxic gases, insufficient oxygen levels, or flammable atmospheres, enabling prompt actions to ensure the safety of everyone involved. While checking the atmosphere before entering, after work begins, or once per shift can provide initial information about the conditions, these methods do not provide the necessary level of awareness and response needed in potentially hazardous environments. Continuous monitoring mitigates the risk of exposure and allows for immediate evacuation or remediation if dangerous conditions arise. This approach aligns with safety regulations and best practices in confined space work, which prioritize worker health and safety at all times.

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://pipefitterstar.examzify.com>

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

SAMPLE