

Commercial Refrigeration II Practice Exam (Sample)

Study Guide



Everything you need from our exam experts!

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. Which of the following is an example of baseline condenser data?**
 - A. Temperature of Air In**
 - B. Condenser Coil Color**
 - C. Lubricant Type**
 - D. Crankcase Vent Temperature**

- 2. What are the two basic types of relief valves used on refrigeration systems?**
 - A. An automatic relief valve and a one-time relief valve**
 - B. A manual relief valve and a spring-loaded relief valve**
 - C. A pressure relief valve and a vacuum relief valve**
 - D. A shutoff valve and a check valve**

- 3. What gas is used for leak testing after reassembly of the system?**
 - A. Nitrogen**
 - B. Helium**
 - C. Oxygen**
 - D. Argon**

- 4. Which refrigerant component prevents liquid refrigerant from returning to the compressor?**
 - A. Suction-line accumulator**
 - B. Liquid receiver**
 - C. Oil separator**
 - D. Evaporator**

- 5. If a filter drier becomes clogged, what symptom would you expect?**
 - A. The pressure drop across the drier exceeds 2 psig**
 - B. The system charge increases**
 - C. The condenser pressure drops**
 - D. There is no impact on performance**

- 6. After a capacitor is discharged:**
- A. It is safe to handle.**
 - B. It must be replaced immediately.**
 - C. It remains dangerous to touch.**
 - D. It should be tested under load.**
- 7. Moisture in the refrigeration system can cause which of the following?**
- A. Metering device freeze-up**
 - B. Improved energy efficiency**
 - C. No effect**
 - D. Higher COP**
- 8. What is a safer, non-brazing method for removing copper tubing connections when servicing equipment?**
- A. Cut them out with a tubing cutter.**
 - B. Use a high-heat brazing method with inert gas.**
 - C. Clamp and seal the joint with epoxy.**
 - D. Disassemble and epoxy the joint instead.**
- 9. Noncondensable gases in the refrigeration system can cause which of the following?**
- A. Increased high-side pressure**
 - B. Decreased high-side pressure**
 - C. Higher COP**
 - D. Faster cooling**
- 10. What happens if you remove tubing before all the brazing material is molten?**
- A. It Will Break Off in the Joint**
 - B. It Will Crack at the Tube Wall**
 - C. It Will Melt**
 - D. It Will Move Out of Place**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which of the following is an example of baseline condenser data?

- A. Temperature of Air In**
- B. Condenser Coil Color**
- C. Lubricant Type**
- D. Crankcase Vent Temperature**

Baseline data are the starting reference measurements used to judge future performance. For a condenser, the temperature of the air entering the condenser is a fundamental reference because it directly influences the heat rejection rate the condenser must achieve. If the inlet air temperature changes, the condenser's ability to reject heat changes too, so recording this initial air-in temperature gives you a meaningful benchmark to compare against as conditions evolve. The other options don't serve as useful baseline condenser measurements: condenser coil color is cosmetic and doesn't reflect performance; lubricant type is a maintenance detail, not a real-time performance parameter; crankcase vent temperature relates to the compressor's lubrication system, not the condenser's heat rejection data.

2. What are the two basic types of relief valves used on refrigeration systems?

- A. An automatic relief valve and a one-time relief valve**
- B. A manual relief valve and a spring-loaded relief valve**
- C. A pressure relief valve and a vacuum relief valve**
- D. A shutoff valve and a check valve**

Relief devices in refrigeration are there to protect equipment from overpressure, and they fall into two fundamental forms: automatic relief devices that vent automatically and reseal, and one-time relief devices that vent once and then must be replaced. Automatic relief valves respond to a set pressure, opening when that limit is exceeded and closing again as pressure falls, which allows repeated protection without manual action. One-time relief devices, such as rupture discs or fusible plugs, provide a single venting event and are not resettable, so they're used where a one-off failure mode must be prevented and then the device is replaced. This pairing covers the typical safety needs: ongoing automatic protection, plus a single-use sacrificial vent for extreme overpressure. The other options don't fit because manual relief would require operator action and isn't automatic protection; a spring-loaded valve is a kind of automatic relief but doesn't represent the two-category distinction; vacuum relief deals with unintended low-pressure situations rather than overpressure protection; and shutoff or check valves are not relief devices at all.

3. What gas is used for leak testing after reassembly of the system?

- A. Nitrogen**
- B. Helium**
- C. Oxygen**
- D. Argon**

When checking for leaks after reassembly, you want to pressurize the system with an inert gas so you can see where it escapes without causing chemical reactions or safety issues. Nitrogen fits this role well: it's inert, non-reactive with refrigerants and oils, inexpensive, and widely available. You can pressurize to a safe level and look for leaks with soap bubbles or a leak detector, which makes it practical for routine service. Helium could reveal smaller leaks more sensitively, but it requires specialized equipment and can be costly for everyday use. Oxygen isn't used because mixing oxygen with lubricants and refrigerants can create safety hazards, and argon, while inert, is less convenient and more expensive to obtain in typical service settings.

4. Which refrigerant component prevents liquid refrigerant from returning to the compressor?

- A. Suction-line accumulator**
- B. Liquid receiver**
- C. Oil separator**
- D. Evaporator**

Liquid slugging can damage the compressor when liquid refrigerant makes its way back through the suction line. A suction-line accumulator provides a separation space on the low-pressure side, allowing any liquid that flows toward the compressor to settle out while only vapor continues to the compressor. This ensures the compressor receives gas rather than liquid, protecting it from damage and helping the system start reliably after low-load or rapid changes in operation. The liquid receiver stores high-pressure liquid on the discharge side, not on the suction side; an oil separator removes oil from discharge gas, not prevent liquid from returning to the compressor; and the evaporator is where heat absorption happens, not a safeguard for preventing liquid return to the compressor.

5. If a filter drier becomes clogged, what symptom would you expect?

- A. The pressure drop across the drier exceeds 2 psig**
- B. The system charge increases**
- C. The condenser pressure drops**
- D. There is no impact on performance**

When a filter drier becomes clogged, it creates a restriction in the liquid line. That restriction causes a larger difference in pressure between the inlet and outlet of the drier—the pressure drop across it increases. In practice, this drop can exceed a small threshold (such as a couple of psi), and that increased pressure drop is a clear sign the drier is blocked and needs replacement. The refrigerant charge wouldn't suddenly rise just from a clogged drier, so a system charge increase isn't a typical symptom. Likewise, condenser pressure isn't directly driven by a clogged drier—the high-side pressure is more influenced by condenser conditions and overall system load—so a drop there isn't the usual indicator. And while the system will lose some performance due to restricted liquid flow, the most immediate, testable symptom you'd look for is the increased pressure drop across the drier.

6. After a capacitor is discharged:

- A. It is safe to handle.**
- B. It must be replaced immediately.**
- C. It remains dangerous to touch.**
- D. It should be tested under load.**

When a capacitor has been discharged, its stored energy has been removed, so touching it no longer carries a risk of a shock. The energy a capacitor holds is $1/2 C V^2$; by providing a discharge path, the voltage drops toward zero and the stored energy becomes heat in the discharge path. Once the voltage is near zero, it's safe to handle the component or the circuit. There's no need to replace the capacitor just because it was discharged, unless it's defective or failing in another way. And you don't need to test it under load just to handle it safely; if you want to confirm safety, verify that the voltage is near zero with a proper meter before touching.

7. Moisture in the refrigeration system can cause which of the following?

- A. Metering device freeze-up**
- B. Improved energy efficiency**
- C. No effect**
- D. Higher COP**

Moisture in the refrigerant loop can freeze in the metering device, blocking the tiny passage that controls how much refrigerant enters the evaporator. As the refrigerant passes through the metering device, pressure drops and temperatures fall; any entrained water turns to ice at this point and wedges in the orifice or valve. That ice restricts or stops the flow of refrigerant, starving the evaporator of liquid needed for proper heat absorption. The result is poor cooling, frost or ice buildup on nearby components, and potential strain on the compressor from improper refrigerant flow. Because moisture causes this blockage, it does not improve efficiency, nor does it leave the system unaffected or increase COP.

8. What is a safer, non-brazing method for removing copper tubing connections when servicing equipment?

- A. Cut them out with a tubing cutter.**
- B. Use a high-heat brazing method with inert gas.**
- C. Clamp and seal the joint with epoxy.**
- D. Disassemble and epoxy the joint instead.**

When servicing copper refrigerant tubing, staying away from heat is safer. Cutting the tube with a tubing cutter lets you remove the joint cleanly without flame or high-temperature work, which protects nearby components, insulation, and the integrity of the system. It also leaves a proper end for reassembly with a new fitting. Using high-heat brazing introduces fire risk and can damage surrounding parts or distort tubing, while epoxy methods aren't suitable for refrigerant systems—they can fail under pressure, outgas, or leak. So, cutting with a tubing cutter is the best non-brazing approach.

9. Noncondensable gases in the refrigeration system can cause which of the following?

- A. Increased high-side pressure**
- B. Decreased high-side pressure**
- C. Higher COP**
- D. Faster cooling**

Noncondensable gases in a refrigeration system don't condense in the condenser and tend to collect as a gas layer. That layer hinders heat transfer from the refrigerant to the condenser, so the condenser must operate at a higher pressure to reject the same amount of heat. The compressor then works against this higher pressure, raising the high-side (discharge) pressure. This is the direct, primary effect. Because the system has to work harder to reject heat, efficiency drops and cooling is not faster; the COP decreases and heat removal slows. The other options would imply lower head pressure, higher efficiency, or faster cooling, which don't happen when noncondensables are present.

10. What happens if you remove tubing before all the brazing material is molten?

A. It Will Break Off in the Joint

B. It Will Crack at the Tube Wall

C. It Will Melt

D. It Will Move Out of Place

When brazing, the filler metal must wet and flow into the joint as the tube and fitting are held in place until the metal cools and solidifies. If you pull the tubing out while the brazing alloy is still molten, you lose the support that keeps the tube aligned and the liquid metal can't form a solid, continuous bond around the tube. The result is that the tube can be pulled away and the softened filler metal can separate at the tube interface, effectively breaking off in the joint. This is why removing the tube early leads to a failed joint. The other outcomes aren't the typical immediate result of removing the tube too soon. The tube wall cracking or the tube melting aren't the usual failure mode in this scenario, and while the joint could shift, the most accurate description given the situation is that the tube breaks off in the joint due to loss of proper wetting and support while the filler is still molten.

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://commercialrefrigeration2.examzify.com>

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

SAMPLE