

NGA 85: METER ASSEMBLY AND ABNORMAL OPERATING CONDITIONS (AOCS) PRACTICE TEST (SAMPLE)

STUDY GUIDE



**SAMPLE STUDY GUIDE
WITH LIMITED QUESTIONS**

**VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE**

<https://nga85.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. In the group labeled Definition: Water and carbon dioxide, which option is listed first?**
 - A. Incomplete combustion results in
 - B. Incomplete combustion is occurring and the appliance is not properly vented causes
 - C. Odor Fade occurs in Plastic Pipes
 - D. Complete combustion results in
- 2. Which events constitute an emergency requiring rapid response?**
 - A. Fire or explosion risk, large gas release, regulator fire or venting, or uncontrollable gas leak that can't be isolated safely.
 - B. A minor odor near the meter.
 - C. A small fluctuation in temperature.
 - D. A routine maintenance alert.
- 3. When recording a meter reading for billing, what should be recorded?**
 - A. Only the decimal portion.
 - B. Only the integer portion.
 - C. The total volume from left to right including decimals, in units shown on the register.
 - D. The time of day.
- 4. Why are liquids and particulates detrimental to meters and regulators?**
 - A. They can cause wear or blockages
 - B. They improve measurement stability
 - C. They have no effect
 - D. They only affect valves, not meters
- 5. Which of the following describes an AOC?**
 - A. A Deviation from Normal Operating Conditions
 - B. A Component Malfunction
 - C. Condition Exceeding Design Limits
 - D. A Condition Hazardous to Life and Property

6. How can you detect an AOC in the field?

- A. By monitoring downstream pressure, regulator behavior (noise, cycling, venting), gas odor or flame presence, unusual flow fluctuations, or alarms.
- B. By monitoring only the downstream pressure.
- C. By visual inspection of the vent pipe only.
- D. By checking for odor only.

7. Which of the following is a sign of component failure?

- A. Leaking threaded joints
- B. No heat complaints
- C. Poor Fusions
- D. Non recognizable

8. Which safety devices are typically found on a meter/regulator skid?

- A. A single shutoff valve and gauge.
- B. A regulator and a relief valve only.
- C. Test ports and bypass only.
- D. Upstream and downstream shutoff valves, a regulator, a relief or vent valve, test ports, and optional bypass with proper isolation features.

9. What effect does natural gas have on oxygen levels in an enclosed space?

- A. Consumes it
- B. Displaces it
- C. Attaches to it
- D. Mixes with it

10. What steps should you take when an AOC occurs?

- A. Protect Life and Property
- B. Notify Your Supervisor
- C. Do Nothing
- D. Take Action to Rectify If Possible

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. In the group labeled Definition: Water and carbon dioxide, which option is listed first?

- A. Incomplete combustion results in**
- B. Incomplete combustion is occurring and the appliance is not properly vented causes
- C. Odor Fade occurs in Plastic Pipes
- D. Complete combustion results in

Focus on what happens during combustion and how the products differ between complete and incomplete burning. When a group is labeled by the products "water and carbon dioxide," the first entry in that context typically introduces the topic of incomplete combustion—the contrast to the ideal case that produces only water and carbon dioxide. Saying "Incomplete combustion results in ..." starts the definition by outlining what occurs when combustion is not complete, which then naturally leads to the corresponding statement about complete combustion producing water and carbon dioxide. The other options don't fit as the first item in this ordering: one describes venting-related cause, another is about odor in plastic pipes, and the remaining option states a result of complete combustion, which would come after introducing incomplete combustion.

2. Which events constitute an emergency requiring rapid response?

- A. Fire or explosion risk, large gas release, regulator fire or venting, or uncontrollable gas leak that can't be isolated safely.**
- B. A minor odor near the meter.
- C. A small fluctuation in temperature.
- D. A routine maintenance alert.

In this context, emergencies requiring rapid response are events that create an immediate danger to people or property because gas is at risk of ignition, there is a large or uncontrollable release, or a safety device situation (like a regulator) that is failing and venting in a dangerous way. Fire or explosion risk, a large gas release, regulator fire or venting, or an uncontrollable gas leak that cannot be isolated safely all indicate a situation that could escalate rapidly and cannot be handled with ordinary procedures. Because of the immediacy of the danger, you act fast: retreat to safety, shut off the gas source if you can do so safely, alert others, and contact emergency services or the gas utility right away. A minor odor near the meter, a small temperature fluctuation, or a routine maintenance alert do not by themselves constitute an immediate, life-threatening emergency requiring rapid response. They require assessment and follow-up per standard procedures, but they don't demand the immediate, high-stakes action that stops an imminent hazard does.

3. When recording a meter reading for billing, what should be recorded?

- A. Only the decimal portion.
- B. Only the integer portion.
- C. The total volume from left to right including decimals, in units shown on the register.**
- D. The time of day.

When recording a meter reading for billing, you must capture the full value shown on the register—from left to right—and include the decimal portion, using the same units displayed on the register. The decimals represent fractions of a unit, and omitting them would misstate the total consumption, leading to inaccurate billing. Recording just the integer part ignores those fractions, and recording only the decimals would omit all of the whole-unit amount. The time of day isn't used to determine the amount consumed, so it isn't relevant to the billing reading.

4. Why are liquids and particulates detrimental to meters and regulators?

- A. They can cause wear or blockages
- B. They improve measurement stability
- C. They have no effect
- D. They only affect valves, not meters

Liquids and particulates harm meters and regulators by contaminating and wearing the moving parts and the flow paths they rely on. When liquids appear in a gas stream, they can cause liquid slugging, corrosion or swelling of seals, and condensation that alters the effective flow and pressure relationships. This disrupts how a regulator senses pressure and how a meter records flow, leading to unstable, inaccurate operation or even failure to regulate properly. Particulates are abrasive and can erode gear trains, damage diaphragms and seals, and clog orifices and valve seats. This wear and blockage change clearances, create sticking or chattering, and introduce drift or erratic readings. Because meters and regulators depend on precise flow paths and smooth, repeatable movement, any contamination degrades performance, reduces accuracy, and can compromise safety. Therefore, liquids and particulates are detrimental because they cause wear and blockages in the components that determine measurement and regulation.

5. Which of the following describes an AOC?

- A. A Deviation from Normal Operating Conditions
- B. A Component Malfunction
- C. Condition Exceeding Design Limits
- D. A Condition Hazardous to Life and Property

An Abnormal Operating Condition is any deviation from normal operation that could indicate something isn't right and needs attention. It covers off-nominal readings, unexpected behavior, or actions outside normal parameters, regardless of the exact cause or severity. That broad notion is why the best description is a deviation from normal operating conditions – it describes the general state that triggers corrective actions and alarm handling. A component malfunction is one possible cause of an AOC, but it isn't the description of an AOC itself. A condition exceeding design limits is a specific, often more severe instance of off-nominal operation, not the general concept. A condition hazardous to life and property describes a dangerous outcome or consequence, which is a subset of AOCs but not the broad definition.

6. How can you detect an AOC in the field?

- A. By monitoring downstream pressure, regulator behavior (noise, cycling, venting), gas odor or flame presence, unusual flow fluctuations, or alarms.
- B. By monitoring only the downstream pressure.
- C. By visual inspection of the vent pipe only.
- D. By checking for odor only.

Detecting an Abnormal Operating Condition in the field comes from watching several indicators together, not relying on a single sign. Downstream pressure helps verify that the regulator is delivering the intended pressure and not drifting. Observing regulator behavior—noise, rapid cycling, or venting—can reveal that the regulator is failing or operating outside its set point. Gas odor or flame presence flags a potential leak or improper combustion, but odors can be faint or masked and not all AOCs involve smell. Unusual flow fluctuations can indicate leaks, blockages, or regulator issues, and alarms from equipment provide direct, immediate alerts. Putting these cues together gives a reliable, timely sense of an AOC and guides safe, appropriate action. Relying on odor alone is insufficient because it may miss non-leaking AOCs, or odor can be inconsistent or undetectable in some conditions.

7. Which of the following is a sign of component failure?

A. Leaking threaded joints

B. No heat complaints

C. Poor Fusions

D. Non recognizable

A basic indicator of a failed component is a loss of integrity in a connection, such as fluid or gas leaking from threaded joints. When threads or seals wear, become damaged, or are installed improperly, they can no longer contain the medium under pressure, so leakage appears. That visible or detectable leak directly signals that the joint is not sealing as it should, which is a hallmark of component failure. No heat complaints don't necessarily point to a failure of a specific component; they can simply mean the system isn't being called to heat or there's another non-fault reason for the lack of heating. Poor fusions might indicate a defect in fabrication or installation, but leakage at joints is the most immediate, unambiguous sign that something has failed. Non recognizability is vague and doesn't provide a concrete indication of failure.

8. Which safety devices are typically found on a meter/regulator skid?

A. A single shutoff valve and gauge.

B. A regulator and a relief valve only.

C. Test ports and bypass only.

D. Upstream and downstream shutoff valves, a regulator, a relief or vent valve, test ports, and optional bypass with proper isolation features.

A meter/regulator skid is designed to both protect the system and allow safe maintenance, so it includes multiple safety features arranged for isolation, pressure control, and monitoring. Upstream and downstream shutoff valves let you completely isolate the skid from the supply and the downstream line for maintenance or in an emergency. The regulator provides the pressure reduction to a usable distribution level. A relief or vent valve is essential to prevent overpressure if the regulator sticks or fails, venting to a safe location. Test ports give access for pressure tests and calibration, and an optional bypass with proper isolation lets you reroute flow or maintain service while the skid is isolated or serviced. This combination covers isolation, protection, and testability, which is why it's the typical, complete configuration. The other options omit one or more of these critical elements, leaving gaps in safety or maintenance capability.

9. What effect does natural gas have on oxygen levels in an enclosed space?

A. Consumes it

B. Displaces it

C. Attaches to it

D. Mixes with it

Natural gas lowers the oxygen available in a confined space by displacing air. It's mainly methane, which isn't oxygen, so when it enters a room it adds more gas without adding oxygen, reducing the fraction of oxygen in the mixture. Combustion would consume oxygen, but just having the gas present doesn't do that unless it's burning. So the primary effect is displacement of air, making the environment less breathable and raising the risk of asphyxiation.

10. What steps should you take when an AOC occurs?

A. Protect Life and Property

B. Notify Your Supervisor

C. Do Nothing

D. Take Action to Rectify If Possible

When an abnormal operating condition occurs, safety must come first. The immediate priority is to protect lives and protect property from harm. This means quickly assessing for hazards, ensuring all personnel are safe, alerting others, and securing or isolating equipment or areas as needed to prevent escalation. If it can be done safely, take steps to stop or contain the problem to minimize damage. After life and property are secured, you would notify your supervisor and follow the emergency procedures, and you may take corrective actions if they are safe and authorized. The key idea is that safeguarding people and assets is the first action in any AOC.

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://nga85.examzify.com>

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

SAMPLE