

MDC3 PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://mdc3.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. What is suspected if a COPD patient becomes somnolent after oxygen?**
 - A. Hypoglycemia.
 - B. Pneumonia.
 - C. Electrolyte imbalance.
 - D. CO2 retention.

- 2. Priority treatment for sickle cell crisis?**
 - A. Antibiotics and hydration.
 - B. Bed rest and observation.
 - C. Oxygen, IV fluids, and pain control.
 - D. Immunization.

- 3. A DVT patient with chest pain and dyspnea; what is the immediate action?**
 - A. Administer a diuretic
 - B. Obtain chest X-ray
 - C. Administer oxygen and call rapid response
 - D. Start anticoagulation at bedside

- 4. In MDC3, governance alignment is built into the SDLC; the stages align with governance, security reviews, and validation criteria. Which option reflects this statement?**
 - A. False
 - B. True
 - C. Governance Only
 - D. Validation Criteria Only

- 5. Which finding indicates worsening status asthmaticus?**
 - A. Continuous productive cough after bronchodilator.
 - B. Wheezing disappears with increasing fatigue.
 - C. Increased air entry throughout chest.
 - D. Stable SpO2 with quiet breathing.

- 6. In androgen deprivation therapy for prostate cancer, which side effects are commonly anticipated?**
- A. Weight gain and increased appetite
 - B. Improved vision
 - C. Hot flashes and decreased libido
 - D. Increased hair growth
- 7. Which combination of symptoms is associated with acute chest syndrome?**
- A. Headache, dizziness, photophobia.
 - B. Abdominal pain and constipation.
 - C. Chest pain relieved by rest.
 - D. Chest pain, hypoxia, fever, and pulmonary infiltrates.
- 8. Thrombocythemia increases the risk of which two major complications?**
- A. Infection and organ failure
 - B. Thrombosis or bleeding
 - C. Hyperglycemia and dehydration
 - D. Hypertension
- 9. Which lifestyle changes are recommended for hypertension?**
- A. Limit sodium; Exercise; Weight management; Stop smoking.
 - B. Increase sodium intake; Avoid exercise; Weight gain; Start smoking.
 - C. Limit fluids; Avoid physical activity; Eat high-fat foods.
 - D. Sleep less; No dietary changes.
- 10. In CKD with hyperphosphatemia, which dietary focus is most appropriate?**
- A. Higher phosphorus intake
 - B. Lower phosphorus intake
 - C. Higher potassium intake
 - D. Higher sodium intake

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is suspected if a COPD patient becomes somnolent after oxygen?

- A. Hypoglycemia.
- B. Pneumonia.
- C. Electrolyte imbalance.
- D. CO₂ retention.**

In COPD patients who chronically retain CO₂, giving supplemental oxygen can blunt their hypoxic drive and worsen CO₂ retention, leading to somnolence. The brain's breathing drive in these individuals becomes more sensitive to low oxygen levels than to high CO₂, so increasing O₂ reduces the stimulant to breathe, causing hypoventilation and a rise in PaCO₂ (hypercapnia). Oxygen can also worsen V/Q mismatch in damaged lungs, further elevating CO₂. If this happens, check arterial blood gas to confirm hypercapnia and adjust oxygen to a target saturation around 88–92% (or 90–92% depending on guidelines). Consider ventilatory support if CO₂ retention is significant. Hypoglycemia, pneumonia, and electrolyte imbalance can cause altered mental status, but they aren't specifically precipitated by oxygen therapy in this way, which is why the CO₂ retention mechanism best explains the somnolence after oxygen.

2. Priority treatment for sickle cell crisis?

- A. Antibiotics and hydration.
- B. Bed rest and observation.
- C. Oxygen, IV fluids, and pain control.**
- D. Immunization.

In an acute sickle cell crisis, the immediate goal is to relieve pain, ensure adequate hydration, and improve oxygenation to prevent further sickling. Providing oxygen helps tissues receive enough oxygen and can reduce the polymerization of hemoglobin S that drives vaso-occlusion. Administering IV fluids lowers blood viscosity and supports perfusion, which helps tissues get blood flow and can shorten the crisis. Prompt pain control is essential because severe pain triggers stress responses and increases oxygen demand; effective analgesia usually involves IV opioids and appropriate adjuncts, allowing the patient to rest and recover. This combination targets the three most impactful factors during a vaso-occlusive crisis: pain, hydration, and oxygenation. Other measures like bed rest alone don't treat the underlying needs of the crisis, and while infection management or preventive immunization are important in general care, they don't address the acute signs of a crisis in the moment.

3. A DVT patient with chest pain and dyspnea; what is the immediate action?

- A. Administer a diuretic
- B. Obtain chest X-ray
- C. Administer oxygen and call rapid response**
- D. Start anticoagulation at bedside

The key idea is that suspected pulmonary embolism requires immediate stabilization of breathing and rapid escalation of care. In a DVT patient with chest pain and shortness of breath, the top priority is to ensure adequate oxygenation and quickly mobilize the team for urgent assessment and treatment. Administering supplemental oxygen helps correct hypoxemia from the V/Q mismatch caused by a PE, supporting tissue oxygen delivery as the patient is watched for potential deterioration. Activating a rapid-response team brings in the necessary resources—monitors, IV access, and rapid diagnostic options like imaging—to confirm the diagnosis and implement therapy as soon as it's safe. Chest X-ray can be helpful for ruling out other causes of chest symptoms, but it does not diagnose PE and won't by itself treat the situation. A diuretic isn't addressing the underlying embolic problem and could worsen hemodynamics if fluids are not appropriately managed. Starting anticoagulation is important in PE management, but it is typically considered after initial stabilization and assessment of contraindications; the immediate action focuses on ensuring oxygenation and urgent escalation so definitive therapy can be delivered promptly.

4. In MDC3, governance alignment is built into the SDLC; the stages align with governance, security reviews, and validation criteria. Which option reflects this statement?

- A. False
- B. True**
- C. Governance Only
- D. Validation Criteria Only

The main idea tested is that governance, security, and validation are not separate silos but are woven into every phase of the software development lifecycle in MDC3. This means each stage carries the necessary governance checks, security reviews, and validation criteria, so progress depends on meeting all three dimensions. That integrated approach ensures alignment with policies, risk controls, and evidence that the work meets security standards and acceptance criteria before moving on. So the statement is true because MDC3 builds governance alignment directly into the SDLC alongside security reviews and validation criteria, giving you traceability and consistent oversight throughout development. The other ideas—focusing only on governance, only on validation, or denying integration—don't capture how MDC3 treats these elements as interconnected parts of the lifecycle.

5. Which finding indicates worsening status asthmaticus?

- A. Continuous productive cough after bronchodilator.
- B. Wheezing disappears with increasing fatigue.**
- C. Increased air entry throughout chest.
- D. Stable SpO₂ with quiet breathing.

Wheezing disappearing as fatigue increases signals worsening status asthmaticus because it shows air movement is dropping, not improving. In severe asthma, wheezes come from turbulent airflow through narrowed airways. As the attack worsens and the patient tires, respiratory muscles fail to sustain movement of air, so there's less airflow overall and the chest may become quiet. That "silent chest" is a dangerous sign that the obstruction is severe and the patient may be heading toward respiratory failure, requiring urgent escalation of treatment. The other scenarios don't indicate deterioration in the same way. A productive cough after a bronchodilator could reflect mucus production but isn't a direct marker of worsening severity. Increased air entry throughout the chest isn't typical in worsening asthma, where air trapping usually dampens breath sounds rather than increasing them. Stable oxygen saturation with quiet breathing suggests stability, not decline.

6. In androgen deprivation therapy for prostate cancer, which side effects are commonly anticipated?

- A. Weight gain and increased appetite
- B. Improved vision
- C. Hot flashes and decreased libido**
- D. Increased hair growth

ADT lowers testosterone, creating a state of low androgens. With less testosterone, the body often shows signs of hypogonadism, especially vasomotor symptoms like hot flashes and a drop in sexual desire. These are the side effects most commonly anticipated because they directly reflect the body's response to reduced testosterone. Other effects can include fatigue, bone thinning, and loss of muscle mass, but hot flashes paired with decreased libido best captures the typical ADT side-effect profile. Improved vision isn't associated with ADT, increased hair growth isn't expected (hair may actually thin), and appetite changes aren't the hallmark features of this therapy.

7. Which combination of symptoms is associated with acute chest syndrome?

- A. Headache, dizziness, photophobia.
- B. Abdominal pain and constipation.
- C. Chest pain relieved by rest.
- D. Chest pain, hypoxia, fever, and pulmonary infiltrates.**

Acute chest syndrome is a lung complication of sickle cell disease that shows both chest symptoms and objective lung involvement. The hallmark is a combination of chest pain, hypoxia, fever, and a new pulmonary infiltrate on imaging. Each piece matters: chest pain points to thoracic involvement, hypoxia shows impaired gas exchange, fever reflects inflammation or infection, and the new infiltrate confirms lung involvement on radiography. Together, these findings distinguish acute chest syndrome from other conditions with chest or abdominal pain, or from chest pain alone.

8. Thrombocythemia increases the risk of which two major complications?

- A. Infection and organ failure
- B. Thrombosis or bleeding**
- C. Hyperglycemia and dehydration
- D. Hypertension

Thrombocythemia raises risk because having too many platelets boosts clot formation, leading to thrombosis. At the same time, very high platelet counts can cause platelet dysfunction or acquired von Willebrand factor deficiency, which impairs normal hemostasis and leads to bleeding. So the two major complications are the formation of clots (thrombosis) and bleeding. This dual risk explains why patients can experience strokes or heart attacks from clots, as well as nosebleeds, gum bleeding, or easy bruising from bleeding tendencies. The other options don't reflect the primary risks tied to a high platelet count.

9. Which lifestyle changes are recommended for hypertension?

- A. Limit sodium; Exercise; Weight management; Stop smoking.**
- B. Increase sodium intake; Avoid exercise; Weight gain; Start smoking.
- C. Limit fluids; Avoid physical activity; Eat high-fat foods.
- D. Sleep less; No dietary changes.

Managing hypertension rests on changes that reduce fluid volume, ease the heart's workload, control body weight, and protect blood vessels. Limiting sodium lowers blood volume and arterial pressure, making it easier for the heart to pump. Regular exercise strengthens the heart, improves vascular function, aids weight control, and lowers blood pressure over time. Keeping a healthy weight reduces the strain on the heart and decreases vascular resistance. Quitting smoking protects blood vessels and reduces overall cardiovascular risk, contributing to better long-term blood pressure control. These changes together address the main factors that raise blood pressure and improve heart health. Choices that promote more sodium, no exercise, weight gain, or starting smoking would worsen hypertension. Other options suggesting limited fluids, avoiding activity, fatty foods, or sleeping less do not align with established lifestyle strategies for lowering blood pressure.

10. In CKD with hyperphosphatemia, which dietary focus is most appropriate?

- A. Higher phosphorus intake
- B. Lower phosphorus intake**
- C. Higher potassium intake
- D. Higher sodium intake

In CKD with high phosphate, the key is to cut phosphate intake through the diet. When the kidneys aren't able to excrete phosphate effectively, phosphate builds up in the blood, which can drive bone problems and vascular calcification. Reducing dietary phosphate helps lower serum phosphate levels and can lessen downstream issues like secondary hyperparathyroidism. Emphasize foods that are naturally low in phosphorus and be cautious with items containing phosphate additives, which are highly absorbable. Often, meals are planned with attention to the phosphate content of foods, and phosphate binders may be used with meals to further limit absorption. While potassium and sodium also need to be managed in CKD, they don't address the hyperphosphatemia directly in the way restricting phosphate does.

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://mdc3.examzify.com>

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

SAMPLE