

Certified Medical-Surgical Registered Nurse (CMSRN) 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 bacterium is most commonly associated with pyelonephritis?**
 - A. Staphylococcus aureus**
 - B. Klebsiella pneumoniae**
 - C. E. coli**
 - D. Enterococcus faecalis**

- 2. Which of the following is a potential cause of hypernatremia?**
 - A. Fluid retention**
 - B. Excessive water intake**
 - C. Intravenous fluids with sodium**
 - D. Adrenal insufficiency**

- 3. Which phase of hepatitis typically lasts 4-6 weeks?**
 - A. Prodromal**
 - B. Icteric**
 - C. Post-icteric**
 - D. Recovery**

- 4. What class of medication is indicated by the suffix -pril?**
 - A. Beta blockers**
 - B. ACE inhibitors**
 - C. Calcium channel blockers**
 - D. Angiotensin II receptor blockers**

- 5. What does the acronym MONA stand for in the treatment of myocardial infarction?**
 - A. Morphine, oxygen, nitrates, aspirin**
 - B. Magnesium, oxygen, nitrates, analgesics**
 - C. Morphine, oxygen, niacin, aspirin**
 - D. Morphine, oxygen, nitrates, anticoagulants**

- 6. Which of the following best describes a pressure injury that is unstageable?**
- A. Full thickness tissue loss with exposed structures**
 - B. Full thickness tissue loss that cannot be determined due to slough or eschar**
 - C. Partial thickness skin loss**
 - D. Skin intact with non-blanchable erythema**
- 7. What type of solutions are D5LR and D5NS?**
- A. Isotonic**
 - B. Hypotonic**
 - C. Hypertonic**
 - D. Colloidal**
- 8. What is the recommended diet for a patient with COPD?**
- A. Low carbohydrate, low-fat**
 - B. High protein, low calorie**
 - C. High protein, high calorie**
 - D. Balanced macro nutrient diet**
- 9. What complication can arise from rapid insulin administration during DKA treatment?**
- A. Hyperglycemia**
 - B. Hypokalemia**
 - C. Hypertension**
 - D. Fatigue**
- 10. What is the recommended treatment for true hyponatremia?**
- A. Fluid restriction only**
 - B. Replace sodium and water**
 - C. Administer hypertonic saline**
 - D. Fluid replacement only**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which bacterium is most commonly associated with pyelonephritis?

- A. Staphylococcus aureus**
- B. Klebsiella pneumoniae**
- C. E. coli**
- D. Enterococcus faecalis**

The bacterium most commonly associated with pyelonephritis is *Escherichia coli* (*E. coli*). This condition involves inflammation of the kidneys, typically originating from a urinary tract infection. *E. coli* is a member of the normal flora of the intestines, but certain strains can ascend the urinary tract and cause infections. Its prevalence in urinary infections is due to several factors, including its ability to adhere to the uroepithelial cells in the bladder, leading to infection. In pyelonephritis, the bacteria often travel from the bladder to the kidneys, resulting in inflammation and, potentially, kidney damage if not treated appropriately. The predominance of *E. coli* in cases of acute pyelonephritis is noted in healthy individuals as well as those with urinary tract abnormalities. Understanding the role of *E. coli* in such infections is crucial for effective clinical treatment and management, including the selection of appropriate antibiotics tailored to the susceptibility profile of the bacteria. The other bacteria listed, while they may occasionally be involved in urinary infections, are not as significant a cause of pyelonephritis as *E. coli*.

2. Which of the following is a potential cause of hypernatremia?

- A. Fluid retention**
- B. Excessive water intake**
- C. Intravenous fluids with sodium**
- D. Adrenal insufficiency**

Hypernatremia, which refers to an elevated sodium level in the blood, can occur when there is an excess of sodium relative to water in the body. One key cause of this condition is the administration of intravenous fluids that contain sodium. When a patient receives intravenous solutions with high sodium concentrations, it can lead to an increase in serum sodium levels, particularly if the fluid is given in large volumes or is not adequately balanced with water intake. Fluid retention typically leads to dilution of sodium levels rather than an increase. Excessive water intake can dilute serum sodium, resulting in hyponatremia (low sodium levels) instead of hypernatremia. Adrenal insufficiency can lead to electrolyte imbalances, but it is more commonly associated with hyponatremia due to a lack of aldosterone, which regulates sodium retention. Therefore, the administration of intravenous fluids containing sodium is a clear and direct cause of hypernatremia.

3. Which phase of hepatitis typically lasts 4-6 weeks?

- A. Prodromal
- B. Icteric**
- C. Post-icteric
- D. Recovery

The icteric phase of hepatitis is characterized by the appearance of jaundice, where the skin and eyes become yellow due to the accumulation of bilirubin in the blood. This phase is significant because it marks a clinical manifestation of liver dysfunction and is typically accompanied by other symptoms such as dark urine, pale stools, and pruritus. During this phase, patients may also experience a range of other symptoms including fatigue, nausea, and abdominal discomfort, which can significantly impact their quality of life. The duration of 4-6 weeks is consistent with the timing of typical viral hepatitis infections, where the icteric phase generally occurs after the initial prodromal phase and lasts until the recovery phase begins. In contrast, the other phases do not encompass this specific time frame. The prodromal phase refers to the early onset of non-specific symptoms that occur before jaundice appears, the post-icteric phase is the period after jaundice has resolved and the recovery process begins, and the recovery phase signifies the overall improvement in health and liver function following the illness.

4. What class of medication is indicated by the suffix -pril?

- A. Beta blockers
- B. ACE inhibitors**
- C. Calcium channel blockers
- D. Angiotensin II receptor blockers

The suffix -pril specifically identifies a class of medications known as ACE inhibitors. ACE stands for angiotensin-converting enzyme, which plays a crucial role in the body's renin-angiotensin-aldosterone system that regulates blood pressure. By inhibiting this enzyme, ACE inhibitors help prevent the conversion of angiotensin I to angiotensin II, a potent vasoconstrictor. This results in decreased blood pressure and reduced workload on the heart, making them particularly useful in the management of hypertension and heart failure. ACE inhibitors are generally well-tolerated and can afford additional benefits, such as renal protection in diabetic patients. The effectiveness of these medications in lowering blood pressure and providing cardiovascular protection is well established, which makes them a primary choice for treatment in various cases of cardiovascular and renal conditions. In contrast, the other listed classes of medications do not share this suffix or mechanism of action. Beta blockers primarily work by blocking beta-adrenergic receptors, calcium channel blockers operate by preventing calcium entry into the cells of the heart and blood vessels, and angiotensin II receptor blockers directly block the effects of angiotensin II without inhibiting its formation. Each of these classes has distinct pharmacological targets and outcomes, which underscores the

5. What does the acronym MONA stand for in the treatment of myocardial infarction?

- A. Morphine, oxygen, nitrates, aspirin**
- B. Magnesium, oxygen, nitrates, analgesics
- C. Morphine, oxygen, niacin, aspirin
- D. Morphine, oxygen, nitrates, anticoagulants

The acronym MONA represents a standard set of interventions used in the initial management of a myocardial infarction, particularly to relieve pain and improve oxygen delivery to the heart muscle. Morphine is utilized to relieve severe chest pain and reduce anxiety, thereby decreasing the workload on the heart. Oxygen is administered to ensure adequate oxygenation, especially if the patient exhibits signs of hypoxia, to help maintain heart function. Nitrates are included to dilate coronary arteries, which can improve blood flow to the heart muscle and alleviate angina. Aspirin is crucial in this regimen because it functions as an antiplatelet agent, reducing the likelihood of further blood clotting, which is often a contributor to myocardial infarction. Each component of MONA is integral to providing symptomatic relief and preventing further cardiac damage. The other options contain variations that do not fully encompass the widely recognized and effective strategy used in treating myocardial infarction, such as using niacin or anticoagulants, which are not first-line interventions in this context.

6. Which of the following best describes a pressure injury that is unstageable?

- A. Full thickness tissue loss with exposed structures
- B. Full thickness tissue loss that cannot be determined due to slough or eschar**
- C. Partial thickness skin loss
- D. Skin intact with non-blanchable erythema

A pressure injury that is categorized as unstageable is best described as having full thickness tissue loss where the depth cannot be fully assessed due to the presence of slough (yellow, tan, gray, green, or brown necrotic tissue) or eschar (thick, black, or brown dead tissue). This characteristic is crucial because the inability to visualize the base of the wound hinders accurate staging and assessment. In the context of pressure injuries, accurate staging is vital for determining the appropriate treatment and management. Unstageable injuries represent a situation where the extent of tissue damage cannot be classified into the known stages due to this covering of necrotic material. Once the slough or eschar is removed, the wound may then be staged appropriately based on the amount of tissue damage and underlying wound characteristics. Understanding this distinction is essential for healthcare professionals, as unstageable injuries require careful monitoring and intervention to promote healing and prevent further complications.

7. What type of solutions are D5LR and D5NS?

- A. Isotonic
- B. Hypotonic
- C. Hypertonic**
- D. Colloidal

D5LR (5% dextrose in lactated Ringer's solution) and D5NS (5% dextrose in normal saline) are classified as hypertonic solutions. When these solutions are administered, their osmolarity is higher than that of body fluids. Hypertonic solutions are characterized by having a higher concentration of solute outside of the cell compared to the concentration within the cell. This can lead to a net movement of water out of the cells, causing them to shrink as the fluid is drawn into the vascular space. The addition of dextrose in these solutions adds to the osmolarity, making them hypertonic in nature. In clinical practice, hypertonic solutions like D5LR and D5NS are often used in specific scenarios such as when rapid expansion of the intravascular volume is needed or to correct certain electrolyte imbalances. It's important for nurses to understand the properties of these solutions for safe and effective patient management. On the other hand, isotonic solutions have osmolarities similar to serum, while hypotonic solutions have lower osmolarities, which would lead to fluid moving into the cells. Colloidal solutions involve larger molecules that exert oncotic pressure but do not apply

8. What is the recommended diet for a patient with COPD?

- A. Low carbohydrate, low-fat
- B. High protein, low calorie
- C. High protein, high calorie**
- D. Balanced macro nutrient diet

The recommended diet for a patient with Chronic Obstructive Pulmonary Disease (COPD) emphasizes a high protein, high calorie intake. This approach is vital for several reasons. First, patients with COPD often experience unintentional weight loss and muscle wasting due to the increased energy expenditure required for breathing. A high-calorie diet provides the necessary energy to maintain weight and support optimal function. Additionally, a high protein intake is crucial for preserving muscle mass, which is particularly important for respiratory muscles that assist in breathing. Adequate protein also promotes healing and recovery, especially if the patient suffers from frequent infections or has a history of exacerbations. Moreover, patients with COPD may have difficulty eating due to dyspnea or the physical effort required during meals. Therefore, energy-dense foods can help meet their nutritional needs without requiring them to consume large volumes of food, which can be cumbersome and tiring. The other dietary choices may lack the necessary caloric and protein content needed for this patient population. A low carbohydrate, low-fat diet may not provide sufficient calories or support muscle maintenance. Similarly, a high-protein, low-calorie diet would not adequately cover energy requirements, while a balanced macronutrient diet may not specifically address the increased caloric

9. What complication can arise from rapid insulin administration during DKA treatment?

- A. Hyperglycemia
- B. Hypokalemia**
- C. Hypertension
- D. Fatigue

Rapid insulin administration during the treatment of diabetic ketoacidosis (DKA) can lead to hypokalemia, which is a critical complication. This occurs because insulin promotes the movement of potassium from the extracellular space into the cells, thereby decreasing serum potassium levels. In DKA, patients often present with hyperkalemia due to acidosis and insulin deficiency. When insulin is administered rapidly to treat the hyperglycemia and correct the metabolic derangement, it can cause a swift drop in serum potassium. This is particularly concerning because potassium plays a vital role in heart and muscle function, and significant hypokalemia can lead to dangerous cardiac arrhythmias or muscle weakness. While hyperglycemia, hypertension, and fatigue are all potential issues in the context of DKA, they do not arise as direct complications from the rapid administration of insulin in the same way that hypokalemia does. The concern with potassium management is why monitoring electrolyte levels, particularly potassium, is essential during DKA treatment, especially after initiating insulin therapy.

10. What is the recommended treatment for true hyponatremia?

- A. Fluid restriction only
- B. Replace sodium and water**
- C. Administer hypertonic saline
- D. Fluid replacement only

The recommended treatment for true hyponatremia is to replace sodium and water, as this approach addresses both the low sodium levels and the necessary fluid balance. True hyponatremia is characterized by a deficiency in sodium concentration in the extracellular fluid. Consequently, simply restricting or replacing fluids without addressing the underlying sodium deficit could lead to further imbalances and complications. The duality of replacing both sodium and water simultaneously helps to prevent rapid corrections, which can be detrimental and lead to osmotic demyelination syndrome. This method is necessary because individuals with true hyponatremia may also be volume depleted or have underlying conditions that affect both sodium and fluid levels. In the case of administering therapies such as fluid restriction or hypertonic saline, those treatments can be applicable in certain contexts, such as specific types of hyponatremia or in cases where fluid overload is a concern, but they do not address the requirement for sodium replacement, which is critical in the management of true hyponatremia. Addressing both aspects is essential for restoring proper physiological function and ensuring patient safety.

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://cmsrn.examzify.com>

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

SAMPLE