

# Certified Medical-Surgical Registered Nurse (CMSRN) Practice Exam (Sample)

## Study Guide



**Everything you need from our exam experts!**

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# 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

- 1. Which type of heart failure is characterized primarily by edema?**
  - A. Left ventricular heart failure**
  - B. Right ventricular heart failure**
  - C. Diastolic heart failure**
  - D. Acute heart failure**
- 2. What is the normal range for HCO<sub>3</sub> (bicarbonate) in arterial blood gases (ABG)?**
  - A. 18-22**
  - B. 22-26**
  - C. 26-30**
  - D. 30-34**
- 3. What is the expected bicarbonate (HCO<sub>3</sub>) level in metabolic acidosis?**
  - A. Increased**
  - B. Normal**
  - C. Decreased**
  - D. Varies**
- 4. What is the hallmark symptom of pancreatitis?**
  - A. Fever**
  - B. Jaundice**
  - C. Severe abdominal pain**
  - D. Constipation**
- 5. Where are peptic ulcers most commonly located?**
  - A. Esophagus**
  - B. Stomach or duodenum**
  - C. Large intestine**
  - D. Small intestine**

- 6. Which symptom of hypercalcemia can affect cognitive function?**
- A. Hyperactive reflexes**
  - B. Impaired memory**
  - C. Excessive energy**
  - D. Euphoria**
- 7. What complication can arise from rapid insulin administration during DKA treatment?**
- A. Hyperglycemia**
  - B. Hypokalemia**
  - C. Hypertension**
  - D. Fatigue**
- 8. What is the final recovery stage duration for hepatitis?**
- A. 1-2 months**
  - B. 2-4 months**
  - C. 4-6 months**
  - D. Over 6 months**
- 9. What is one common symptom of hypocalcemia?**
- A. Increased appetite**
  - B. Tinnitus**
  - C. Tingling in fingers/toes/lips**
  - D. Elevated blood pressure**
- 10. What can happen to the esophagus as a complication of untreated GERD?**
- A. Development of strictures**
  - B. Expansion into the stomach**
  - C. Increase in motility**
  - D. Development of cancer without symptoms**



## **Answers**

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

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## **Explanations**

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**1. Which type of heart failure is characterized primarily by edema?**

- A. Left ventricular heart failure**
- B. Right ventricular heart failure**
- C. Diastolic heart failure**
- D. Acute heart failure**

Right ventricular heart failure is characterized primarily by edema due to the impaired ability of the right ventricle to pump blood effectively into the pulmonary circulation, leading to increased pressure in the systemic venous system. This results in fluid accumulation in the body, particularly in the lower extremities (peripheral edema) and in the abdominal cavity (ascites). The congestion in the venous system stems from the inability of the right side of the heart to manage the return of blood from the body, causing fluid to be retained and leading to swelling. Other types of heart failure can be associated with fluid issues but may present differently. Left ventricular heart failure often presents with pulmonary congestion and shortness of breath due to fluid buildup in the lungs, rather than primarily causing edema. Diastolic heart failure, also known as heart failure with preserved ejection fraction, can lead to symptoms of edema but is more focused on issues with the heart's filling capacity rather than fluid overload. Acute heart failure encompasses various forms and can involve sudden onset of symptoms related to cardiac output, making it less specific to edema alone.

**2. What is the normal range for HCO<sub>3</sub> (bicarbonate) in arterial blood gases (ABG)?**

- A. 18-22**
- B. 22-26**
- C. 26-30**
- D. 30-34**

The normal range for HCO<sub>3</sub> (bicarbonate) in arterial blood gases (ABG) is indeed 22-26 mEq/L. Bicarbonate is an important buffer in the body, primarily regulated by the kidneys, and plays a crucial role in maintaining the body's acid-base balance. Values within this range indicate proper metabolic function and acid-base homeostasis. If the bicarbonate level falls below this range, it may suggest a metabolic acidosis, where there is an accumulation of acid or a loss of bicarbonate, while values above this range can indicate metabolic alkalosis, often due to excessive bicarbonate or loss of acid. Understanding this normal range is essential in clinical practice, as it helps nurses and healthcare professionals interpret ABG results accurately, allowing them to assess a patient's metabolic status and make informed decisions about treatment and management.

### 3. What is the expected bicarbonate ( $\text{HCO}_3$ ) level in metabolic acidosis?

- A. Increased
- B. Normal
- C. Decreased**
- D. Varies

In metabolic acidosis, the expected bicarbonate ( $\text{HCO}_3$ ) level is decreased. This condition results from an increase in the production of acids or a loss of bicarbonate from the body, leading to an overall low level of bicarbonate in the bloodstream. Bicarbonate acts as a buffer in the blood, helping to maintain the body's pH balance. When there is an excess of acid, the bicarbonate is utilized to neutralize it, which consequently lowers its concentration. This is the reason behind the decrease in bicarbonate levels when a patient is in metabolic acidosis. Understanding the expected decrease in bicarbonate is essential for diagnosing and managing metabolic acidosis effectively, as it directly reflects the body's attempt to compensate for the acid-base disturbance.

### 4. What is the hallmark symptom of pancreatitis?

- A. Fever
- B. Jaundice
- C. Severe abdominal pain**
- D. Constipation

The hallmark symptom of pancreatitis is severe abdominal pain. This pain typically presents in the upper abdomen and can radiate to the back, often described as a deep, piercing sensation. Patients frequently report that the pain intensifies after eating, especially if the meal is high in fat. The severity of pain can vary but is usually significant enough to prompt medical attention. In the context of pancreatitis, the abdominal pain arises from inflammation and irritation of the pancreas, which can affect surrounding structures and result in acute or chronic discomfort. This symptom is crucial in helping healthcare providers differentiate pancreatitis from other abdominal conditions. While fever, jaundice, and constipation may accompany pancreatitis in some cases, they are not specific to this condition. Fever may indicate an infectious process or inflammation; jaundice may occur due to bile duct obstruction, which can occur in conditions like cholangitis rather than pancreatitis explicitly; and constipation is a more general gastrointestinal symptom that does not directly define pancreatitis. Thus, severe abdominal pain is the primary and most characteristic symptom recognized in cases of pancreatitis.

**5. Where are peptic ulcers most commonly located?**

- A. Esophagus
- B. Stomach or duodenum**
- C. Large intestine
- D. Small intestine

Peptic ulcers are most commonly located in the stomach or duodenum due to the presence of gastric acid and pepsin, which are secreted in these areas. The term "peptic" relates to digestion and the digestive acids that can lead to the erosion of the mucosal lining. In the stomach, gastric ulcers occur when the protective lining is compromised, allowing acid to irritate the tissue. Similarly, duodenal ulcers form in the upper part of the small intestine, just beyond the stomach. These sites are particularly susceptible due to the high levels of acid required for digestion and the potential for infection with *Helicobacter pylori*, a common cause of peptic ulcers. The other options are less common sites for peptic ulcers. The esophagus can develop ulcers, but this is typically associated with reflux disease rather than peptic ulcers specifically. The large intestine and small intestine are less frequently implicated in peptic ulcer formation compared to the stomach and duodenum.

**6. Which symptom of hypercalcemia can affect cognitive function?**

- A. Hyperactive reflexes
- B. Impaired memory**
- C. Excessive energy
- D. Euphoria

Impaired memory is a recognized symptom of hypercalcemia that can significantly affect cognitive function. In conditions of elevated calcium levels in the blood, such as hypercalcemia, several neurological deficits can occur. Increased calcium interferes with neurotransmission and can disrupt normal brain function, leading to cognitive manifestations such as confusion, memory impairment, and even depression. While hyperactive reflexes could be seen in some neuromuscular conditions, it is not directly linked to hypercalcemia as prominently as cognitive changes. Excessive energy and euphoria may not be typical responses to hypercalcemia; rather, individuals often become lethargic or may experience a decrease in mental clarity. Thus, impairment of memory is the most relevant symptom in the context of hypercalcemia affecting cognitive function.

**7. 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.

**8. What is the final recovery stage duration for hepatitis?**

- A. 1-2 months**
- B. 2-4 months**
- C. 4-6 months**
- D. Over 6 months**

The final recovery stage of hepatitis, particularly in cases of viral hepatitis (like hepatitis A, B, or C), typically lasts between 4 to 6 months. During this phase, patients often begin to regain their health as liver function improves and symptoms diminish. It's essential to understand that recovery times can vary based on the specific type of hepatitis, the severity of the infection, and individual patient factors such as overall health and the presence of any coexisting conditions. The period of 4 to 6 months reflects a general timeline in which most patients can expect to see significant improvement and resolution of acute symptoms. While some may experience recovery in a shorter time frame, others may take longer if complications arise. Therefore, the 4 to 6 month duration is seen as a typical standard for the final recovery stage of hepatitis.

**9. What is one common symptom of hypocalcemia?**

- A. Increased appetite**
- B. Tinnitus**
- C. Tingling in fingers/toes/lips**
- D. Elevated blood pressure**

Hypocalcemia, which is a condition characterized by low levels of calcium in the blood, often manifests through symptoms related to neuromuscular excitability. Tingling sensations, also known as paresthesia, can occur in the fingers, toes, and lips, as a direct result of increased neuromuscular excitability stemming from insufficient calcium levels. This tingling can also be accompanied by muscle spasms, cramps, and even seizures in more severe cases. The other options do not align with common symptoms associated with hypocalcemia. Increased appetite is generally more related to metabolic or endocrine conditions rather than to calcium levels. Tinnitus, or ringing in the ears, is typically associated with issues related to the ear or neurological conditions rather than hypocalcemia. Elevated blood pressure also does not correlate with low calcium levels and is more commonly linked to varied cardiovascular issues. Therefore, the sensation of tingling is the most representative symptom of hypocalcemia.

**10. What can happen to the esophagus as a complication of untreated GERD?**

- A. Development of strictures**
- B. Expansion into the stomach**
- C. Increase in motility**
- D. Development of cancer without symptoms**

The development of strictures in the esophagus is a recognized complication of untreated gastroesophageal reflux disease (GERD). In GERD, stomach acid repeatedly irritates the esophageal lining, leading to inflammation and damage. Over time, this chronic irritation can cause scar tissue to form, which narrows the esophagus, resulting in strictures. These strictures can make swallowing difficult and may lead to food getting stuck in the esophagus, further complicating the condition. While expansion into the stomach may refer to the physical movement of content between these two organs, it does not represent a complication of GERD itself. An increase in motility generally indicates a healthy response to gastric contents and is not a typical outcome of GERD. Although the risk for esophageal cancer can increase due to chronic irritation from GERD, this development does not consistently occur without symptoms. Therefore, focusing on the development of strictures aligns with the chronic nature of untreated GERD and its complications.



## 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](mailto: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!**