

RESPIRATORY THERAPY CRT PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://respiratorycrt.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	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. What does the abbreviation NIV stand for in respiratory care?**
 - A. Non-Invasive Ventilation
 - B. Non-Interventional Ventilation
 - C. Negative Intrapleural Ventilation
 - D. Normal Inhalation Volume
- 2. What is the typical pH range indicating metabolic acidosis on an arterial blood gas (ABG) test?**
 - A. 7.35 to 7.45
 - B. 7.45 to 7.70
 - C. 7.70 to 7.80
 - D. 7.30 to 7.40
- 3. In a patient undergoing mechanical ventilation, what might contribute to respiratory alkalosis?**
 - A. Decreased lung compliance
 - B. Hyperventilation
 - C. Increased PCO₂
 - D. Hypoventilation
- 4. What therapeutic intervention may improve ventilation in a patient with COPD?**
 - A. Incentive spirometry
 - B. Aerosolized antibiotics
 - C. Diuretics
 - D. Mechanical ventilation
- 5. Which is a common side effect of corticosteroids?**
 - A. Increased blood pressure levels
 - B. Increased blood sugar levels
 - C. Weight loss
 - D. Decreased appetite

- 6. Which disease is characterized by small airway obstruction and decreased airflow?**
- A. Asthma
 - B. Chronic bronchitis
 - C. Emphysema
 - D. Pneumonia
- 7. Which of the following describes the use of chest physiotherapy?**
- A. To enhance gas exchange in the lungs
 - B. To help mobilize secretions from the lungs
 - C. To increase lung capacity
 - D. To manage sleep apnea
- 8. What is the purpose of performing a bronchial challenge test?**
- A. To assess lung capacity and strength
 - B. To measure oxygen saturation levels
 - C. To assess bronchial hyper-responsiveness
 - D. To evaluate pulmonary compliance
- 9. What does the term "tachypnea" refer to?**
- A. Slow breathing
 - B. Deep breathing
 - C. Rapid breathing
 - D. Shallow breathing
- 10. What is the mechanism of action for corticosteroids in respiratory therapy?**
- A. Bronchodilation in the airways
 - B. Reduce inflammation in the airways
 - C. Enhance mucus clearance
 - D. Inhibit infection

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What does the abbreviation NIV stand for in respiratory care?

- A. Non-Invasive Ventilation**
- B. Non-Interventional Ventilation
- C. Negative Intrapleural Ventilation
- D. Normal Inhalation Volume

The abbreviation NIV stands for Non-Invasive Ventilation. This term is widely used in respiratory care to describe techniques that provide ventilatory support without the need for an invasive artificial airway, such as intubation. NIV typically involves the use of a mask or similar device to deliver oxygen or air with the goal of improving ventilation and oxygenation in patients with respiratory failure or other breathing difficulties. Non-invasive ventilation is particularly beneficial for conditions like chronic obstructive pulmonary disease (COPD) exacerbations and heart failure since it can reduce the need for more invasive procedures, minimize complications, and enhance patient comfort. The effectiveness of NIV depends on proper patient selection and the appropriate settings for the device being used. In contrast, the other options do not correctly define NIV within the context of respiratory therapy. Non-Interventional Ventilation does not represent a standard term recognized in clinical practice. Negative Intrapleural Ventilation and Normal Inhalation Volume are also not accurate nor reflective of common practices or terminologies in the field. This demonstrates the importance of understanding the specific terminology used in respiratory care.

2. What is the typical pH range indicating metabolic acidosis on an arterial blood gas (ABG) test?

- A. 7.35 to 7.45
- B. 7.45 to 7.70**
- C. 7.70 to 7.80
- D. 7.30 to 7.40

The correct answer indicates that a typical pH range reflecting metabolic acidosis on an arterial blood gas (ABG) test falls outside the normal physiological range of pH, which is typically between 7.35 and 7.45. In the context of metabolic acidosis, the pH is usually lower than this normal range. In metabolic acidosis, a decrease in the blood's pH can occur due to a variety of factors, such as an accumulation of acid in the body or a loss of bicarbonate. A pH value of 7.35 or lower is commonly associated with this condition, demonstrating that the blood is more acidic than normal. Therefore, recognizing the significance of a pH value that dips towards or below 7.35 is crucial for identifying metabolic acidosis. The other options present ranges that do not reflect the typical pH associated with metabolic acidosis. For example, a pH range of 7.45 to 7.70 suggests an alkalotic state rather than acidosis, while ranges like 7.70 to 7.80 exceed typical physiological limits, indicating a more serious or rare condition. A range of 7.30 to 7.40 is closer to normal but still does

3. In a patient undergoing mechanical ventilation, what might contribute to respiratory alkalosis?

- A. Decreased lung compliance
- B. Hyperventilation**
- C. Increased PCO₂
- D. Hypoventilation

Hyperventilation is a significant contributor to respiratory alkalosis during mechanical ventilation. When a patient hyperventilates, the respiratory rate and/or tidal volume are increased, leading to an excessive expulsion of carbon dioxide (CO₂) from the body. This reduction in CO₂ concentration results in an increase in blood pH, leading to a state of alkalosis. In mechanical ventilation settings, this can occur if the ventilator settings are too aggressive or if the patient's natural breathing drive is stimulating excessive breath rate. Understanding this process is critical for respiratory therapists, as managing ventilation settings and monitoring the patient's response is essential to maintaining acid-base balance. In cases where respiratory alkalosis occurs, it may be necessary to adjust the ventilator settings to allow for CO₂ retention and correct the pH imbalance.

4. What therapeutic intervention may improve ventilation in a patient with COPD?

- A. Incentive spirometry**
- B. Aerosolized antibiotics
- C. Diuretics
- D. Mechanical ventilation

Incentive spirometry is a therapeutic intervention that encourages patients, particularly those with conditions like Chronic Obstructive Pulmonary Disease (COPD), to take deep breaths. The primary goal of incentive spirometry is to improve lung expansion and ventilation by promoting the uptake of air into the lungs. This can be particularly beneficial for patients with COPD, as they often struggle with air trapping and reduced lung function. When a patient uses an incentive spirometer, they are motivated to inhale slowly and deeply, which can help open up the airways, increase lung volumes, and improve overall gas exchange. This method can also assist in preventing atelectasis, a condition where parts of the lung collapse and can exacerbate respiratory issues. In contrast, the other options provided may not directly address the need for improved ventilation in a COPD patient. Aerosolized antibiotics are typically used to treat infections rather than enhance ventilation. Diuretics primarily address fluid overload and may not have any direct effect on airway function or ventilation. Mechanical ventilation can be necessary in severe cases of respiratory failure, but it is not a first-line intervention for improving ventilation in stable COPD patients.

5. Which is a common side effect of corticosteroids?

- A. Increased blood pressure levels
- B. Increased blood sugar levels**
- C. Weight loss
- D. Decreased appetite

Corticosteroids, which are often used to reduce inflammation and suppress the immune response, can lead to an increase in blood sugar levels as a common side effect. This occurs because corticosteroids can stimulate gluconeogenesis, the process by which the liver produces glucose, and they can also decrease insulin sensitivity. As a result, patients who are on corticosteroids may be at risk for hyperglycemia, particularly if they have pre-existing diabetes or glucose intolerance. This effect is important for respiratory therapists and healthcare professionals to monitor, especially in patients who may already have issues with blood sugar control. Other options, while they may represent effects associated with different medications or conditions, are not typical side effects of corticosteroids. Weight loss and decreased appetite are uncommon and usually don't occur with corticosteroid usage, which often leads to weight gain and increased appetite instead, due to metabolic effects and potential changes in mood.

6. Which disease is characterized by small airway obstruction and decreased airflow?

- A. Asthma
- B. Chronic bronchitis**
- C. Emphysema
- D. Pneumonia

Chronic bronchitis is characterized by small airway obstruction and decreased airflow primarily due to inflammation and obstruction of the airways, leading to a productive cough and difficulty in breathing. In individuals with chronic bronchitis, the bronchial tubes become inflamed and filled with mucus, which further narrows the air passages and hampers airflow during expiration. This condition is typically associated with long-term exposure to irritants such as cigarette smoke or air pollutants, resulting in chronic inflammation and structural changes in the airways. The hallmark of chronic bronchitis is the presence of excessive mucus production along with airflow limitation, which can be assessed through pulmonary function tests that show decreased expiratory flow rates. Furthermore, patients often experience wheezing and recurrent respiratory infections as a result of airway obstruction. While asthma does involve airway obstruction, it is generally characterized by reversible airflow limitation due to bronchospasm, inflammation, and increased mucus production. Emphysema, on the other hand, primarily affects the alveoli and leads to destruction of the air sacs, causing air trapping but does not predominantly involve small airway obstruction. Pneumonia is an infection that inflames the air sacs in one or both lungs and may lead to decreased airflow due to fluid accumulation, but it is not primarily categorized by

7. Which of the following describes the use of chest physiotherapy?

- A. To enhance gas exchange in the lungs
- B. To help mobilize secretions from the lungs**
- C. To increase lung capacity
- D. To manage sleep apnea

The use of chest physiotherapy primarily focuses on helping to mobilize secretions from the lungs. This therapeutic technique involves various methods such as percussion, vibration, and postural drainage, aimed at loosening and facilitating the clearance of mucus and other secretions from the airways. By promoting airway clearance, chest physiotherapy improves lung function and reduces the risk of infections. Enhancing gas exchange in the lungs is a goal that can be indirectly supported by ensuring that airways are clear; however, this is not the primary purpose of chest physiotherapy. Similarly, increasing lung capacity can be a secondary benefit if secretions are effectively managed, but it is not the main focus. Managing sleep apnea involves different strategies and interventions that do not typically include chest physiotherapy, as it addresses upper airway obstruction rather than secretions within the lungs. Therefore, the clear purpose of chest physiotherapy is indeed to assist in mobilizing secretions from the lungs, making it a critical intervention in respiratory care.

8. What is the purpose of performing a bronchial challenge test?

- A. To assess lung capacity and strength
- B. To measure oxygen saturation levels
- C. To assess bronchial hyper-responsiveness**
- D. To evaluate pulmonary compliance

The purpose of performing a bronchial challenge test is to assess bronchial hyper-responsiveness. This test is particularly useful in diagnosing conditions such as asthma, where the airways are more reactive to various stimuli. During the test, a patient inhales a substance that can provoke bronchoconstriction, and the subsequent changes in lung function are measured. Such measurements help to determine the sensitivity of the airways and give insight into the presence and severity of respiratory conditions. The ability to quantify how easily the airways constrict in response to specific triggers is critical for tailoring asthma management and treatment plans. By identifying bronchial hyper-responsiveness, healthcare providers can make more informed decisions regarding medication and lifestyle adjustments necessary to manage a patient's respiratory health effectively.

9. What does the term "tachypnea" refer to?

- A. Slow breathing
- B. Deep breathing
- C. Rapid breathing**
- D. Shallow breathing

The term "tachypnea" specifically refers to an increased respiratory rate, meaning rapid breathing. This condition is characterized by a rate of breathing that is higher than normal, typically defined as more than 20 breaths per minute in adults. Tachypnea can be a physiological response to various factors such as fever, anxiety, pain, or underlying health conditions that affect the lungs or cardiovascular system. Understanding tachypnea is important because it can serve as a vital sign that may indicate distress or an underlying medical issue that requires evaluation and management. In contrast, "bradypnea" refers to slow breathing, while "hyperventilation" describes deep and rapid breathing, which are distinctly different from tachypnea. Additionally, "shallow breathing" is another term that describes insufficient depth of breaths, but this does not align with the rapid nature of tachypnea. Recognizing these terms helps in accurately identifying and responding to a patient's respiratory status.

10. What is the mechanism of action for corticosteroids in respiratory therapy?

- A. Bronchodilation in the airways
- B. Reduce inflammation in the airways**
- C. Enhance mucus clearance
- D. Inhibit infection

Corticosteroids play a critical role in respiratory therapy primarily through their ability to reduce inflammation in the airways. This anti-inflammatory effect is essential in the management of various respiratory conditions, such as asthma and chronic obstructive pulmonary disease (COPD). By reducing airway inflammation, corticosteroids help to decrease swelling and mucus production, making it easier for patients to breathe and reducing the frequency and severity of exacerbations. Inflammation in the respiratory system can lead to increased resistance in the airways and exacerbate symptoms. Corticosteroids mitigate this by inhibiting the inflammatory response, which is mediated by various immune cells and cytokines. This action allows for improved airflow and respiratory function, thereby addressing the underlying issues that contribute to respiratory distress. The other options—bronchodilation, enhancing mucus clearance, and inhibiting infection—highlight mechanisms relevant to respiratory therapy but do not accurately describe the primary action of corticosteroids. Bronchodilators, for example, are responsible for relaxing the smooth muscles in the airways, while the clearance of mucus is typically managed through other medications or therapies. Additionally, corticosteroids do not directly combat infections but can affect the immune response, which is a separate function.

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://respiratorycrt.examzify.com>

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

SAMPLE