Registered Nurse (RN) Respiratory 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. Don't worry about getting everything right, 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, and take breaks to retain information better.

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.

7. Use Other Tools

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 of the following is NOT a treatment for chronic bronchitis or emphysema?**

   A. Albuterol

   B. Spiriva

   C. Theophylline

   D. Metoprolol

2. **Which medication ordered for a patient with COPD can cause hyperglycemia and bruising?**

   A. Prednisone

   B. Atrovent

   C. Flagyl

   D. Levaquin

3. **Which of the following are common signs of respiratory distress?**

   A. Increased heart rate and fever

   B. Increased respiratory rate, use of accessory muscles, cyanosis, and altered mental status

   C. Headache and fatigue

   D. Decreased appetite and nausea

4. **What is the primary cause of pulmonary embolism?**

   A. Pneumonia

   B. Deep vein thrombosis (DVT)

   C. Cardiac arrest

   D. Chronic bronchitis

5. **If a patient’s oxygen saturation is reading 89% but they appear comfortable and stable, what is the next best nursing action?**

   A. Continue to monitor the patient

   B. Increase the patient's oxygen level to 3 L

   C. Notify the doctor for further orders

   D. Turn off the alarm settings

6. Which medication provides the fastest relief to a patient experiencing an asthma attack?

A. Theophylline

B. Tiotropium

C. Albuterol

D. Cromolyn

7. True or False: The diaphragm contracts upward during inhalation to create a vacuum for air intake.

A. True

B. False

8. What is the significance of cyanosis in respiratory assessment?

A. It indicates an allergic reaction.

B. It signifies inadequate oxygen delivery to tissues, requiring immediate evaluation.

C. It shows the patient has a good oxygenation level.

D. It is a normal observation in elderly patients.

9. What is the correct way to use an incentive spirometer?

A. Encourage the patient to use it twice a day.

B. The patient exhales into the device rapidly and then coughs.

C. The patient inhales slowly from the device until no longer able, then holds breath for 6 seconds and exhales.

D. The patient rapidly inhales 10 times from the device and exhales for 6 seconds.

10. Regarding a latent tuberculosis infection, which statement is true?

A. "The patient is contagious and will have no signs and symptoms."

B. "The patient will have an abnormal chest x-ray."

C. "The patient will have a positive tuberculin skin test or IGRA test."

D. "The patient's sputum will test positive for mycobacterium tuberculosis."

Answers

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

Explanations

1. Which of the following is NOT a treatment for chronic bronchitis or emphysema?

A. Albuterol

B. Spiriva

C. Theophylline

D. Metoprolol

Metoprolol is not a treatment for chronic bronchitis or emphysema as it is primarily a beta-blocker used to manage cardiovascular conditions like hypertension, heart failure, and arrhythmias. In the context of respiratory diseases, the main therapeutic approach involves bronchodilators and anti-inflammatory medications. Albuterol, a short-acting beta-agonist, is widely used in the management of obstructive airway diseases, providing quick relief of bronchospasm. Spiriva (tiotropium) is an anticholinergic long-acting bronchodilator that helps to open airways and improve breathing in patients with chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema. Theophylline, a methylxanthine, is another medication that can promote bronchodilation and is used as an adjunct therapy in chronic bronchitis and emphysema. In summary, while albuterol, Spiriva, and theophylline are specifically indicated for managing symptoms and improving lung function in patients with chronic bronchitis or emphysema, metoprolol does not address the underlying respiratory issues associated with these conditions.

2. Which medication ordered for a patient with COPD can cause hyperglycemia and bruising?

A. Prednisone

B. Atrovent

C. Flagyl

D. Levaquin

Prednisone is a corticosteroid that is commonly prescribed for managing conditions like Chronic Obstructive Pulmonary Disease (COPD) because of its powerful anti-inflammatory effects. One of the notable side effects of corticosteroids, particularly with systemic use like that of prednisone, is the potential to cause hyperglycemia. This occurs because corticosteroids can elevate blood sugar levels by promoting gluconeogenesis in the liver and reducing glucose uptake in peripheral tissues. Additionally, prednisone can lead to bruising, particularly in cases of long-term use or higher doses. This happens because corticosteroids can also affect the body's collagen synthesis and the structure of blood vessels, making them more susceptible to rupture, thus leading to easy bruising. Other medications such as Atrovent (an anticholinergic), Flagyl (an antibiotic), and Levaquin (a fluoroquinolone antibiotic) do not typically have a direct association with causing hyperglycemia or bruising, making prednisone the clear choice for this question. Therefore, understanding the effects of corticosteroids like prednisone not only helps in managing COPD but also prepares the nurse to monitor and manage these potential side effects effectively.

3. Which of the following are common signs of respiratory distress?

A. Increased heart rate and fever

B. Increased respiratory rate, use of accessory muscles, cyanosis, and altered mental status

C. Headache and fatigue

D. Decreased appetite and nausea

Increased respiratory rate, use of accessory muscles, cyanosis, and altered mental status are indeed common signs of respiratory distress. Each of these indicators reflects the body's response to inadequate oxygenation or increased work of breathing. An increased respiratory rate, or tachypnea, often indicates that the body is attempting to compensate for low oxygen levels or elevated carbon dioxide levels. The use of accessory muscles, such as those in the neck and abdomen, signifies that the patient is struggling to breathe effectively, necessitating the engagement of additional muscle power beyond the diaphragm. Cyanosis, characterized by a bluish discoloration of the skin, especially in the lips and extremities, indicates that the body is not receiving sufficient oxygen, as it occurs due to deoxygenated hemoglobin in the bloodstream. Altered mental status, which may include confusion, restlessness, or lethargy, indicates that the brain is being affected by reduced oxygen levels, highlighting the critical need for immediate assessment and potential intervention. Understanding these signs helps healthcare professionals recognize respiratory distress early and respond promptly, potentially preventing further complications.

4. What is the primary cause of pulmonary embolism?

A. Pneumonia

B. Deep vein thrombosis (DVT)

C. Cardiac arrest

D. Chronic bronchitis

The primary cause of pulmonary embolism is deep vein thrombosis (DVT). This condition occurs when a blood clot forms in a deep vein, often in the legs, and then dislodges, traveling through the bloodstream to the lungs where it can block pulmonary arteries. The significant relationship between DVT and pulmonary embolism is crucial for understanding how these conditions are connected. When a clot from the deep venous system travels to the lungs, it can cause serious complications, including impaired gas exchange and reduced blood flow. Recognizing DVT as a leading precursor to pulmonary embolism underlines the importance of effective prevention and management strategies, especially in at-risk patient populations, such as those with limited mobility or underlying hypercoagulable states. Other conditions mentioned, such as pneumonia, cardiac arrest, and chronic bronchitis, do not lead to pulmonary embolism in the same direct manner as DVT does. While they can contribute to respiratory symptoms or complications, they do not involve the mechanism of thromboembolic obstruction that is specific to pulmonary embolism. Understanding this pathophysiological link helps guide interventions and patient education in nursing practice.

5. If a patient’s oxygen saturation is reading 89% but they appear comfortable and stable, what is the next best nursing action?

A. Continue to monitor the patient

B. Increase the patient's oxygen level to 3 L

C. Notify the doctor for further orders

D. Turn off the alarm settings

When a patient’s oxygen saturation reads 89% but they appear comfortable and stable, the next best nursing action is to continue to monitor the patient. This choice is appropriate because it reflects the need to evaluate the patient’s condition over time rather than making immediate changes based on a single measurement. Monitoring allows the nurse to assess if the patient's oxygen saturation remains stable, improves, or declines, and whether there are any changes in the patient's clinical status. Given that the patient appears comfortable, it suggests that they are compensating for the lower oxygen saturation. Making any sudden changes, such as increasing oxygen levels or notifying a physician, may not be warranted immediately and could lead to unnecessary interventions. By maintaining vigilance through monitoring, the nurse ensures that should the patient’s condition change or if the saturation decreases further, immediate actions can be implemented based on evidence and clinical judgment. This approach aligns with best practices in patient safety and care.

6. Which medication provides the fastest relief to a patient experiencing an asthma attack?

A. Theophylline

B. Tiotropium

C. Albuterol

D. Cromolyn

Albuterol is a short-acting beta-agonist (SABA) that provides rapid relief for patients experiencing asthma attacks. It works by stimulating beta-2 adrenergic receptors in the bronchial smooth muscle, leading to quick bronchodilation. This mechanism allows the airways to open up within minutes, which is critical during an acute asthma episode when immediate symptom relief is necessary. Other options like theophylline and tiotropium serve as long-term management medications rather than quick relief agents. Theophylline has a slower onset of action and requires careful monitoring due to potential side effects. Tiotropium is a long-acting anticholinergic inhaler not designed for acute situations but rather for maintenance therapy. Cromolyn is a mast cell stabilizer that also takes time to work and is not a rescue medication. Overall, albuterol's rapid action and effectiveness in quickly relieving bronchospasm make it the treatment of choice during an acute asthma attack.

7. True or False: The diaphragm contracts upward during inhalation to create a vacuum for air intake.

A. True

B. False

The statement is false because during inhalation, the diaphragm actually contracts downward. This movement increases the volume of the thoracic cavity, which decreases the pressure inside the lungs relative to the atmospheric pressure. As a result, air is drawn into the lungs due to this pressure difference. The diaphragm is a crucial muscle in respiration, and its downward contraction allows for lung expansion and facilitates air intake, rather than contracting upward. This understanding of diaphragmatic movement during the respiratory cycle is essential for nurses and healthcare professionals in assessing respiratory function and teaching patients about breathing mechanics.

8. What is the significance of cyanosis in respiratory assessment?

A. It indicates an allergic reaction.

B. It signifies inadequate oxygen delivery to tissues, requiring immediate evaluation.

C. It shows the patient has a good oxygenation level.

D. It is a normal observation in elderly patients.

Cyanosis is the bluish discoloration of the skin and mucous membranes that occurs when there is a significant lack of oxygen in the blood. This condition is clinically significant because it serves as a visual cue indicating that the body tissues are not receiving sufficient oxygen. When cyanosis is observed during a respiratory assessment, it raises an immediate concern about potential respiratory distress or hypoxia. Timely evaluation is critical, as inadequate oxygen delivery can lead to severe complications if not addressed promptly. In contrast, allergic reactions can produce a variety of symptoms, but cyanosis is not a direct indicator of such reactions. Additionally, the presence of cyanosis does not correlate with good oxygenation; rather, it indicates the opposite. Lastly, while elderly patients can experience changes in skin tone and circulation, cyanosis is not considered a normal finding in this population and should always prompt further investigation. Thus, recognizing the significance of cyanosis is vital for effective respiratory assessment and management.

9. What is the correct way to use an incentive spirometer?

A. Encourage the patient to use it twice a day.

B. The patient exhales into the device rapidly and then coughs.

C. The patient inhales slowly from the device until no longer able, then holds breath for 6 seconds and exhales.

D. The patient rapidly inhales 10 times from the device and exhales for 6 seconds.

The correct way to use an incentive spirometer emphasizes the importance of inhalation technique in promoting lung expansion and preventing atelectasis. By inhaling slowly from the device, the patient is able to engage the alveoli, leading to improved ventilation and oxygenation. Holding the breath for 6 seconds helps to maximize the expansion of the lungs, allowing more air to reach deeper areas that may not be utilized during shallow breathing. Exhaling afterwards ensures that the patient does not retain air excessively, which is beneficial in maintaining effective respiratory function during the use of this device. This technique is particularly valuable in postoperative care and among patients with respiratory issues, as it encourages deep breathing and helps to clear secretions, leading to better overall pulmonary health.

10. Regarding a latent tuberculosis infection, which statement is true?

A. "The patient is contagious and will have no signs and symptoms."

B. "The patient will have an abnormal chest x-ray."

C. "The patient will have a positive tuberculin skin test or IGRA test."

D. "The patient's sputum will test positive for mycobacterium tuberculosis."

The statement that is true regarding a latent tuberculosis infection is that the patient will have a positive tuberculin skin test or IGRA test. In cases of latent tuberculosis, the individual has been infected with the Mycobacterium tuberculosis bacteria but does not exhibit active disease symptoms. The immune system manages to contain the bacteria, which is why the person does not feel sick and is not contagious. A positive tuberculin skin test (TST) or interferon-gamma release assay (IGRA) indicates exposure to the bacteria, thus confirming the latent infection. These tests do not necessarily indicate that the individual currently has active tuberculosis, but rather that there has been an immune response to the bacteria. The other statements are not true for latent tuberculosis infection. Patients with latent TB do not display contagiousness, nor do they generally show symptoms. Chest x-rays in these cases often appear normal, and sputum testing for Mycobacterium tuberculosis would only be positive if the individual had progressed to active tuberculosis disease.

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://registerednurse-respiratory.examzify.com

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