EMT Airway Management Practice Test (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. **Irregular respirations characterized by an increasing rate and depth of breathing followed by periods of apnea are called which pattern?**
   - **A. Cheyne-Stokes respirations.**
   - **B. Agonal respirations.**
   - **C. Ataxic respirations.**
   - **D. Eupneic respirations.**

2. **Which statement is true regarding cyanosis and hypoxia?**
   - **A. Cyanosis is an early sign of hypoxia.**
   - **B. Cyanosis indicates adequate oxygenation.**
   - **C. Cyanosis is a late sign of hypoxia.**
   - **D. Cyanosis only occurs with severe dehydration.**

3. **What is the term for elevated carbon dioxide levels in the blood?**
   - **A. Acidosis**
   - **B. Hypercarbia**
   - **C. Hypoxemia**
   - **D. Hypoxia**

4. **What is the primary purpose of the alveolar sacs in gas exchange?**
   - **A. To filter air**
   - **B. To facilitate diffusion of oxygen and carbon dioxide with capillaries**
   - **C. To warm and humidify inspired air**
   - **D. To connect bronchi to the trachea**

5. **Which substance reduces alveolar surface tension and helps prevent alveolar collapse?**
   - **A. Oxygen concentration.**
   - **B. Surfactant.**
   - **C. Mucus layer.**
   - **D. Partial pressure of carbon dioxide.**

6. During CPAP in severe respiratory distress, if heart rate increases and the patient becomes unresponsive, you should

A. remove the CPAP device and ventilate him with a bag-mask device.

B. decrease the amount of pressure that the CPAP device is delivering.

C. remove the CPAP device and apply oxygen by nonrebreathing mask.

D. increase the amount of pressure that the CPAP device is delivering.

7. Which statement best describes exhalation during normal breathing?

A. is a passive process caused by increased intrathoracic pressure.

B. requires muscular effort to effectively expel air from the lungs.

C. is an active process caused by decreased intrathoracic pressure.

D. occurs when the diaphragm lowers and expels air from the lungs.

8. What is the initial step for airway management in a trauma patient with facial bleeding?

A. Suctioning first

B. Jaw-thrust

C. Oropharyngeal airway

D. Nasal airway

9. When ventilating a patient with a stoma, to prevent air from escaping from the mouth and nose, you should:

A. Seal the mouth and nose

B. Thrust the jaw forward

C. Thoroughly suction the stoma

D. Ventilate with less pressure

10. Which action would NOT help minimize the risk of gastric distention when ventilating an apneic patient with a bag-mask device?

A. delivering each breath over 1 second.

B. ventilating the patient at the appropriate rate.

C. increasing the amount of delivered tidal volume.

D. ensuring the appropriate airway position.

Answers

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

Explanations

1. Irregular respirations characterized by an increasing rate and depth of breathing followed by periods of apnea are called which pattern?

A. Cheyne-Stokes respirations.

B. Agonal respirations.

C. Ataxic respirations.

D. Eupneic respirations.

The pattern described is Cheyne-Stokes respiration. It features a regular cyclical sequence: breathing gradually increases in rate and depth (a crescendo), then gradually decreases (a decrescendo) until it stops briefly (period of apnea), and the cycle then repeats. This waxing and waning with a pause happens because the brain's control of breathing is temporarily overshooting and then undershooting the drive to breathe. This pattern is often seen in patients with conditions such as congestive heart failure, stroke or other brain injuries, or increased intracranial pressure, and can also appear in some older patients or during sleep. It helps distinguish a dysregulated respiratory rhythm from other abnormal patterns. Why the other patterns don't fit: agonal respirations are irregular, gasping, and not part of a smooth, repeating crescendo–decrescendo cycle; ataxic (Biot) respirations are completely irregular in rate and depth with irregular pauses; eupneic means normal, regular breathing.

2. Which statement is true regarding cyanosis and hypoxia?

A. Cyanosis is an early sign of hypoxia.

B. Cyanosis indicates adequate oxygenation.

C. Cyanosis is a late sign of hypoxia.

D. Cyanosis only occurs with severe dehydration.

Cyanosis shows up only after a meaningful amount of deoxygenated hemoglobin is present in the blood, which typically happens when oxygen delivery is already seriously compromised. Because it requires a certain threshold of deoxygenated hemoglobin, cyanosis is considered a late sign of hypoxia—the body has often already tried to compensate, and noticeable bluish discoloration appears when those compensations are no longer sufficient. In practice, you'll notice earlier clues like rapid, shallow breathing, a fast pulse, anxiety or restlessness, sweating, and changes in mental status. Central cyanosis (lips, tongue, mucous membranes) indicates true systemic hypoxemia, whereas peripheral cyanosis can occur with cold or poor perfusion and isn't as reliable for judging oxygenation. Also, cyanosis can be hard to detect in people with darker skin, so rely on oxygen saturation (SpO2) and overall clinical status rather than waiting for bluish discoloration. The statement aligns with physiology: cyanosis is a late sign of hypoxia.

3. What is the term for elevated carbon dioxide levels in the blood?

A. Acidosis

B. Hypercarbia

C. Hypoxemia

D. Hypoxia

Elevated carbon dioxide in the blood is called hypercarbia (also known as hypercapnia). This term specifically describes higher CO2 levels in the blood, regardless of pH. Acidosis refers to a low blood pH and can occur when CO2 is high, but the term asked for is the CO2 elevation itself. The other options describe oxygen status—hypoxemia means low blood oxygen, and hypoxia means inadequate oxygen delivery to tissues. So hypercarbia is the correct term.

4. What is the primary purpose of the alveolar sacs in gas exchange?

A. To filter air

B. To facilitate diffusion of oxygen and carbon dioxide with capillaries

C. To warm and humidify inspired air

D. To connect bronchi to the trachea

Gas exchange happens when oxygen and carbon dioxide diffuse across the very thin alveolar-capillary membrane. The alveolar sacs provide a huge surface area and an extremely thin barrier, surrounded by a dense network of capillaries, so gases can move readily. Oxygen moves from the air in the alveoli into the blood, while carbon dioxide moves from the blood into the alveolar air to be exhaled, driven by differences in partial pressures. Surfactant helps keep the alveoli open, maintaining surface area for efficient diffusion. The other functions belong to different parts of the airway system—for example, filtering and warming air occur in the upper airways, and the trachea-bronchial tree transports air—so the primary role of the alveolar sacs is diffusion of oxygen and carbon dioxide with the capillaries.

5. Which substance reduces alveolar surface tension and helps prevent alveolar collapse?

A. Oxygen concentration.

B. Surfactant.

C. Mucus layer.

D. Partial pressure of carbon dioxide.

Surfactant lowers surface tension at the air–liquid interface inside the alveoli, which prevents small alveoli from collapsing at the end of expiration and makes breathing easier. It is produced by type II pneumocytes and consists of phospholipids and specific proteins that spread along the alveolar surface. Because it reduces the energy needed to keep alveoli open, more of the lung remains inflated, improving compliance and decreasing work of breathing. In premature infants, insufficient surfactant leads to widespread alveolar collapse (respiratory distress syndrome), highlighting its crucial role in maintaining alveolar stability. Oxygen concentration changes oxygen delivery, not surface tension. The mucus layer protects and humidifies airways but doesn't prevent alveolar collapse. Partial pressure of carbon dioxide influences breathing drive and acid-base balance, not the surface tension of alveoli.

6. During CPAP in severe respiratory distress, if heart rate increases and the patient becomes unresponsive, you should

A. remove the CPAP device and ventilate him with a bag-mask device.

B. decrease the amount of pressure that the CPAP device is delivering.

C. remove the CPAP device and apply oxygen by nonrebreathing mask.

D. increase the amount of pressure that the CPAP device is delivering.

When a patient on CPAP deteriorates to unresponsiveness with a rising heart rate, the priority is to protect the airway and provide effective ventilation with a bag-valve-mask device. CPAP relies on the patient's ability to breathe spontaneously and to maintain airway reflexes. If the patient becomes unresponsive, these protections are lost, increasing the risk of airway obstruction and aspiration. Switching to bag-valve-mask ventilation allows you to actively ventilate with high-flow oxygen and monitor chest rise, while you manage the airway, suction as needed, and consider advanced airway assistance. Lowering CPAP pressure would not address the problem of an unprotected airway or ensure adequate ventilation. A nonrebreathing mask can oxygenate but does not provide ventilation for an unresponsive patient. Increasing CPAP pressure could worsen hemodynamics and further compromise ventilation in a patient who cannot protect their airway.

7. Which statement best describes exhalation during normal breathing?

A. is a passive process caused by increased intrathoracic pressure.

B. requires muscular effort to effectively expel air from the lungs.

C. is an active process caused by decreased intrathoracic pressure.

D. occurs when the diaphragm lowers and expels air from the lungs.

Exhalation during normal breathing is a passive process driven by the elastic recoil of the lungs and chest wall. When the inspiratory muscles relax, the chest returns to its resting size and the lungs recoil, which increases intrathoracic pressure. That rise in pressure pushes air out of the lungs without the need for active muscle effort. This aligns with quiet breathing, where no extra work is required. The other descriptions describe conditions outside normal quiet breathing: exhalation that requires muscle effort corresponds to forced expiration, not resting breath; expiration described as due to decreased intrathoracic pressure would actually apply to inspiration; and the action of the diaphragm lowering is what occurs during inspiration, not expiration.

8. What is the initial step for airway management in a trauma patient with facial bleeding?

A. Suctioning first

B. Jaw-thrust

C. Oropharyngeal airway

D. Nasal airway

Clearing the airway of blood and secretions is the first move because pooled blood in the mouth and throat can rapidly obstruct ventilation and hide ongoing airway compromise. Suctioning quickly removes this debris, making it possible to assess airway patency, prevent aspiration, and plan the next steps with a clear view of what you're dealing with. After the airway is free of blood, you can move on to opening the airway with a jaw-thrust while maintaining cervical spine precautions, then decide on an airway adjunct or definitive airway as needed. Nasal airways are avoided in facial trauma due to the risk of skull-base fracture and worsening injury, and an oropharyngeal airway is less reliable when blood is present and may not be suitable depending on gag reflex and consciousness. So suctioning first sets the stage for effective airway management.

9. When ventilating a patient with a stoma, to prevent air from escaping from the mouth and nose, you should:

A. Seal the mouth and nose

B. Thrust the jaw forward

C. Thoroughly suction the stoma

D. Ventilate with less pressure

Direct ventilation through a stoma works best when you prevent air from leaking out of the mouth and nose. Sealing the mouth and nose directs the breaths into the tracheostomy/opening, ensuring the delivered tidal volume reaches the lungs instead of escaping upward. Without sealing, air can escape through the upper airway, making ventilation inefficient and harder to achieve adequate chest rise. The other actions don't specifically stop that leak or improve the effectiveness of ventilation through the stoma.

10. Which action would NOT help minimize the risk of gastric distention when ventilating an apneic patient with a bag-mask device?

A. delivering each breath over 1 second.

B. ventilating the patient at the appropriate rate.

C. increasing the amount of delivered tidal volume.

D. ensuring the appropriate airway position.

Gastric distention during bag-mask ventilation occurs when air is forced into the stomach rather than the lungs, usually because of high airway pressures or delivering too much air at once. The best way to minimize this is to keep ventilation gentle and controlled while ensuring the airway is open and correctly aligned. Delivering each breath over about a second helps limit peak airway pressures, so less air is pushed into the stomach. Ventilating at an appropriate rate avoids both under- and over-ventilation, preventing unnecessary pressure buildup. Ensuring the airway is in the correct position reduces resistance and makes it easier to deliver effective breaths without needing to increase pressure. Increasing the amount of delivered tidal volume, on the other hand, would push more air into the stomach and worsen gastric distention, so it does not help reduce the risk.

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://emtairwaymanagement.examzify.com

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