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. To select the proper size of an oropharyngeal airway, you should measure from the

A. center of the mouth to the posterior ear.

B. corner of the mouth to the earlobe.

C. angle of the jaw to the center of the mouth.

D. corner of the mouth to the superior ear.

2. Which oxygen delivery device is capable of delivering up to 90% inspired oxygen with a tight seal at high flow?

A. Oxygen tent

B. Nasal cannula

C. Simple face mask

D. Nonrebreathing mask

3. What is the most significant complication associated with oropharyngeal suctioning?

A. clogging of the catheter with thick secretions.

B. vomiting from stimulating the anterior airway.

C. oral abrasions from vigorous suctioning.

D. hypoxia due to prolonged suction attempts.

4. 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.

5. What is the approximate pressure in a full oxygen cylinder?

A. 2,000 psi

B. 3,000 psi

C. 1,000 psi

D. 500 psi

6. 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

7. Central chemoreceptors located in the medulla provide feedback to increase the rate and depth of breathing when they sense:

A. increased levels of oxygen in the blood and a decrease in the pH of the cerebrospinal fluid.

B. slight decreases in carbon dioxide and an increase in the pH of the cerebrospinal fluid.

C. decreased levels of oxygen in the blood and an increase in the pH of the cerebrospinal fluid.

D. slight increases in carbon dioxide or a decrease in the pH of the cerebrospinal fluid.

8. The head tilt-chin lift maneuver is MOST appropriate for which scenario?

A. A 37-year-old female who is found unconscious in her bed

B. A 45-year-old male who is semiconscious after falling 20 feet

C. A 24-year-old male who is found unconscious at the base of a tree

D. A 50-year-old male who is unconscious following head trauma

9. 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.

10. At a flow rate of 6 L/min, a nasal cannula can deliver an approximate oxygen concentration up to which percentage?

A. 44%.

B. 24%.

C. 52%.

D. 35%.

Answers

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

Explanations

1. To select the proper size of an oropharyngeal airway, you should measure from the

A. center of the mouth to the posterior ear.

B. corner of the mouth to the earlobe.

C. angle of the jaw to the center of the mouth.

D. corner of the mouth to the superior ear.

Measuring from the corner of the mouth to the earlobe is used because this length best approximates how far the airway needs to extend to lift the tongue away from the back of the throat and seat the device so the flange rests at the lips. If the airway is too long, it can push the tongue or tissues backward and cause obstruction or trauma; if it's too short, the tongue may still block the airway. Other measurement methods don't reliably reflect the depth needed for an effective fit across patients, making corner-of-mouth to earlobe the practical standard.

2. Which oxygen delivery device is capable of delivering up to 90% inspired oxygen with a tight seal at high flow?

A. Oxygen tent

B. Nasal cannula

C. Simple face mask

D. Nonrebreathing mask

The key idea is delivering a high concentration of oxygen by preventing air from diluting the inhaled gas. A nonrebreathing mask uses a reservoir bag and one-way valves on the exhalation ports, so during inhalation the mask draws mostly oxygen from the bag and the oxygen source rather than room air. When it's fitted tightly and supplied with high flow (typically about 10–15 L/min), the bag stays inflated and the valves limit entrainment, allowing inspired oxygen concentrations to approach about 90%. Nasal cannulas deliver relatively low FiO_2 because they primarily add oxygen to the air the patient is already drawing in and don't prevent room-air entrainment. Simple face masks provide a modest increase but are limited by leaks and inability to maintain a high, constant FiO_2. Oxygen tents are not a tight-seal delivery and aren't suitable for achieving very high FiO_2 quickly. So the nonrebreathing mask is the device capable of delivering up to near 90% inspired oxygen with a tight seal at high flow.

3. What is the most significant complication associated with oropharyngeal suctioning?

A. clogging of the catheter with thick secretions.

B. vomiting from stimulating the anterior airway.

C. oral abrasions from vigorous suctioning.

D. hypoxia due to prolonged suction attempts.

When suctioning the oropharynx, the biggest risk is hypoxia from interrupting ventilation and removing oxygen from the airway during the procedure. Negative pressure draws secretions out but also reduces the amount of air and oxygen reaching the lungs, which can quickly lower oxygen saturation if suction passes are prolonged or repeated without giving the patient a chance to reoxygenate. To minimize this risk, preoxygenate when possible, keep each suction pass brief (about 5–10 seconds), and ventilate or provide oxygen between passes. Monitoring the patient's SpO2 is essential during the procedure. Other potential issues, like clogging from thick secretions, vomiting from airway stimulation, or oral abrasions from aggressive suctioning, can occur but are less life-threatening than the immediate danger of hypoxia.

4. 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.

5. What is the approximate pressure in a full oxygen cylinder?

A. 2,000 psi

B. 3,000 psi

C. 1,000 psi

D. 500 psi

Oxygen is stored in cylinders under high pressure, and the gauge on the regulator shows how much is left. In typical EMS practice, a full oxygen cylinder is filled to about 2,000 psi. That pressure is used as a practical benchmark to estimate remaining gas, knowing that as you deliver oxygen the pressure drops. If you see much higher pressure (for example, around 3,000 psi) that could correspond to a different, larger cylinder type, but for the standard EMS full cylinder the common approximation is 2,000 psi. Lower readings like 1,000 psi or 500 psi reflect a partially used or nearly empty cylinder. So the best approximate value for a full cylinder in this context is about 2,000 psi.

6. 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.

7. Central chemoreceptors located in the medulla provide feedback to increase the rate and depth of breathing when they sense:

A. increased levels of oxygen in the blood and a decrease in the pH of the cerebrospinal fluid.

B. slight decreases in carbon dioxide and an increase in the pH of the cerebrospinal fluid.

C. decreased levels of oxygen in the blood and an increase in the pH of the cerebrospinal fluid.

D. slight increases in carbon dioxide or a decrease in the pH of the cerebrospinal fluid.

Central chemoreceptors in the medulla monitor the acidity of cerebrospinal fluid, which reflects carbon dioxide levels in the blood. When CO_2 rises, it diffuses into the CSF and converts to carbonic acid, dissociating into hydrogen ions and bicarbonate. The increased hydrogen ion concentration lowers CSF pH, and these receptors sense that change and send signals to the respiratory centers to increase both the rate and depth of breathing to blow off CO_2 and raise pH. That's why slight increases in CO_2 or a decrease in CSF pH provoke a stronger ventilatory drive. Oxygen levels play a smaller direct role for central chemoreceptors; the primary oxygen-sensitive control comes from peripheral chemoreceptors (like carotid bodies) when oxygen is low. So the scenario that best fits is a small rise in CO_2 or a drop in CSF pH, which directly stimulates these medullary sensors to boost breathing.

8. The head tilt-chin lift maneuver is MOST appropriate for which scenario?

A. A 37-year-old female who is found unconscious in her bed

B. A 45-year-old male who is semiconscious after falling 20 feet

C. A 24-year-old male who is found unconscious at the base of a tree

D. A 50-year-old male who is unconscious following head trauma

When opening the airway, you choose the technique based on whether there's a suspected cervical spine injury. The head tilt-chin lift is the quickest way to open an airway when you have no reason to suspect neck or spine injury because it maneuvers the tongue away from the airway by tilting the head back and lifting the chin. This fits a patient who's unconscious in bed with no reported trauma or mechanism suggesting spinal injury. In that case, you can use head tilt-chin lift to rapidly clear the airway and ventilate. In the other scenarios, there's clear or likely head or neck trauma (fall from height, unconscious after trauma, potential cervical injury). In those situations you'd protect the spine with in-line stabilization and use a jaw-thrust maneuver to open the airway without extending the neck.

9. 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.

10. At a flow rate of 6 L/min, a nasal cannula can deliver an approximate oxygen concentration up to which percentage?

A. 44%.

B. 24%.

C. 52%.

D. 35%.

Oxygen concentration from a nasal cannula rises with flow but is limited by mixing with room air as you breathe in. The typical relationship is about 24% at 1 L/min and adds roughly 3–4 percentage points for each extra liter, topping out around 44% at 6 L/min. So at 6 L/min you can approximate about 44% FiO2. The other options don't fit this pattern: 24% is what you'd see at a much lower flow, around 1 L/min; 35% is closer to what you'd get at some mid-range flows but not the maximum for 6 L/min; 52% would require a device capable of delivering substantially more oxygen without entraining room air.

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!