NORTH CAROLINA EMT-BASIC (EMT-B) STATE PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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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.

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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!

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Questions

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1. **In blast injuries, which of the following organ systems may experience increased risk due to pressure changes?**

   A. Circular organs, including the heart

   B. Hollow organs, including the lungs and ears

   C. External organs, such as skin

   D. Dense organs, like the spleen

2. **What does crepitus refer to?**

   A. The sound of air escaping from a wound

   B. The sensation of broken bones grinding together

   C. The presence of a foreign object in a wound

   D. The feeling of swelling in soft tissue

3. **In which situation would you consider using the recovery position?**

   A. When a patient is unconscious but breathing

   B. After performing chest compressions

   C. When a patient shows signs of shock

   D. For all patients upon arrival

4. **What is the normal respiratory rate for a newborn?**

   A. 20-30 breaths per minute

   B. 30-60 breaths per minute

   C. 40-70 breaths per minute

   D. 10-20 breaths per minute

5. **What is a critical first step in treating a patient with heat stroke?**

   A. Cool the patient immediately

   B. Administer oral fluids

   C. Apply heat pads

   D. Make the patient run cold water

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6. During the assessment, what should an EMT-B evaluate first for airway management?

A. Respiratory rate

B. Obstructions in the air passage

C. Heart rate

D. Blood pressure

7. The acronym ROSC stands for which of the following?

A. Return Of Spontaneous Contraction

B. Return Of Spontaneous Circulation

C. Rapid Offset of Spinal Compression

D. Rehabilitation Of Spinal Coordination

8. Which symptom is characteristic of a contusion?

A. Skin breakdown and discoloration

B. Visible skin lesions

C. Intact skin with bruising

D. Delayed painful response

9. What should an EMT-B do first upon arriving at the scene of an emergency?

A. Assess the patient immediately

B. Call for backup

C. Ensure scene safety

D. Perform a quick check of the surroundings

10. Which device is used to deliver a precise concentration of oxygen?

A. Nasal cannula

B. Venturi mask

C. Bag-valve mask

D. Non-rebreather mask

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Answers

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

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Explanations

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1. In blast injuries, which of the following organ systems may experience increased risk due to pressure changes?

A. Circular organs, including the heart

B. Hollow organs, including the lungs and ears

C. External organs, such as skin

D. Dense organs, like the spleen

In blast injuries, the organ systems that are most vulnerable to changes in pressure are hollow organs, such as the lungs and ears. This vulnerability arises because hollow organs are filled with air or other gases, and they can be more easily affected by rapid changes in external pressure that occur during a blast wave. The sudden and intense pressure changes can cause barotrauma, leading to ruptures or tears in these hollow structures. For instance, the lungs particularly are at risk for conditions like pneumothorax as the pressure difference can cause an accumulation of air outside the lung, impairing respiratory function. Similarly, the ears can experience damage such as eardrum perforation due to the abrupt pressure fluctuations, which can lead to hearing loss or other auditory issues. Other organ systems mentioned, such as circular organs like the heart and dense organs like the spleen, are not typically as susceptible to the immediate effects of pressure changes during a blast. External organs like the skin, while they can sustain injuries from shrapnel or thermal effects during an explosion, are not specifically impacted by pressure changes in the same manner as hollow organs are. Thus, the correct answer highlights the unique susceptibility of hollow organs to the pressure dynamics commonly associated with blast injuries.

2. What does crepitus refer to?

A. The sound of air escaping from a wound

B. The sensation of broken bones grinding together

C. The presence of a foreign object in a wound

D. The feeling of swelling in soft tissue

Crepitus refers specifically to the sensation or sound that occurs when broken bones or damaged cartilage move against each other, often producing a characteristic grinding or crackling noise. This phenomenon typically occurs in conditions such as fractures or severe joint injuries, where there is a disruption in normal anatomical structures. In the context of patient assessment, recognizing crepitus is essential for EMTs, as it may indicate significant underlying trauma that requires specific attention and intervention. Understanding this concept helps responders to identify the nature of an injury which is crucial for determining appropriate treatment and transport strategies.

3. In which situation would you consider using the recovery position?

A. When a patient is unconscious but breathing

B. After performing chest compressions

C. When a patient shows signs of shock

D. For all patients upon arrival

The recovery position is specifically intended for unconscious patients who are still breathing. This position helps to keep the airway open while allowing any fluids to drain from the mouth, reducing the risk of aspiration. It is crucial to monitor the patient's breathing and responsiveness, and placing them in the recovery position provides a safe way to protect their airway until further help arrives. In the context of the other choices, after performing chest compressions, it is essential to monitor the patient's condition and not move them unnecessarily until a comprehensive assessment is conducted. In cases of shock, the priority is to stabilize the patient rather than place them in a lateral position. Finally, placing all patients in the recovery position is not universally appropriate, as many patients may not require it depending on their level of consciousness and respiratory status.

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4. What is the normal respiratory rate for a newborn?

A. 20-30 breaths per minute

B. 30-60 breaths per minute

C. 40-70 breaths per minute

D. 10-20 breaths per minute

The normal respiratory rate for a newborn falls within the range of 30 to 60 breaths per minute, making this the correct choice. This range is typical because newborns have a higher metabolic rate and oxygen demand compared to older children and adults, requiring more frequent breaths to meet their physiological needs. Newborns' respiratory rates can be quite variable and often fluctuate due to various factors such as sleeping or crying. However, maintaining a respiratory rate within the specified range is essential for adequate oxygenation and overall health. Recognizing this standard helps healthcare providers assess the respiratory function of newborns effectively. Understanding normal rates is also crucial for identifying potential respiratory distress or other medical concerns in these patients.

5. What is a critical first step in treating a patient with heat stroke?

A. Cool the patient immediately

B. Administer oral fluids

C. Apply heat pads

D. Make the patient run cold water

The critical first step in treating a patient with heat stroke is to cool the patient immediately. Heat stroke occurs when the body overheats and is unable to regulate its temperature, which can lead to serious complications or even death if not addressed promptly. Immediate cooling is essential to reduce the core body temperature and prevent organ damage. Cooling methods can include removing the patient from heat sources, applying cold packs to areas with high blood flow (such as the neck, armpits, and groin), and using fan-assisted evaporation. The goal is to lower the temperature as quickly as possible to stabilize the patient's condition. Other options, such as administering oral fluids or applying heat pads, are not appropriate in this scenario because they could exacerbate the condition. Oral fluids are not advisable; patients with heat stroke may have altered mental status or be unable to drink safely, which may lead to choking or further complications. Applying heat pads would counteract the necessary action of cooling and worsen the patient's condition, and making a patient run cold water is impractical and could cause further stress or complications. Therefore, immediate cooling is the most effective and critical action in managing a patient with heat stroke.

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6. During the assessment, what should an EMT-B evaluate first for airway management?

A. Respiratory rate

B. Obstructions in the air passage

C. Heart rate

D. Blood pressure

In airway management, the primary concern is to ensure that the patient's airway is clear and that there are no obstructions preventing airflow. When assessing a patient, an EMT-B should first check for any obstructions in the airway, such as foreign bodies, swelling, or fluids that could compromise breathing. This step is critical because even if a patient has adequate respiratory rate and heart rate, an obstructed airway can lead to inadequate oxygenation and potentially life-threatening situations. By prioritizing the evaluation of obstructions, the EMT-B can quickly identify and address any immediate threats to the patient's ability to breathe. Once the airway is assessed and determined to be clear, further evaluations, such as respiratory rate, heart rate, and blood pressure, can be performed to provide a comprehensive assessment of the patient's condition. This approach is consistent with the foundational principles of emergency care, which emphasize airway management as a critical first step in patient assessment and intervention.

7. The acronym ROSC stands for which of the following?

A. Return Of Spontaneous Contraction

B. Return Of Spontaneous Circulation

C. Rapid Offset of Spinal Compression

D. Rehabilitation Of Spinal Coordination

ROSC stands for "Return Of Spontaneous Circulation." This term is critical in the context of cardiopulmonary resuscitation (CPR) and post-cardiac arrest care. It indicates that a patient who has been in cardiac arrest has regained a heartbeat and is now experiencing the return of blood circulation on its own. This is a significant milestone during emergency medical interventions, as achieving ROSC suggests that the patient's heart is functioning adequately to supply blood to vital organs, which is essential for survival and recovery. Other terms mentioned in the choices are not used in the same context. While spontaneous contraction and circulation might seem related, the accurate medical terminology clearly identifies the importance of circulation in this specific instance. Understanding ROSC is pivotal for EMTs and healthcare providers, as it directs continued care and interventions post-arrest.

8. Which symptom is characteristic of a contusion?

A. Skin breakdown and discoloration

B. Visible skin lesions

C. Intact skin with bruising

D. Delayed painful response

A contusion, commonly known as a bruise, occurs when small blood vessels under the skin break due to trauma, causing blood to leak into the surrounding tissue. This leads to an area of discoloration, which is one of the most recognizable features of a contusion. The skin remains intact, meaning there is no open wound, which distinguishes it from more severe injuries like lacerations or abrasions. The presence of intact skin and bruising is characteristic of a contusion because the tissue damage is confined to areas beneath the surface. In contrast, other symptoms associated with more severe or different types of injuries, such as skin breakdown or visible skin lesions, would indicate alternative medical conditions rather than a straightforward contusion. Hence, recognizing the unique attributes of contusions is essential for accurate assessment and diagnosis in the field.

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9. What should an EMT-B do first upon arriving at the scene of an emergency?

A. Assess the patient immediately

B. Call for backup

C. Ensure scene safety

D. Perform a quick check of the surroundings

When an EMT-B arrives at the scene of an emergency, the first priority must always be to ensure the safety of the scene. This is crucial because a hazardous scene can pose risks not only to the patient but also to the EMTs, bystanders, and any additional responders. Ensuring scene safety involves observing the environment for potential threats, such as traffic, unstable structures, fire, hazardous materials, or violence, which could compromise everyone's well-being. By prioritizing scene safety, the EMT sets the stage for effective patient assessment and care without the risk of becoming an additional victim. Once the scene is determined to be safe, the EMT can then proceed to assess the patient, call for backup if necessary, or conduct a quick check of the surroundings for any additional potential hazards. It's a foundational principle in emergency response to mitigate risks before engaging in patient care.

10. Which device is used to deliver a precise concentration of oxygen?

A. Nasal cannula

B. Venturi mask

C. Bag-valve mask

D. Non-rebreather mask

The Venturi mask is designed specifically to deliver a precise concentration of oxygen to the patient. It works by drawing in room air through adjustable ports, allowing for a mix of oxygen and ambient air which can be calibrated to deliver specific oxygen concentrations. This capability makes it particularly useful for patients who require controlled oxygen therapy, such as those with chronic obstructive pulmonary disease (COPD), where too much oxygen can be detrimental. In contrast, while other devices like the nasal cannula or the non-rebreather mask provide oxygen delivery, they do not allow for the same level of precision in determining the exact concentration of oxygen that reaches the patient. The bag-valve mask is mainly used for providing positive pressure ventilation and does not focus on delivering a controlled concentration of oxygen. Therefore, the Venturi mask stands out as the most suitable option for ensuring that a patient receives the exact amount of oxygen as prescribed by their healthcare provider.

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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://ncemtbstate.examzify.com

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

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