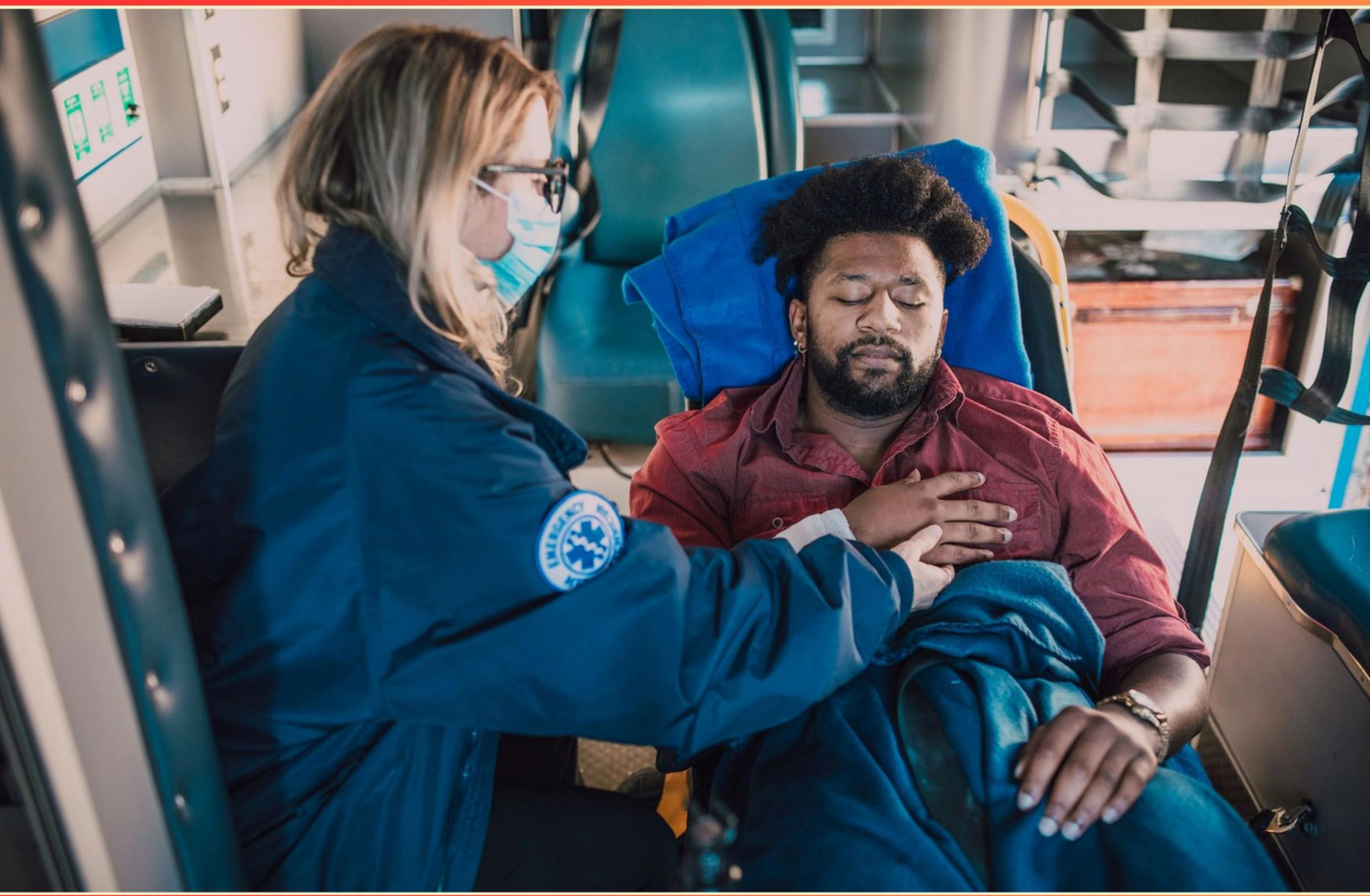
ADVANCED CARDIOVASCULAR LIFE SUPPORT (ACLS) PRACTICE EXAM (SAMPLE)

STUDY GUIDE



Prepare with structure. Pass with confidence

Table of Contents

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. What is the most reliable method of confirming and monitoring correct placement of an endotracheal tube?

A. Bag-valve-mask ventilation

B. Continuous waveform capnography

C. Chest X-ray

D. Manual auscultation

2. How do we determine the return of spontaneous circulation (ROSC) in ACLS?

A. By evaluating the patient's color and responsiveness

B. By observing signs of blood flow or effective heart function, such as a palpable pulse

C. By measuring blood pressure

D. By asking the patient if they can feel their limbs

3. After verifying the absence of a pulse, you initiate CPR with adequate bag-mask ventilation. What is your next action?

A. Prepare for intubation

B. IV or IO access

C. Administer epinephrine

D. Check for a pulse again

4. What is the purpose of using an automated external defibrillator (AED) during a cardiac event?

A. To monitor blood pressure

B. To analyze heart rhythm and deliver a shock if necessary

C. To provide oxygen to the patient

D. To assist in chest compressions

5. What is the usual post-cardiac arrest target range for PETCO2 when ventilating a patient who achieves return of spontaneous circulation (ROSC)?

A. 30-35 mm Hg

B. 35-40 mm Hg

C. 40-45 mm Hg

D. 45-50 mm Hg

6. What is the initial priority for an unconscious patient with any tachycardia on the monitor?

A. Provide oxygen immediately

B. Determine whether pulses are present

C. Start chest compressions

D. Apply defibrillator pads

7. What is an appropriate indication to stop or withhold resuscitative efforts?

A. Significant improvement in vital signs

B. Evidence of rigor mortis

C. Return of spontaneous circulation

D. Patient responsiveness to stimuli

8. When persistent tachycardia is asymptomatic, what characteristic should be considered?

A. QRS duration less than 0.08 seconds

B. QRS duration greater than 0.12 seconds

C. Presence of ST elevation

D. Heart rate below 100 beats per minute

9. Which action improves the quality of chest compressions delivered during a resuscitation attempt?

A. Increase the compression rate

B. Switch providers every minute

C. Switch providers about every 2 minutes or every 5 compression cycles

D. Maintain the same provider throughout

10. What is the initial dose of atropine for a patient with sinus bradycardia and hypotension?

A. 1.0 mg

B. 0.5 mg

C. 2.0 mg

D. 0.25 mg

Answers

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

Explanations

1. What is the most reliable method of confirming and monitoring correct placement of an endotracheal tube?

A. Bag-valve-mask ventilation

B. Continuous waveform capnography

C. Chest X-ray

D. Manual auscultation

The most reliable method of confirming and monitoring correct placement of an endotracheal tube is continuous waveform capnography. This technique provides real-time assessment of exhaled carbon dioxide levels, which signifies effective ventilation. When the endotracheal tube is correctly positioned in the trachea, the presence of carbon dioxide in exhaled air is detectable, resulting in a consistent waveform on the capnography monitor. This method not only confirms that the tube is in the correct location but also allows for continuous monitoring throughout the procedure, ensuring that any dislodgment or incorrect placement can be identified promptly. In contrast, while bag-valve-mask ventilation may provide breath sounds, it does not definitively confirm proper tube placement, as inadequate ventilatory support may still occur even if sounds are heard. Chest X-ray, though useful for confirming placement, is not a real-time method and can lead to delays in patient care. Manual auscultation can assist in assessing tube placement but is subjective and may not detect subtle misplacement or changes over time, making it less reliable compared to continuous waveform capnography.

2. How do we determine the return of spontaneous circulation (ROSC) in ACLS?

A. By evaluating the patient's color and responsiveness

B. By observing signs of blood flow or effective heart function, such as a palpable pulse

C. By measuring blood pressure

D. By asking the patient if they can feel their limbs

The determination of return of spontaneous circulation (ROSC) is primarily assessed by observing signs of blood flow or effective heart function, which includes the presence of a palpable pulse. When ROSC occurs, it indicates that the heart has resumed effective pumping action, enabling blood to circulate throughout the body. The ability to feel a pulse signifies that there is sufficient blood flow generated by the heart to the peripheries, which is a critical sign that the circulatory system is functioning. Evaluating the patient's color and responsiveness provides some information about the patient's overall status, but it is not a direct measure of blood flow or heart function. Similarly, while measuring blood pressure is important in evaluating a patient's hemodynamic state, it is not the most immediate or direct way to confirm ROSC. Lastly, asking the patient if they can feel their limbs is not a reliable method for determining ROSC, as many patients may not be fully responsive or may have altered consciousness after cardiac arrest. In summary, the most direct and reliable way to confirm ROSC is through the observation of a palpable pulse, indicating that the heart is effectively pumping blood.

3. After verifying the absence of a pulse, you initiate CPR with adequate bag-mask ventilation. What is your next action?

A. Prepare for intubation

B. IV or IO access

C. Administer epinephrine

D. Check for a pulse again

After verifying the absence of a pulse and initiating CPR with adequate bag-mask ventilation, the critical next action is to establish IV (intravenous) or IO (intraosseous) access. This step is vital because it allows for the rapid administration of medications such as epinephrine and other necessary interventions, which are crucial for improving the patient's chances of survival during cardiac arrest. Establishing IV or IO access enables healthcare providers to deliver lifesaving drugs effectively and efficiently, especially in a resuscitation scenario where every second counts. The ACLS guidelines emphasize the importance of obtaining vascular access early in the resuscitation efforts as medications need to be administered to facilitate heart rhythm stabilization and enhance perfusion. While preparing for intubation is important in advanced airway management, it typically follows the establishment of IV access and the administration of medications. Administering epinephrine is a critical step as well, but it should be done after confirming that IV or IO access is in place. Checking for a pulse again is also essential, but in the immediate steps of resuscitation, establishing access to deliver medications takes precedence.

4. What is the purpose of using an automated external defibrillator (AED) during a cardiac event?

A. To monitor blood pressure

B. To analyze heart rhythm and deliver a shock if necessary

C. To provide oxygen to the patient

D. To assist in chest compressions

The primary purpose of using an automated external defibrillator (AED) during a cardiac event is to analyze the heart's rhythm and deliver a shock if necessary. When a person experiences a sudden cardiac arrest, their heart may enter a life-threatening rhythm, such as ventricular fibrillation or pulseless ventricular tachycardia. The AED is designed to assess the heart's electrical activity and determine whether a shock (defibrillation) is needed to restore a normal rhythm. If the device identifies a shockable rhythm, it will prompt the user to deliver a shock, which can potentially save the patient's life by allowing the heart to re-establish an effective rhythm. While monitoring blood pressure, providing oxygen, and assisting in chest compressions are critical components of overall patient care during a cardiac event, they do not represent the primary function of an AED. The AED's critical role is specifically focused on rhythm analysis and defibrillation, making it an essential tool in emergency response situations where quick intervention can significantly improve outcomes.

5. What is the usual post-cardiac arrest target range for PETCO2 when ventilating a patient who achieves return of spontaneous circulation (ROSC)?

A. 30-35 mm Hg

B. 35-40 mm Hg

C. 40-45 mm Hg

D. 45-50 mm Hg

The usual post-cardiac arrest target range for PETCO2, or end-tidal carbon dioxide, when a patient achieves return of spontaneous circulation (ROSC) is 35-40 mm Hg. This range is considered optimal for several reasons. First, maintaining PETCO2 within this range indicates that sufficient cardiac output is being achieved, which reflects effective ventilation and perfusion. After ROSC, a higher PETCO2 (above 40 mm Hg) can suggest poor circulation and inadequate perfusion, while a lower PETCO2 (below 35 mm Hg) may indicate hyperventilation or inadequate cardiac output. Moreover, monitoring PETCO2 is essential as it provides real-time feedback on a patient's respiratory and circulatory status during the post-cardiac arrest phase. Achieving a PETCO2 level in the 35-40 mm Hg range supports optimal metabolic function and helps in guiding further resuscitative efforts and management strategies for the patient. This target range contributes to improved outcomes by ensuring the balance between oxygen delivery and carbon dioxide removal is maintained, which is critical in the recovery phase following a cardiac arrest.

6. What is the initial priority for an unconscious patient with any tachycardia on the monitor?

A. Provide oxygen immediately

B. Determine whether pulses are present

C. Start chest compressions

D. Apply defibrillator pads

The initial priority for an unconscious patient with any form of tachycardia is to determine whether pulses are present. Assessing the presence of a pulse is crucial because it will guide the subsequent actions. If the patient has a pulse, the approach may involve stabilizing the patient and considering advanced interventions to address the tachycardia. Conversely, if there is no pulse, this indicates a cardiac arrest situation, necessitating immediate initiation of chest compressions and defibrillation if indicated. In clinical practice, understanding whether the patient is still perfusing is critical to managing their care effectively. This assessment directs the entire treatment pathway, establishing whether the priority shifts toward supportive measures or aggressive resuscitative efforts.

7. What is an appropriate indication to stop or withhold resuscitative efforts?

A. Significant improvement in vital signs

B. Evidence of rigor mortis

C. Return of spontaneous circulation

D. Patient responsiveness to stimuli

The presence of rigor mortis is a significant indicator that the patient has undergone complete and irreversible death. In the context of resuscitation, once rigor mortis has developed, it signifies that the body's physiological processes have ceased and resuscitation efforts are no longer effective or appropriate. This condition typically develops several hours post-mortem, indicating that the individual cannot be revived. In contrast, significant improvement in vital signs, return of spontaneous circulation, and patient responsiveness to stimuli all indicate that the patient is either improving or has potentially regained a viable physiological state that could be compatible with survival. Thus, these signs would not warrant stopping resuscitation efforts but rather suggest that they should continue.

8. When persistent tachycardia is asymptomatic, what characteristic should be considered?

A. QRS duration less than 0.08 seconds

B. QRS duration greater than 0.12 seconds

C. Presence of ST elevation

D. Heart rate below 100 beats per minute

In the context of persistent tachycardia that is asymptomatic, it is crucial to consider the QRS duration as it helps in identifying the underlying mechanism of the tachycardia. A QRS duration greater than 0.12 seconds indicates a bundle branch block or possibly other forms of ventricular conduction delay, which may categorize the tachycardia as ventricular in origin or suggest the presence of a more complex arrhythmia. This characteristic can signify a more serious condition that may necessitate further evaluation and possibly intervention, despite the absence of symptoms. It is important to note that asymptomatic tachycardia may still require careful assessment of the QRS duration to understand risks and treatment options, differentiating between supraventricular and ventricular tachycardias. In contrast, a QRS duration less than 0.08 seconds would suggest a more benign and likely supraventricular origin. The presence of ST elevation could indicate myocardial ischemia or infarction, which may not be the primary concern in asymptomatic tachycardia. Lastly, a heart rate below 100 beats per minute does not pertain to the definition of tachycardia, since it signifies a normal heart rate. Thus, monitoring and evaluating the Q

9. Which action improves the quality of chest compressions delivered during a resuscitation attempt?

A. Increase the compression rate

B. Switch providers every minute

C. Switch providers about every 2 minutes or every 5 compression cycles

D. Maintain the same provider throughout

Switching providers about every 2 minutes or after every 5 compression cycles is recognized as an effective strategy to maintain the quality of chest compressions during a resuscitation attempt. This practice helps prevent provider fatigue, which can lead to a decrease in the effectiveness of chest compressions over time. Fatigue sets in quickly when performing compressions, as it is physically demanding to maintain the required rate and depth. By rotating providers regularly, the team ensures that each provider is performing at their optimal capacity, delivering compressions that are consistent in both rate and depth. Additionally, the timing of these switches is also critical. The recommendation to switch every 2 minutes aligns with the overall rhythm of CPR, allowing for a structured and efficient transition that minimizes interruptions to chest compressions. This approach not only enhances the quality of compressions but also improves the overall chances of a successful resuscitation outcome.

10. What is the initial dose of atropine for a patient with sinus bradycardia and hypotension?

A. 1.0 mg

B. 0.5 mg

C. 2.0 mg

D. 0.25 mg

The initial dose of atropine for a patient experiencing symptomatic bradycardia, which can include sinus bradycardia accompanied by hypotension, is 0.5 mg. This dosage aligns with current advanced cardiovascular life support guidelines intended to stabilize the patient's heart rate and improve hemodynamics. Atropine functions by blocking vagal effects on the heart, thereby increasing the heart rate. Administering 0.5 mg is recommended as it allows for a controlled approach to managing bradycardia. If the heart rate does not improve within a few minutes, additional doses may be given, up to a total of 3 mg, but starting with 0.5 mg is the standard practice. The other dosing options vary in magnitude and would not align with the standard initial dose recommended for immediate symptom relief in this situation.

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://acls.examzify.com

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