Anesthesia 2 – Anesthetic Problems and Emergencies Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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. **The most challenging high-risk patient is one with _____ disease; Minimize stress as much as possible.**

   A. Cardiac

   B. Hepatic

   C. Renal

   D. Respiratory

2. **Which step in the ALS sequence is associated with obtaining vascular access?**

   A. Obtaining Vascular Access

   B. Defibrillation

   C. Airway Management

   D. Monitoring Only

3. **Status Epilepticus occurs after ___ minutes?**

   A. 3 minutes

   B. 5 minutes

   C. 7 minutes

   D. 10 minutes

4. **Which drug classes are listed as capable of causing tachycardia during anesthesia?**

   A. Anticholinergics

   B. Dissociatives

   C. Catecholamines

   D. All of the above

5. **Pulseless Electrical Activity is also known as which term?**

   A. Electromechanical Dissociation

   B. Electrical Mechanical Arrest

   C. Vasovagal Episode

   D. Cardiac Arrest With Rhythm

6. Which statement best describes the use of dextrose-containing fluids in neonates and pediatric anesthesia?

A. They are used to provide glucose and maintain osmolar balance in fluids

B. They are avoided entirely in pediatric anesthesia

C. They are used only after surgery

D. They are used only in adults

7. During chest compressions, compress which fraction of the chest width to allow re-expansion between compressions?

A. 1/2 - 1/3

B. 1/4

C. 2/3

D. 3/4

8. Initial treatment for Asystole and PEA includes which combination?

A. Low dose Epinephrine, Vasopressin, Atropine

B. High dose Epinephrine and Bicarbonate

C. Calcium, Sodium Bicarbonate

D. Defibrillation and CPR only

9. During ALS Step 3, which monitoring modalities are used?

A. ECG and End-Tidal CO2 monitoring

B. SpO2 and Blood Pressure monitoring

C. Only SpO2 monitoring

D. Ultrasound monitoring

10. Which of the following represents signs of fluid overload in an awake patient?

A. Crackles/wheezes; serous nasal discharge; bulging eyes; increased RR/effort; coughing; restlessness; increased urine output

B. Coughing only

C. Shortness of breath only

D. Normal mucous membranes with calm demeanor

Answers

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

Explanations

1. The most challenging high-risk patient is one with _____ disease; Minimize stress as much as possible.

A. Cardiac

B. Hepatic

C. Renal

D. Respiratory

The main idea is that respiratory disease creates the greatest perioperative stress because breathing is the most immediately compromised system during anesthesia, and patients with limited respiratory reserve are hardest to manage. Inducing anesthesia and providing airway support directly affect ventilation and gas exchange. Sedatives and neuromuscular drugs depress respiratory drive and muscle tone, which can lead to hypoventilation in someone with limited pulmonary reserve. Airway hyperreactivity and bronchospasm are real concerns in reactive airways disease, and secretions or mucus plugging can quickly provoke hypoxemia. Postoperatively, shallow breathing and impaired mucociliary clearance raise the risk of atelectasis, pneumonia, and respiratory failure. In diseases like COPD or restrictive lung conditions, even small physiological stresses can cause large drops in oxygenation and increases in carbon dioxide, so the patient's safety hinges on minimizing stress and preserving as much normal respiration as possible. Strategies to achieve this include using regional anesthesia when feasible to avoid airway instrumentation, employing gentle induction and careful ventilatory management with lung-protective strategies, ensuring optimal analgesia to promote deep, comfortable breaths, and aggressive pulmonary hygiene postoperatively. While cardiac, hepatic, or renal diseases are also high-risk, the immediate vulnerability to airway and ventilation problems makes respiratory disease the most challenging in this context.

2. Which step in the ALS sequence is associated with obtaining vascular access?

A. Obtaining Vascular Access

B. Defibrillation

C. Airway Management

D. Monitoring Only

In advanced life support, securing a route to deliver medications is the step that centers on obtaining vascular access. You need IV (or IO) access to administer life-saving drugs such as epinephrine and antiarrhythmics during resuscitation, and to flush them effectively. If IV access is hard to establish quickly, intraosseous access is a common alternative. This step is distinct from defibrillation (which targets shockable rhythms), airway management (securing the airway and ventilation), and ongoing monitoring. So obtaining vascular access is the step tied to delivering meds during the ALS sequence.

3. Status Epilepticus occurs after ___ minutes?

A. 3 minutes

B. 5 minutes

C. 7 minutes

D. 10 minutes

Status epilepticus is determined by how long seizure activity lasts. In modern practice, a seizure that continues for five minutes or longer, or a series of seizures without a return to baseline between them, is classified as status epilepticus. The five-minute mark is chosen because most seizures would have stopped on their own by then; when it reaches five minutes, the likelihood of ongoing, self-sustaining activity increases, and the brain is at higher risk of injury and metabolic complications. This is why urgent treatment is recommended as soon as five minutes is reached. Shorter durations (around three minutes) are often still self-limited, while longer durations (such as seven or ten minutes) indicate a prolonged emergency, but the formal threshold used is five minutes.

4. Which drug classes are listed as capable of causing tachycardia during anesthesia?

A. Anticholinergics

B. Dissociatives

C. Catecholamines

D. All of the above

Tachycardia during anesthesia can result from drugs that either remove parasympathetic braking, stimulate the sympathetic system, or directly increase adrenergic drive. Anticholinergics like atropine or glycopyrrolate block muscarinic receptors, removing vagal influence on the heart and allowing the sinoatrial node to fire faster. Dissociatives such as ketamine provoke sympathetic activation, increasing endogenous catecholamine release and beta-adrenergic stimulation, which raises heart rate. Catecholamines used as vasopressors or inotropes (like epinephrine, norepinephrine, or dopamine) directly stimulate beta-1 receptors in the heart, increasing heart rate and contractility. Since each class can cause tachycardia on their own, all of the above are capable of producing this effect.

5. Pulseless Electrical Activity is also known as which term?

A. Electromechanical Dissociation

B. Electrical Mechanical Arrest

C. Vasovagal Episode

D. Cardiac Arrest With Rhythm

Pulseless electrical activity means you can see organized electrical activity on the monitor, but there is no palpable pulse or usable blood flow. The term that best describes this situation is electromechanical dissociation, because it highlights the mismatch between the heart's electrical signals and its mechanical pumping. The heart's electrical system may be firing, but the mechanical action fails to produce contraction strong enough to generate a pulse, so there's no perfusion despite the rhythm on the monitor. This is considered a form of cardiac arrest requiring CPR and reversal of causes. The other terms aren't standard descriptors for this phenomenon: an Electrical Mechanical Arrest isn't the recognized term; a vasovagal episode is a fainting event with a different mechanism and usually not a pulseless electrical state; and Cardiac Arrest With Rhythm is not a conventional label for this situation.

6. Which statement best describes the use of dextrose-containing fluids in neonates and pediatric anesthesia?

A. They are used to provide glucose and maintain osmolar balance in fluids

B. They are avoided entirely in pediatric anesthesia

C. They are used only after surgery

D. They are used only in adults

The main idea is that neonates and young children have limited stored glycogen and higher metabolic needs, so during anesthesia when they aren't taking oral fluids, giving IV fluids that contain dextrose provides an immediate glucose source. This helps prevent perioperative hypoglycemia and supplies energy for brain and other tissues while the child is fasting. Dextrose-containing fluids are also designed to maintain the appropriate fluid composition and volume status, which is why they're used in pediatric cases. Of course, glucose needs to be balanced with electrolytes and monitored, since once the glucose is used, the remaining fluid can affect sodium and overall osmolar balance, so rates and concentrations are tailored to the child's age, weight, and the length of the procedure.

7. During chest compressions, compress which fraction of the chest width to allow re-expansion between compressions?

A. 1/2 - 1/3

B. 1/4

C. 2/3

D. 3/4

During chest compressions you want enough depth to push blood out of the heart, but you also need the chest to recoil fully between compressions to restore venous return. Compressing to about one-third to one-half of the chest width achieves this balance: it's deep enough to generate forward flow yet shallow enough to allow complete chest re-expansion. If you go shallower, perfusion drops; if you go deeper than about half the chest width, chest recoil is hindered and venous return suffers. So targeting roughly one-third to one-half of the chest width best supports effective circulation and proper recoil between compressions.

8. Initial treatment for Asystole and PEA includes which combination?

A. Low dose Epinephrine, Vasopressin, Atropine

B. High dose Epinephrine and Bicarbonate

C. Calcium, Sodium Bicarbonate

D. Defibrillation and CPR only

In non-shockable cardiac arrest (asystole or PEA), the priority is to maximize perfusion during CPR while providing vasopressor support to improve coronary and cerebral blood flow. Giving a low dose of epinephrine helps tighten the vessels and raise perfusion pressures during CPR, increasing the likelihood of return of spontaneous circulation. Vasopressin can be used as an alternative or in addition to epinephrine to maintain vasoconstriction and support perfusion when the patient isn't responding adequately. At the time this answer is framed, atropine was historically included in initial arrest protocols because of its vagolytic effects, but robust evidence does not show a benefit in full arrest, so its routine use in asystole/PEA is not supported by modern guidelines. Still, the combination listed aligns with the traditional approach of providing vasopressor support early in a non-shockable arrest to improve outcomes. Defibrillation is not indicated for asystole or PEA because these rhythms are non-shockable. Bicarbonate or calcium is not routinely given in initial management unless there's a specific reversible cause (like hyperkalemia, severe acidosis, or overdose) that warrants it.

9. During ALS Step 3, which monitoring modalities are used?

A. ECG and End-Tidal CO2 monitoring

B. SpO2 and Blood Pressure monitoring

C. Only SpO2 monitoring

D. Ultrasound monitoring

During ALS Step 3, the focus is on advanced airway management and continuous physiologic monitoring. ECG provides real-time information on heart rhythm during resuscitation, while capnography (end-tidal CO2) is essential for confirming endotracheal tube placement and assessing ventilation quality while chest compressions are ongoing. These two monitoring modalities are foundational for Step 3 because they directly guide airway patency, ventilation effectiveness, and rhythm management. SpO2 and blood pressure are important, but SpO2 can be unreliable during CPR due to low perfusion, and ultrasound is not a routine monitoring modality in this step.

10. Which of the following represents signs of fluid overload in an awake patient?

A. Crackles/wheezes; serous nasal discharge; bulging eyes; increased RR/effort; coughing; restlessness; increased urine output

B. Coughing only

C. Shortness of breath only

D. Normal mucous membranes with calm demeanor

Fluid overload shows up as a group of signs from the lungs to the rest of the body, not just one symptom. When there is too much circulating fluid, the lungs become congested, so you hear crackles or wheezes, the patient tends to breathe faster and harder, and coughing can occur. Restlessness reflects the growing discomfort from reduced oxygen delivery. The kidneys may respond by increasing urine production as they try to excrete the excess volume. Some mucous membranes and facial tissues can show edema-related changes such as serous nasal discharge or mild swelling around the eyes. Collectively these signs point to excess fluid in the body rather than dehydration or a localized issue. If a patient only coughs, or only has shortness of breath, or has normal, calm mucous membranes, those patterns don't align with the multi-system signs you'd expect from fluid overload.

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://anesthesia2problemsemergencies.examzify.com

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