ANESTHESIA 2 – ANESTHETIC PROBLEMS AND EMERGENCIES PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://anesthesia2problemsemergencies.examzify.com

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 15

SAMPLE

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. Which combination indicates poor perfusion during anesthesia?

A. Cold extremities and pale mucous membranes

B. Warm extremities and pink mucous membranes

C. Dry tongue and bright mucous membranes

D. Hyperactive responding to stimuli

2. Which strategies help prevent hypothermia and shivering in the perioperative period?

A. Pre-warm the patient

B. Use warming blankets and fluid warmers

C. Pharmacologic measures such as meperidine or dexmedetomidine

D. All of the above

3. Which species is associated with a bradycardia rate as low as 25 bpm during stage III anesthesia?

A. Dog 60-70 bpm

B. Cat 100 bpm

C. Horse 25 bpm

D. Cow 40 bpm

4. Which practice is not recommended for preventing hypothermia and shivering in the perioperative period?

A. Pre-warm the patient

B. Use warming blankets

C. Inducing hypothermia to reduce metabolic rate

D. Pharmacologic measures to reduce shivering

5. What is a common complication in patients with diaphragmatic hernia?

A. Pneumothorax

B. Pulmonary edema

C. Hemothorax

D. Pleural effusion

SAMPLE

6. Epinephrine given IV is typically administered in what context?

A. For routine anesthesia

B. When it is a life saving measure

C. Only after Lidocaine

D. Only in cats

7. Cardiac arrhythmias are common in trauma patients about how many hours after the incident?

A. 6-12 hours

B. 12-72 hours

C. 24-96 hours

D. 2-6 hours

8. Defibrillation for VF or VT can be delivered using which methods?

A. External or Internal

B. Oral defibrillation

C. Vagal stimulation

D. Pacing

9. What is the essential initial step in malignant hyperthermia management?

A. Stop triggering agents, administer 100% O2, and give dantrolene promptly.

B. Increase inhaled anesthetic concentration to suppress symptoms.

C. Administer epinephrine alone.

D. Delay treatment to confirm diagnosis.

10. During LAST management, which approach best addresses seizures?

A. Administer high-dose opioids.

B. Use benzodiazepines.

C. Administer lidocaine only.

D. Administer diuretics.

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which combination indicates poor perfusion during anesthesia?

A. Cold extremities and pale mucous membranes

B. Warm extremities and pink mucous membranes

C. Dry tongue and bright mucous membranes

D. Hyperactive responding to stimuli

Poor tissue perfusion shows up as signs of reduced blood flow to the tissues. Cold extremities reflect peripheral vasoconstriction and decreased peripheral perfusion, while pale mucous membranes indicate less arterial blood reaching the mucosal tissues. Together, these signs point to inadequate blood flow during anesthesia. In contrast, warm extremities and pink mucous membranes suggest good perfusion; a dry tongue is more about dehydration or saliva changes and doesn't by itself prove poor perfusion; hyperactive response to stimuli relates to anesthesia depth or neurological status, not perfusion. So cold extremities with pale mucous membranes is the combination that best indicates poor perfusion.

2. Which strategies help prevent hypothermia and shivering in the perioperative period?

A. Pre-warm the patient

B. Use warming blankets and fluid warmers

C. Pharmacologic measures such as meperidine or dexmedetomidine

D. All of the above

Preventing perioperative hypothermia and shivering requires a multimodal approach that keeps the patient warm from the start and through emergence, while also addressing shivering if it occurs. Starting with pre-warming fills the peripheral tissues with heat before anesthesia lowers the big drop in core temperature that often happens after induction. This reduces both the likelihood of hypothermia and the need for shivering afterward. Using warming blankets and warming intravenous fluids helps maintain body temperature by minimizing heat loss and supplying heat directly to the patient. These simple, practical measures are effective in keeping core temperature stable when the patient is exposed to cold operating-room conditions and chilly IV fluids. Pharmacologic measures add an anti-shivering effect when needed. Meperidine has a well-known anti-shivering action through its specific receptor effects, and dexmedetomidine, an alpha-2 agonist, also reduces the shivering threshold while providing sedation and analgesia. Together with physical warming strategies, these drugs help prevent or attenuate shivering without relying on higher anesthesia doses. Because each approach targets a different aspect of thermoregulation and shivering, combining them provides the most reliable protection. Hence, using pre-warming, active warming devices, and pharmacologic anti-shivering measures together is the best strategy to prevent both hypothermia and shivering.

SAMPLE

3. Which species is associated with a bradycardia rate as low as 25 bpm during stage III anesthesia?

A. Dog 60-70 bpm

B. Cat 100 bpm

C. Horse 25 bpm

D. Cow 40 bpm

During stage III anesthesia, heart rate response varies by species, and horses show the strongest tendency toward profound bradycardia. Their autonomic balance under anesthesia—marked vagal influence and sensitivity to inhaled anesthetics—can push the heart rate down very low, sometimes around 25 beats per minute. This level of bradycardia is much less typical in dogs or cats, whose heart rates under similar anesthesia tend to be higher (dogs often around 60–70 bpm, cats around 100 bpm). Cattle can experience bradycardia as well, but it generally isn't as deep as what's seen in horses. So, a 25 bpm rate during stage III anesthesia is characteristic of horses, reflecting their unique autonomic and anesthetic responsiveness. Clinically, such bradycardia signals the need to reassess anesthetic depth and consider interventions to support heart rate if needed.

4. Which practice is not recommended for preventing hypothermia and shivering in the perioperative period?

A. Pre-warm the patient

B. Use warming blankets

C. Inducing hypothermia to reduce metabolic rate

D. Pharmacologic measures to reduce shivering

Maintaining normal body temperature is essential in the perioperative period because hypothermia worsens outcomes and shivering increases oxygen consumption and stress on the heart. Proactive warming helps prevent heat loss: pre-warming before anesthesia reduces the initial core-to-shell temperature drop, and using warming blankets or forced-air warming keeps core temperature more stable. Pharmacologic measures to reduce shivering, such as certain opioids or alpha-2 agonists, are used to blunt the body's shivering response and improve comfort and stability. Deliberately inducing hypothermia to reduce metabolic rate is not a recommended strategy for preventing hypothermia and shivering in most perioperative settings. Lowering the core temperature introduces its own risks—coagulopathy, increased infection risk, cardiac arrhythmias, and the need for aggressive rewarming—without reliably preventing perioperative hypothermia or shivering. In short, controlled warming and anti-shivering pharmacology address the problem effectively, while intentional cooling does the opposite.

SAMPLE

5. What is a common complication in patients with diaphragmatic hernia?

A. Pneumothorax

B. Pulmonary edema

C. Hemothorax

D. Pleural effusion

Traumatic diaphragmatic rupture often comes with chest injuries, so the thoracic compartment is commonly disrupted. When the pleura or lung tissue is injured, air can escape into the pleural space, causing a pneumothorax. This is a frequent immediate complication because the injury that allows the abdominal contents into the chest often accompanies pleural or parenchymal lung damage, and the use of positive-pressure ventilation during resuscitation or anesthesia can precipitate barotrauma, expanding that risk. A pneumothorax directly impairs lung expansion and demands prompt recognition and management. Other chest complications like pleural effusion or hemothorax can occur with chest trauma, but they are not as consistently linked to diaphragmatic hernia itself as pneumothorax. Pulmonary edema is more related to fluid status or cardiac issues rather than a direct consequence of the hernia.

6. Epinephrine given IV is typically administered in what context?

A. For routine anesthesia

B. When it is a life saving measure

C. Only after Lidocaine

D. Only in cats

The key idea here is that intravenous epinephrine is reserved for emergencies because of its powerful, rapid systemic effects. When given IV, it can quickly support the heart and circulation (increasing heart rate and contractility, raising blood pressure) and open airways, which is lifesaving in critical situations like cardiac arrest or severe anaphylaxis. Because of these potent effects, it is not used routinely during anesthesia. It's also not limited to one species. While epinephrine can be used with local anesthetics to prolong effect or reduce bleeding, that is a local use, not an IV, resuscitative use. So the context in which IV epinephrine is typically given is as a life-saving measure.

7. Cardiac arrhythmias are common in trauma patients about how many hours after the incident?

A. 6-12 hours

B. 12-72 hours

C. 24-96 hours

D. 2-6 hours

Post-traumatic cardiac arrhythmias often emerge after the initial resuscitation period as myocardial contusion, electrolyte shifts, and autonomic instability develop. Blunt heart injury can cause conduction disturbances that aren't immediate; edema and necrosis of the myocardium typically evolve over the first day or two. Because of this, the window when arrhythmias are most commonly observed is roughly 12 to 72 hours after injury. During this time, continuous ECG monitoring is especially important, since ventricular ectopy or other rhythm disturbances can occur and may be life-threatening. Earlier time frames (a few hours) reflect the immediate post-injury phase, while later windows can occur but the most characteristic period is the 12–72 hour window.

SAMPLE

8. Defibrillation for VF or VT can be delivered using which methods?

A. External or Internal

B. Oral defibrillation

C. Vagal stimulation

D. Pacing

Defibrillation for ventricular fibrillation or pulseless ventricular tachycardia works by delivering a high-energy electrical shock to reset the heart's electrical activity so a normal rhythm can resume. This can be done from outside the chest with external defibrillators (pads or paddles) or from inside the heart with internal defibrillation systems, such as transvenous or epicardial leads or an implanted cardioverter-defibrillator. Oral defibrillation isn't feasible because energy cannot be delivered to the heart in a controlled, effective way through the mouth. Vagal stimulation and pacing don't terminate malignant ventricular rhythms like VF or VT—vagal maneuvers affect heart rate management but don't reset a chaotic ventricular rhythm, and pacing alone doesn't deliver the necessary shock unless it's accompanied by a defibrillation shock.

9. What is the essential initial step in malignant hyperthermia management?

A. Stop triggering agents, administer 100% O2, and give dantrolene promptly.

B. Increase inhaled anesthetic concentration to suppress symptoms.

C. Administer epinephrine alone.

D. Delay treatment to confirm diagnosis.

In malignant hyperthermia management, the first action is to stop all triggering agents, provide 100% oxygen, and give dantrolene promptly. Stopping the triggering agents halts the ongoing abnormal calcium release in skeletal muscle that drives the hypermetabolic crisis. Giving 100% oxygen ensures tissues receive adequate oxygen as the body's demand surges and helps manage rising CO2 and acidosis that accompany the crisis. Dantrolene directly counteracts the heart of the problem by inhibiting the ryanodine receptor, preventing further calcium release, reducing muscle rigidity, decreasing heat production, and blunting the metabolic storm. This trio—stopping triggers, high-flow oxygen, and rapid dantrolene administration—is essential because malignant hyperthermia can progress quickly to life-threatening complications if treatment is delayed. By contrast, increasing anesthetic concentration would worsen the condition, epinephrine alone doesn't address the underlying calcium dysregulation, and delaying therapy until diagnosis is confirmed risks rapid deterioration.

10. During LAST management, which approach best addresses seizures?

A. Administer high-dose opioids.

B. Use benzodiazepines.

C. Administer lidocaine only.

D. Administer diuretics.

When seizures occur during LAST, the priority is rapidly suppressing CNS excitability with a fast-acting anticonvulsant that minimizes additional cardiovascular risk. Benzodiazepines are the best choice because they enhance GABA-A receptor activity, increasing chloride influx to dampen neuronal firing and abort seizures quickly. This mechanism directly counters the CNS hyperexcitability caused by high local anesthetic levels, providing effective seizure control with a relatively favorable safety profile in the toxic setting. Other options don't address the seizure activity—opioids won't stop seizures and can worsen respiratory depression, lidocaine would not treat and may worsen the toxicity, and diuretics have no role in controlling seizures or LAST. If seizures persist after benzodiazepines, clinicians may escalate with other agents, but benzodiazepines remain the initial, best approach.

SAMPLE

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!

SAMPLE