IA MED Certified Flight Registered Nurse (CFRN) 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. **Which option best explains why humidified gas is beneficial for pediatric patients on high-flow oxygen?**

   A. It reduces mucosal edema directly

   B. It prevents airway drying by reducing water loss due to increased work of breathing

   C. It increases oxygen diffusion across the membrane

   D. It enhances CO2 clearance more effectively than dry gas

2. **In an obstetric scenario, which condition necessitates placing the provider's hand in the vagina to relieve fetal distress?**

   A. Nuchal cord

   B. Prolapsed cord

   C. Shoulder dystocia

   D. Cephalad presentation

3. **Which medication is an appropriate first-line intervention for a child with airway swelling due to croup?**

   A. Nebulized epinephrine

   B. Nebulized albuterol

   C. Intravenous dexamethasone

   D. Nebulized albuterol-ipratropium solution

4. **A base excess of +4 is most consistent with which acid-base disturbance?**

   A. Metabolic alkalosis

   B. Respiratory acidosis

   C. Metabolic acidosis

   D. Bicarbonate toxicity

5. **Per 14 CFR 91 daytime VFR minimums, which of the following represents the correct requirement?**

   A. 1 mile visibility and 500 ft ceiling

   B. 2 miles visibility and 1000 ft ceiling

   C. 5 miles visibility and 2000 ft ceiling

   D. 5 miles visibility and 1000 ft ceiling

6. Interpret this arterial blood gas: pH 7.36, PO2 84, PCO2 44, HCO3 24.

A. Normal ABG

B. Compensated metabolic acidosis

C. Partially compensated metabolic acidosis

D. Compensated metabolic alkalosis

7. During transport of a patient with a subarachnoid hemorrhage who remains hypertensive despite analgesia, which BP management approach is BEST?

A. Nicardipine titrated to a systolic BP of 160 mmHg

B. Labetalol pushes to a systolic BP goal of 140 mmHg

C. Nicardipine titrated to a systolic BP of 120 mmHg

D. Labetalol pushes to a systolic BP of 180

8. In rapid sequence intubation for a trauma patient with tachycardia and borderline blood pressure, which dose adjustment is recommended to minimize hemodynamic compromise?

A. Reducing the dose of the induction agent

B. Reducing the dose of the paralytic agent

C. Administering a 500 mL fluid bolus during intubation

D. Administering 5 mcg of push-dose epinephrine after the paralytic agent is administered

9. Calcium gluconate is used in hyperkalemia to achieve which therapeutic effect?

A. Increase serum potassium

B. Stabilize cardiac membranes

C. Increase insulin release

D. Decrease urinary potassium excretion

10. Which safety framework uses crew coordination and standardized procedures to reduce errors in high-stakes environments?

A. High Reliability Organization

B. Just Culture

C. Root Cause Analysis

D. Crew Resource Management

Answers

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

Explanations

1. Which option best explains why humidified gas is beneficial for pediatric patients on high-flow oxygen?

A. It reduces mucosal edema directly

B. It prevents airway drying by reducing water loss due to increased work of breathing

C. It increases oxygen diffusion across the membrane

D. It enhances CO2 clearance more effectively than dry gas

Humidified gas helps keep the airway surfaces moist, which is especially important when giving high-flow oxygen to children. The inspired gas can dry out the delicate pediatric airway, and increased work of breathing amplifies water loss from the mucosa. By delivering heated, humidified gas, you prevent that drying, keep secretions more mobile, and support mucociliary clearance. With the airways better hydrated, secretions are easier to mobilize, airway resistance remains lower, and the child tolerates high-flow therapy with less breathing effort. This isn't about directly reducing mucosal edema, improving membrane diffusion, or dramatically changing CO2 removal. Dry gas doesn't cause edema to shrink, humidification doesn't mainly increase diffusion across the alveolar–capillary membrane, and CO2 clearance depends more on ventilation than on humidity alone. The key benefit is maintaining airway moisture to reduce drying and help secretion clearance during high-flow oxygen in pediatric patients.

2. In an obstetric scenario, which condition necessitates placing the provider's hand in the vagina to relieve fetal distress?

A. Nuchal cord

B. Prolapsed cord

C. Shoulder dystocia

D. Cephalad presentation

Relieving cord compression from a prolapsed umbilical cord is the action being tested. When the cord slips ahead of the presenting part into the birth canal, it can be pressed by the presenting part, leading to fetal hypoxia and distress. The most immediate and life-saving step is to insert a gloved hand into the vagina and gently lift the presenting part away from the cord, keeping the cord from being compressed. This manual elevation buys time for stabilization and delivery, usually by emergent cesarean section if vaginal delivery isn't rapidly achievable. After doing this, position the patient to relieve pressure on the cord, administer oxygen, and call for urgent help to expedite delivery. Nuchal cord involves the cord around the baby's neck and is managed differently, often by reducing the cord over the head if possible or delivering with careful maneuvers. Shoulder dystocia centers on freeing the anterior shoulder with maneuvers rather than vaginally elevating a presenting part to relieve cord compression. Cephalad presentation refers to head-first delivery, which is the normal presentation and does not require this maneuver.

3. Which medication is an appropriate first-line intervention for a child with airway swelling due to croup?

A. Nebulized epinephrine

B. Nebulized albuterol

C. Intravenous dexamethasone

D. Nebulized albuterol-ipratropium solution

Rapid relief of airway edema is essential when a child with croup shows signs of airway swelling. Nebulized epinephrine delivers a rise in mucosal vasoconstriction, which sharply reduces subglottic edema and opens the airway within minutes. This quick onset is why it's the best first-line intervention for swelling that threatens breathing. The effect is temporary, so it's paired with corticosteroids (like dexamethasone) to sustain improvement and close observation to monitor for rebound symptoms as the epinephrine wears off. Nebulized albuterol targets bronchodilation, which helps more with wheeze from asthma or bronchospasm—not the edema-driven obstruction seen in croup. Intravenous dexamethasone addresses inflammation, but its onset is slower, so it won't provide the immediate relief needed in this acute swelling scenario. Nebulized albuterol-ipratropium offers similar bronchodilatory help but isn't a primary choice for croup edema either.

4. A base excess of +4 is most consistent with which acid-base disturbance?

A. Metabolic alkalosis

B. Respiratory acidosis

C. Metabolic acidosis

D. Bicarbonate toxicity

Base excess reflects how much buffering base, mainly bicarbonate, is present beyond normal in the blood. Normal base excess is roughly -2 to +2 mEq/L. A positive base excess means there is an excess of bicarbonate, pointing to a metabolic process rather than a primary change in respiration. A base excess of +4 indicates a bicarbonate surplus, which fits metabolic alkalosis. This condition arises when there is a gain of base or loss of hydrogen ions through mechanisms like vomiting, diuretic use, or mineralocorticoid activity, all of which raise bicarbonate and push the base excess above normal. In contrast, a primary respiratory disturbance alters CO_2 and pH directly rather than increasing bicarbonate. Respiratory acidosis elevates CO_2 with a lower pH, and metabolic acidosis lowers bicarbonate with a lower base excess. Bicarbonate toxicity isn't a standard primary acid-base category, so it doesn't describe a typical pattern seen with a positive base excess.

5. Per 14 CFR 91 daytime VFR minimums, which of the following represents the correct requirement?

A. 1 mile visibility and 500 ft ceiling

B. 2 miles visibility and 1000 ft ceiling

C. 5 miles visibility and 2000 ft ceiling

D. 5 miles visibility and 1000 ft ceiling

In daytime VFR, weather minimums rise with altitude and airspace. When you're operating in the upper ranges of controlled airspace (above 10,000 ft MSL), the minimums require five miles of visibility and a cloud ceiling no lower than 1,000 ft above the surface, with the usual cloud clearance of 1,000 ft above, 1,000 ft below, and 1 mile horizontal. This ensures you have sufficient visibility to see other aircraft and comply with cloud clearance in busier, higher airspace. So the combination of five miles visibility and a 1,000 ft ceiling satisfies these daytime high-altitude VFR minimums, whereas the other options do not meet the required visibility or ceiling at that altitude.

6. Interpret this arterial blood gas: pH 7.36, PO2 84, PCO2 44, HCO3 24.

A. Normal ABG

B. Compensated metabolic acidosis

C. Partially compensated metabolic acidosis

D. Compensated metabolic alkalosis

Normal acid-base status is indicated when the pH is within the normal range and the accompanying gases and bicarbonate are also normal, with adequate oxygenation. Here, the pH is 7.36 (within 7.35–7.45), the PCO2 is 44 (within 35–45), and the HCO3 is 24 (within 22–26), and the PaO2 is 84, all lying in their normal ranges. This means there is no acid-base disturbance—no respiratory or metabolic acidosis or alkalosis—and oxygenation is sufficient. If a disorder were present, you'd expect a pH outside the normal range or a mismatch between pH and the primary driver (PCO2 or HCO3) with appropriate compensatory changes; that isn't the case here.

7. During transport of a patient with a subarachnoid hemorrhage who remains hypertensive despite analgesia, which BP management approach is BEST?

A. Nicardipine titrated to a systolic BP of 160 mmHg

B. Labetalol pushes to a systolic BP goal of 140 mmHg

C. Nicardipine titrated to a systolic BP of 120 mmHg

D. Labetalol pushes to a systolic BP of 180

In ruptured subarachnoid hemorrhage, the goal is to prevent the aneurysm from rebleeding while keeping enough cerebral perfusion. That means using a controllable, titratable IV antihypertensive rather than a one-time bolus or setting an overly aggressive target. Nicardipine fits this role well because it can be started as an infusion and finely adjusted to a moderate systolic BP around 160 mmHg. This keeps the pressure high enough to maintain cerebral perfusion but low enough to reduce the risk of another bleed during transport, and it avoids the instability that can come with abrupt boluses or very low targets. Lowering to a very close-to-normal SBP (like 120) would risk cerebral hypoperfusion, which is dangerous in SAH. Allowing SBP to rise toward 180 keeps the aneurysm at greater risk for rebleeding. Bolus approaches with labetalol can cause rapid, sometimes unpredictable blood pressure shifts, which is less ideal in the transport setting where tight, gradual control is preferred.

8. In rapid sequence intubation for a trauma patient with tachycardia and borderline blood pressure, which dose adjustment is recommended to minimize hemodynamic compromise?

A. Reducing the dose of the induction agent

B. Reducing the dose of the paralytic agent

C. Administering a 500 mL fluid bolus during intubation

D. Administering 5 mcg of push-dose epinephrine after the paralytic agent is administered

When airway control is needed in a trauma patient who is tachycardic and has borderline blood pressure, the goal is to limit factors that provoke rapid hemodynamic swings during rapid sequence intubation. A key contributor to these swings is the sympathetic surge that can accompany the paralytic agent, especially depolarizing agents that cause fasciculations. Those muscle twitching movements can trigger a transient but meaningful release of catecholamines, increasing heart rate and blood pressure at a moment when the patient is already vulnerable. By reducing the dose of the paralytic, you blunt those fasciculations and the associated sympathetic response, helping to keep the heart rate and blood pressure more stable during intubation. Other approaches—such as altering the induction agent dose, giving a fluid bolus, or administering vasopressors after paralysis—address different aspects of hemodynamics but do not target the immediate surge caused by the paralytic itself. A large induction dose can still cause hypotension from vasodilation, a fluid bolus may risk volume overload without reliably preventing instability, and pushing epinephrine after paralysis can raise heart rate and blood pressure further, potentially worsening tachycardia in this patient.

9. Calcium gluconate is used in hyperkalemia to achieve which therapeutic effect?

A. Increase serum potassium

B. Stabilize cardiac membranes

C. Increase insulin release

D. Decrease urinary potassium excretion

Calcium gluconate works by stabilizing the heart's electrical membranes when potassium is high. It raises the threshold for depolarization, making cardiac cells less excitable, which helps prevent dangerous arrhythmias that hyperkalemia can trigger. It does not lower the potassium level itself; other treatments are needed to shift potassium into cells or remove it from the body. The effect is rapid but temporary, buying time to implement measures like insulin with glucose, beta-agonists, bicarbonate, or dialysis as appropriate.

10. Which safety framework uses crew coordination and standardized procedures to reduce errors in high-stakes environments?

A. High Reliability Organization

B. Just Culture

C. Root Cause Analysis

D. Crew Resource Management

Clear, coordinated teamwork and standardized procedures are essential for safety in high-stakes environments. Crew Resource Management centers on non-technical skills—communication, leadership, decision-making, and workload management—within a team. It teaches how to use formal briefings, standardized checklists, clear callouts, and closed-loop communication so information is shared accurately and actions are coordinated. This creates a shared mental model and better situational awareness, allowing the team to anticipate workload, allocate resources, and speak up when something doesn't seem right. By structuring interactions around common protocols and encouraging proactive collaboration, CRM reduces the kinds of miscommunication and omissions that lead to errors. Other frameworks address related aspects of safety—High Reliability Organization focuses on organizational resilience across the system, Just Culture emphasizes accountability and learning from mistakes, and Root Cause Analysis is a method for investigating errors after they occur. The approach that specifically emphasizes crew coordination and standardized procedures to reduce errors is Crew Resource Management.

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://iamedcfrn.examzify.com

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