AMBOSS 200 High Yield (HY) Concepts for Step 2 Practice Test (Sample)

Study Guide

BY EXAMZIFY

Everything you need from our exam experts!

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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.

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. In iron deficiency anemia, ferritin level is typically:

A. Decreased

B. Increased

C. Normal

D. Variable

2. Hereditary angioedema is due to deficiency of which protein?

A. C3

B. C4

C. Factor H

D. C1 esterase inhibitor

3. Posterior auricular lymphadenopathy is a feature of which infections?

A. Rubella only

B. Roseola only

C. Both rubella and roseola

D. Neither

4. Ceftriaxone in infants less than 1 month has which notable side effect?

A. Hepatotoxicity

B. Nephrotoxicity

C. Anemia

D. Kernicterus and biliary sludge

5. In late septic shock, what happens to cardiac output?

A. Increases

B. No change

C. Decreases

D. Fluctuates

6. In G6PD deficiency, exposure to oxidizing agents causes which type of hemolysis?

A. Extravascular and intravascular hemolysis

B. Intravascular hemolysis only

C. Extravascular hemolysis only

D. No hemolysis

7. Acute management of migraine is best achieved with which option?

A. Triptans

B. Beta-blockers

C. Antidepressants

D. Antihistamines

8. Cardiac tamponade primarily affects LV diastolic filling by causing which change?

A. Increased

B. Decreased

C. No change

D. Increased afterload

9. What happens to TIBC/transferrin levels in iron deficiency anemia?

A. Decreased

B. Increased

C. Normal

D. Variable

10. In hypertrophic obstructive cardiomyopathy, which is a first-line therapy for reducing exertional symptoms?

A. Nitrates

B. Beta blocker

C. AICD

D. Calcium channel blocker

Answers

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

Explanations

1. In iron deficiency anemia, ferritin level is typically:

A. Decreased

B. Increased

C. Normal

D. Variable

Ferritin reflects the body's iron stores. In iron deficiency anemia, those stores are depleted, so serum ferritin falls and becomes the most sensitive marker of iron deficiency. This is why ferritin is typically decreased. (Note that ferritin can be normal or elevated in inflammation or chronic disease, which can mask deficiency, but in pure iron deficiency the level is decreased.)

2. Hereditary angioedema is due to deficiency of which protein?

A. C3

B. C4

C. Factor H

D. C1 esterase inhibitor

Hereditary angioedema arises from deficiency or dysfunction of C1 esterase inhibitor, the protein that normally represses the classical complement pathway and the contact system (which leads to bradykinin production). When C1-INH is lacking or dysfunctional, C1 activation proceeds unchecked, causing increased kallikrein activity and excessive bradykinin. This raises vascular permeability and produces angioedema, often without itching or urticaria. C4 is typically consumed and can be low during attacks, reflecting this unregulated activation, but the fundamental defect is the C1 esterase inhibitor deficiency. Other options involve components or regulators of the complement system but do not explain the primary cause of hereditary angioedema.

3. Posterior auricular lymphadenopathy is a feature of which infections?

A. Rubella only

B. Roseola only

C. Both rubella and roseola

D. Neither

Posterior auricular lymphadenopathy is a classic finding with rubella because the infection often causes enlargement of the posterior auricular and occipital nodes along with the characteristic facial-to-trunk rash. Roseola is defined mainly by a high fever that resolves before the rash appears, with milder, nonspecific lymphadenopathy; however, viral infections can cause generalized lymph node involvement, and occasional posterior neck nodes can be seen. Therefore, while rubella is the stronger association, both infections can present with posterior auricular lymphadenopathy in some cases, making the option that includes both the best choice.

4. Ceftriaxone in infants less than 1 month has which notable side effect?

A. Hepatotoxicity

B. Nephrotoxicity

C. Anemia

D. Kernicterus and biliary sludge

In very young infants, ceftriaxone has unique safety concerns tied to bilirubin metabolism and biliary excretion. It can displace bilirubin from albumin, increasing free bilirubin levels. In neonates, whose blood-brain barrier and bilirubin-handling systems are immature, this rise in free bilirubin can cross into the brain and cause kernicterus, a serious neurologic complication. At the same time, ceftriaxone is excreted into the bile, and in neonates the biliary system is immature, so the drug can form precipitates with calcium, leading to biliary sludge or even pseudolithiasis. These Neonate-specific risks explain why kernicterus and biliary sludge are notable adverse effects in this age group.

5. In late septic shock, what happens to cardiac output?

A. Increases

B. No change

C. Decreases

D. Fluctuates

In septic shock, a progression occurs from a high-output, vasodilated state to a failing heart. In the late stage, inflammatory mediators and endotoxins depress myocardial function, leading to septic cardiomyopathy. This reduces contractility and stroke volume, so even if heart rate remains elevated, the overall cardiac output drops because it's the product of heart rate and stroke volume. The pervasive vasodilation keeps afterload low, but it can't compensate for the weakened heart, so tissue perfusion worsens and CO falls. Thus decreased cardiac output is the expected finding in late septic shock.

6. In G6PD deficiency, exposure to oxidizing agents causes which type of hemolysis?

A. Extravascular and intravascular hemolysis

B. Intravascular hemolysis only

C. Extravascular hemolysis only

D. No hemolysis

Oxidative stress in G6PD deficiency damages hemoglobin and the red cell membrane because these cells cannot regenerate reduced glutathione without NADPH. The oxidative damage leads to Heinz bodies; damaged cells are cleared by the spleen (extravascular hemolysis) and, in some cases, lyse directly within the bloodstream (intravascular hemolysis). This dual path explains why exposure to oxidizing agents can cause both intravascular and extravascular hemolysis. Clinically, you might see markers of intravascular destruction like hemoglobinemia/hemoglobinuria alongside signs of extravascular clearance such as indirect hyperbilirubinemia and reticulocytosis, with a smear showing Heinz bodies or bite cells.

7. Acute management of migraine is best achieved with which option?

A. Triptans

B. Beta-blockers

C. Antidepressants

D. Antihistamines

Triptans are best for acute migraine because they directly interrupt the ongoing attack by binding to 5-HT1B/1D receptors on cranial blood vessels and trigeminal nerve terminals. This causes constriction of dilated intracranial vessels and inhibits the release of CGRP and other pro-migraine neuropeptides, reducing trigeminal nerve activation and neurogenic inflammation. Because of this mechanism, they quickly relieve headache and associated symptoms when taken early in an attack, and come in multiple formulations (oral, nasal, injectable) to fit patient needs. They're considered first-line for abortive therapy in patients without cardiovascular contraindications. By contrast, beta-blockers are used mainly for prevention, antidepressants for prevention or comorbidity management, and antihistamines have no established role in acute migraine treatment.

8. Cardiac tamponade primarily affects LV diastolic filling by causing which change?

A. Increased

B. Decreased

C. No change

D. Increased afterload

Tamponade raises pericardial pressure and externally constrains the heart during diastole. This prevents the ventricles from expanding normally, so LV diastolic filling is reduced. The result is lower LV preload and a smaller end-diastolic volume, which lowers stroke volume and cardiac output (often compensated by a faster heart rate). It's not an increase in afterload or no change; the key effect is diminished filling due to the constrained intrapericardial space.

9. What happens to TIBC/transferrin levels in iron deficiency anemia?

A. Decreased

B. Increased

C. Normal

D. Variable

In iron deficiency anemia, the body ramps up production of transferrin, the main iron-binding protein in plasma, to maximize iron capture and transport when stores are depleted. This increases the total iron-binding capacity (TIBC). So the level is increased. In contrast, low iron or depleted transferrin would not raise TIBC, and inflammation can suppress or normalize TIBC, which is why iron deficiency characteristically shows an elevated TIBC.

10. In hypertrophic obstructive cardiomyopathy, which is a first-line therapy for reducing exertional symptoms?

A. Nitrates

B. Beta blocker

C. AICD

D. Calcium channel blocker

In hypertrophic obstructive cardiomyopathy, the main problem during exertion is a dynamic LV outflow tract obstruction that gets worse with faster heart rate and more forceful contractions. A beta-blocker directly counteracts this by slowing the heart rate and reducing contractility, which decreases the obstruction and improves diastolic filling. By lowering the LVOT gradient during activity, it alleviates exertional symptoms like dyspnea and chest tightness. Nitrates tend to reduce preload and can worsen the obstruction, AICD is aimed at preventing sudden death rather than relieving symptoms, and calcium channel blockers are options if beta-blockers can't be used but aren't the first-line choice. Therefore, a beta-blocker is the best initial therapy for reducing exertional symptoms.

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://amboss200hyconcepts4step2.examzify.com

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