

ADVANCED PHLEBOTOMY PRACTICE TEST (SAMPLE)

STUDY GUIDE



**SAMPLE STUDY GUIDE
WITH LIMITED QUESTIONS**

**VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE**

<https://advancedphlebotomy.examzify.com>



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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

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- 1. Which option lists the correct technique for mixing a tube with additives?**
 - A. Roll between palms
 - B. Invert 6-8 times
 - C. Shake vigorously
 - D. Vortex

- 2. Which tube contains EDTA and is used for hematology tests such as CBC, Hgb, and Hct?**
 - A. Gray Tube — Na Fluoride/K Oxalate
 - B. Lavender Tube — EDTA
 - C. SST (Tiger Top) — No additive
 - D. Red Tube — No additive

- 3. What is the purpose of the Allen test in arterial blood sampling?**
 - A. To assess collateral circulation to the hand before radial artery puncture.
 - B. To measure arterial oxygen content.
 - C. To determine venous return.
 - D. To assess nerve function.

- 4. During venipuncture, you notice a developing hematoma. What steps should you take and what should you avoid?**
 - A. Stop the draw, remove the needle, apply firm pressure for several minutes; avoid massaging or puncturing near hematoma
 - B. Continue the draw and massage the hematoma
 - C. Remove the needle, inspect site, start a new draw from a nearby site with pressure
 - D. Apply ice and resume drawing after 10 minutes

- 5. In the mnemonic 'Never Let Monkeys Eat Bananas,' which cell type corresponds to the third term?**
 - A. Basophils
 - B. Monocytes
 - C. Neutrophils
 - D. Lymphocytes

- 6. In the mnemonic for white blood cells, which cell type corresponds to the first letter N?**
- A. Lymphocytes
 - B. Monocytes
 - C. Eosinophils
 - D. Neutrophils
- 7. Which tube contains ACD and is used for HLA B27 genetic marker testing and DNA matching?**
- A. Canary Yellow Tube – ACD
 - B. Gray Tube – Na Fluoride/K Oxalate
 - C. Lt Blue Tube – Na Citrate
 - D. SPS Tube – Blood Cultures
- 8. For arterial blood gas samples, what is the typical time window to analyze after collection?**
- A. Within 15–30 minutes
 - B. Immediately after collection
 - C. Within 2 hours
 - D. Within 24 hours
- 9. A patient faints during phlebotomy. What are the immediate steps to manage and when is it appropriate to continue?**
- A. Stop the draw, lower the patient to a supine or reclined position, remove the tourniquet and needle, monitor vital signs, and after recovery decide whether to reattempt at a later time with the patient in a comfortable position.
 - B. Continue the draw and pause only if the patient awakens
 - C. Withdraw the needle and discontinue blood collection
 - D. Notify patient family and wait for instructions
- 10. How does needle gauge selection impact patient comfort and specimen quality during venipuncture?**
- A. Smaller gauge needles always reduce pain and never cause issues.
 - B. Larger bore needles reduce hemolysis risk but can cause more discomfort.
 - C. Gauge selection does not affect specimen quality.
 - D. Larger bore needles have no tradeoffs.

Answers

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

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Explanations

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1. Which option lists the correct technique for mixing a tube with additives?

- A. Roll between palms
- B. Invert 6-8 times**
- C. Shake vigorously
- D. Vortex

Mixing a tube with additives requires distributing the additive evenly through the blood without generating damaging shear forces. Inverting the tube end-to-end achieves gentle, thorough mixing: the blood and additive glide past each other when the tube is turned, not violently shaken. Six to eight inversions provide enough motion to distribute the additive evenly for most common additive tubes, ensuring proper anticoagulation or activation as required, while minimizing the risk of hemolysis or sample splashing. Rolling between the palms isn't reliable for evacuated tubes and can risk uneven mixing or tube damage; shaking vigorously or vortexing introduces strong forces that can hemolyze cells and create bubbles, which can bias results. Follow manufacturer guidance, but six to eight inversions is a solid general rule for proper mixing.

2. Which tube contains EDTA and is used for hematology tests such as CBC, Hgb, and Hct?

- A. Gray Tube – Na Fluoride/K Oxalate
- B. Lavender Tube – EDTA**
- C. SST (Tiger Top) – No additive
- D. Red Tube – No additive

The main idea is that hematology tests require an anticoagulant that keeps the blood from clotting while preserving the cells for accurate counting. The lavender-top tube contains EDTA, which binds calcium and prevents coagulation, so the sample stays as whole blood with intact cells. This preservation of cellular morphology is essential for reliable CBC results, including hemoglobin concentration and hematocrit. The other tubes serve different purposes: gray-top tubes have fluoride/oxalate for glucose testing and aren't ideal for hematology; SST tubes are serum tubes with no additive or gel and require clotting, which alters the cells; red-top tubes are plain serum tubes after clotting, also not suitable for CBC.

3. What is the purpose of the Allen test in arterial blood sampling?

- A. To assess collateral circulation to the hand before radial artery puncture.**
- B. To measure arterial oxygen content.
- C. To determine venous return.
- D. To assess nerve function.

The test assess collateral circulation to the hand before radial artery puncture. Its purpose is to make sure the hand will still be well perfused if the radial artery is used for sampling. By temporarily blocking both the radial and ulnar arteries and then releasing one, you observe whether blood flow returns quickly to the hand. A prompt return of color indicates adequate collateral flow through the ulnar artery and palmar arches, meaning it's safe to use the radial artery. If color does not return promptly, collateral circulation is insufficient, raising the risk of ischemia if radial access is pursued. This test isn't about measuring how much oxygen is in the blood, nor does it assess venous return or nerve function. Those assessments involve different tests and purposes.

4. During venipuncture, you notice a developing hematoma. What steps should you take and what should you avoid?

- A. Stop the draw, remove the needle, apply firm pressure for several minutes; avoid massaging or puncturing near hematoma
- B. Continue the draw and massage the hematoma
- C. Remove the needle, inspect site, start a new draw from a nearby site with pressure
- D. Apply ice and resume drawing after 10 minutes

When a hematoma starts to develop during venipuncture, the priority is to stop further injury and limit bleeding. Stop the draw and remove the needle to prevent deeper or continuing vessel damage. Then apply firm, direct pressure with clean gauze for several minutes to compress the puncture site and allow the clot to form, which helps seal the vessel and minimize outward bleeding. Avoid massaging the area because rubbing can disrupt forming clots and cause the hematoma to enlarge; avoid puncturing again near the hematoma because damaged vessels in that region are fragile and a new puncture there risks creating a larger bleed. If you need to obtain additional blood, select a new site away from the hematoma and apply proper pressure after the puncture.

5. In the mnemonic 'Never Let Monkeys Eat Bananas,' which cell type corresponds to the third term?

- A. Basophils
- B. Monocytes
- C. Neutrophils
- D. Lymphocytes

Remembering the order of leukocytes by how common they are in peripheral blood is the key idea. The mnemonic Never Let Monkeys Eat Bananas maps to neutrophils, lymphocytes, monocytes, eosinophils, and basophils in that exact sequence. The third term, therefore, is monocytes. Monocytes are the largest white blood cells and go on to become macrophages, where they perform phagocytosis and present antigens, helping both innate and adaptive immunity. Basophils would be the last term, neutrophils the first term, and lymphocytes the second term.

6. In the mnemonic for white blood cells, which cell type corresponds to the first letter N?

- A. Lymphocytes
- B. Monocytes
- C. Eosinophils
- D. Neutrophils

The mnemonic used to recall white blood cell types assigns the initials of each cell: N for neutrophils, L for lymphocytes, M for monocytes, E for eosinophils, and B for basophils. So the first letter N points to neutrophils. Neutrophils are the most abundant white blood cells and act as the first responders to bacterial infection, performing rapid phagocytosis and killing of microbes. They have a characteristic multilobed nucleus and a short lifespan, which fits their role as quick, frontline defenders. The other cell types listed—lymphocytes, monocytes, and eosinophils—start with different initials and thus map to their respective letters in the mnemonic, not the N.

7. Which tube contains ACD and is used for HLA B27 genetic marker testing and DNA matching?

- A. Canary Yellow Tube – ACD**
- B. Gray Tube – Na Fluoride/K Oxalate
- C. Lt Blue Tube – Na Citrate
- D. SPS Tube – Blood Cultures

Genetic marker testing and DNA matching require high-quality DNA from the blood, so the tube chosen should preserve leukocytes and nucleic acids. The canary yellow tube containing acid-citrate-dextrose is designed for this purpose. ACD as an anticoagulant helps keep cells intact and stabilizes DNA, which is essential for reliable extraction and downstream HLA typing (such as HLA B27) and DNA matching. The other tubes are used for different tests and do not provide the same DNA-preserving environment. A gray-top tube with fluoride/oxalate is for glucose testing and glycolysis inhibition, a light blue top tube with sodium citrate is for coagulation studies, and an SPS tube is used for blood cultures. None of these offer the DNA preservation needed for genetic marker testing.

8. For arterial blood gas samples, what is the typical time window to analyze after collection?

- A. Within 15–30 minutes**
- B. Immediately after collection
- C. Within 2 hours
- D. Within 24 hours

Arterial blood gas values are time-sensitive because the blood continues to exchange gases with the air and cells metabolize after collection. CO₂ can diffuse out, pH can shift as hydrogen ions change, and oxygen tension can fall as cells use the available O₂. These processes cause the measured pH, pCO₂, and pO₂ to drift away from the patient's true in vivo values the longer the sample sits. To preserve accuracy, we analyze within a narrow window—typically 15–30 minutes after collection. If immediate analysis isn't possible, refrigerate or place the sample on ice to slow changes and still aim to analyze as soon as feasible, ideally within 30 minutes. Delays of a couple hours or more lead to significant gas changes and unreliable results.

9. A patient faints during phlebotomy. What are the immediate steps to manage and when is it appropriate to continue?

- A. Stop the draw, lower the patient to a supine or reclined position, remove the tourniquet and needle, monitor vital signs, and after recovery decide whether to reattempt at a later time with the patient in a comfortable position.**
- B. Continue the draw and pause only if the patient awakens
- C. Withdraw the needle and discontinue blood collection
- D. Notify patient family and wait for instructions

When a patient faints during phlebotomy, the immediate goal is to protect safety and restore blood flow to the brain. This is almost always a vasovagal reaction. The correct course is to stop the draw at once, lower the patient to a supine or fully reclined position, and remove the tourniquet and the needle. Keeping the patient flat helps return blood to the brain quickly and reduces the risk of injury if they collapse. After that, apply gentle pressure to the venipuncture site to control any bleeding, and monitor the patient's vital signs and level of consciousness until they recover. Once the patient is fully awake, stable, and comfortable, you can decide whether to attempt blood collection again. If a reattempt is pursued, it's typically done later (often after a break or in a position that reduces anxiety, like lying down) and may be at a different site or with precautions to minimize a repeat reaction. If recovery is incomplete or the patient remains unstable, do not continue; provide appropriate care and defer the draw.

10. How does needle gauge selection impact patient comfort and specimen quality during venipuncture?

- A. Smaller gauge needles always reduce pain and never cause issues.
- B. Larger bore needles reduce hemolysis risk but can cause more discomfort.**
- C. Gauge selection does not affect specimen quality.
- D. Larger bore needles have no tradeoffs.

Needle size affects how blood moves into the tube and how the vein feels. A larger bore needle (the smaller gauge number) provides a wider path for the blood, which lowers shear forces on red blood cells as they flow into the collection tube. That reduces the risk of hemolysis, helping preserve specimen quality for tests that are sensitive to damaged cells or plasma quality. But a larger bore needle causes more tissue trauma and pain for many patients and can increase the chance of vein injury or a hematoma, especially in small or fragile veins. So the best approach is to use the largest bore that the vein can tolerate to minimize hemolysis while keeping patient comfort in mind. The other options oversimplify or misstate the relationship: choosing a smaller needle doesn't always mean less pain and it can raise hemolysis risk; gauge selection does influence specimen quality; and saying there are no tradeoffs ignores the balance between comfort and sample integrity.

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://advancedphlebotomy.examzify.com>

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

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