

American Medical Technologist (AMT) Practice Exam (Sample)

Study Guide



Everything you need from our exam experts!

This is a sample study guide. To access the full version with hundreds of questions,

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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. Don't worry about getting everything right, 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, and take breaks to retain information better.

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.

7. Use Other Tools

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!

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Questions

- 1. What type of blood sample is required for an arterial blood gas test?**
 - A. Venous blood sample**
 - B. Capillary blood sample**
 - C. Arterial blood sample**
 - D. Serum sample**
- 2. Which color evacuated tube is most commonly used for coagulation testing?**
 - A. Red**
 - B. Green**
 - C. Light blue**
 - D. Purple**
- 3. What should be done first before performing any phlebotomy procedure?**
 - A. Notify the patient**
 - B. Gather all equipment**
 - C. Sanitize hands and don gloves**
 - D. Prepare the site with antiseptic**
- 4. Under what circumstance can a phlebotomist perform venipuncture on an ankle vein?**
 - A. They are specifically trained for it**
 - B. If the patient requests it**
 - C. With doctor's approval after exhausting all other options**
 - D. When no arm veins are visible**
- 5. What action could lead to the formation of a hematoma during venipuncture?**
 - A. The needle is not inserted deep enough**
 - B. The tourniquet is released too early**
 - C. The needle penetrates all the way through the vein**
 - D. The site is not cleaned properly**

- 6. What is the focus of the AMT practice exam for medical technologists?**
- A. To evaluate patient care skills**
 - B. To assess knowledge and skills necessary for competency in medical technology**
 - C. To provide clinical training guidelines**
 - D. To ensure compliance with safety regulations**
- 7. What is the recommended site for adult venipuncture?**
- A. Saphenous vein**
 - B. Median cubital vein**
 - C. Radial artery**
 - D. Basilic vein**
- 8. Which type of laboratory testing is primarily performed in hematology?**
- A. Blood glucose tests**
 - B. Complete blood count (CBC)**
 - C. Microbial cultures**
 - D. Urinalysis**
- 9. Which blood group is considered the universal donor?**
- A. AB positive (AB+)**
 - B. A positive (A+)**
 - C. B negative (B-)**
 - D. O negative (O-)**
- 10. What type of samples does heparinized plasma typically provide?**
- A. Samples for blood typing**
 - B. Samples for coagulation testing**
 - C. Samples for metabolic panel testing**
 - D. Samples for microbiological analysis**

Answers

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

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Explanations

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1. What type of blood sample is required for an arterial blood gas test?

- A. Venous blood sample**
- B. Capillary blood sample**
- C. Arterial blood sample**
- D. Serum sample**

An arterial blood gas (ABG) test specifically requires an arterial blood sample because it measures the levels of oxygen, carbon dioxide, and pH, which are critical indicators of respiratory function and metabolic state. Arterial blood differs from venous blood because it is oxygen-rich and is under higher pressure as it is directly transported from the heart to the tissues. When assessing how well oxygen is being delivered to the body and how effectively carbon dioxide is being removed, obtaining an arterial sample provides the most accurate representation of these parameters, as well as the body's acid-base balance. Venous blood, on the other hand, would not give an accurate reflection of the oxygen content and other critical factors, making it inappropriate for ABG testing. Capillary blood samples can sometimes be used for preliminary assessments in children or in specific scenarios but generally do not provide the accuracy required for a formal ABG test. Serum samples, which are obtained after blood has clotted and the clot has been removed, are not suitable for ABG analysis either, as they lack the cellular components and gases of whole blood necessary for this specific testing.

2. Which color evacuated tube is most commonly used for coagulation testing?

- A. Red**
- B. Green**
- C. Light blue**
- D. Purple**

The light blue evacuated tube is specifically designed for coagulation testing because it contains sodium citrate as an anticoagulant. This anticoagulant binds calcium ions in the blood, which is crucial for the coagulation process. By preventing clotting, the sample can be tested for various coagulation factors and tests such as PT (prothrombin time) and aPTT (activated partial thromboplastin time). The 9:1 ratio of blood to anticoagulant in the light blue tube is balanced to ensure accurate results for these tests, making it the preferred choice in the laboratory for evaluating clotting ability. Other colored tubes have different additives intended for various types of testing; for instance, red tubes typically do not contain any anticoagulants and are used for serum tests, while green tubes contain heparin, which would interfere with coagulation tests. The purple tube is primarily utilized for hematology tests. Hence, the light blue tube's specific formulation and intended use establish it as the most suitable option for coagulation testing.

3. What should be done first before performing any phlebotomy procedure?

- A. Notify the patient**
- B. Gather all equipment**
- C. Sanitize hands and don gloves**
- D. Prepare the site with antiseptic**

Before performing any phlebotomy procedure, the first critical step is to sanitize hands and don gloves. This practice is essential for ensuring both the safety of the patient and the phlebotomist. Hand hygiene is a fundamental measure to prevent the transmission of infections, as microorganisms can easily spread through contact. By cleaning hands before any direct patient interaction and wearing gloves, the phlebotomist helps to create a sterile environment, minimizing the risk of contamination. In addition to promoting safety, this step is in line with standard infection control practices. It sets the tone for the rest of the procedure, ensuring that all subsequent actions are taken with a focus on maintaining asepsis. Following this initial step, other important actions—such as notifying the patient, gathering equipment, and preparing the puncture site—can be effectively carried out.

4. Under what circumstance can a phlebotomist perform venipuncture on an ankle vein?

- A. They are specifically trained for it**
- B. If the patient requests it**
- C. With doctor's approval after exhausting all other options**
- D. When no arm veins are visible**

The appropriate circumstance for a phlebotomist to perform venipuncture on an ankle vein is when there is doctor's approval after exhausting all other options. This is due to several key considerations regarding the practice of phlebotomy. Ankle veins can be more difficult to access and may carry a higher risk of complications, such as injury to surrounding tissues, nerve damage, or complications from an incorrect puncture. Since performing venipuncture on less conventional sites like the ankle can pose risks, medical professionals typically require that phlebotomists follow specific protocols. In practice, it is standard to first attempt to access more traditional sites for venipuncture, such as the arm, especially the antecubital area where veins are more prominent and easier to access. Only after it has been determined that these options are inadequate or unfeasible should a phlebotomist seek a physician's approval to proceed with accessing veins in the ankle. This ensures that patient safety remains a priority and that the procedures being performed meet medical guidelines and standards.

5. What action could lead to the formation of a hematoma during venipuncture?

- A. The needle is not inserted deep enough**
- B. The tourniquet is released too early**
- C. The needle penetrates all the way through the vein**
- D. The site is not cleaned properly**

The formation of a hematoma during venipuncture is primarily associated with the needle penetrating all the way through the vein wall. When the needle traverses the entire thickness of the vein, it can create a situation where blood escapes into the surrounding tissue. This extravasation of blood results in the accumulation that forms a hematoma, which is a localized collection of blood outside of blood vessels. In this scenario, the other actions could lead to issues but not specifically to the formation of a hematoma in the same manner. For example, if the needle is not inserted deep enough, it might fail to enter the vein properly, leading to difficulty in obtaining a blood sample rather than bleeding into the tissue. Similarly, releasing the tourniquet too early may not have a direct impact on causing a hematoma; it would typically just result in a less pronounced venous filling, potentially making it harder to draw blood. Not cleaning the site properly can increase the risk of infection but does not directly cause bleeding into the tissue surrounding the puncture site. Thus, the best explanation for hematoma formation is indeed the needle penetrating all the way through the vein, leading to blood leaking out into the surrounding area.

6. What is the focus of the AMT practice exam for medical technologists?

- A. To evaluate patient care skills**
- B. To assess knowledge and skills necessary for competency in medical technology**
- C. To provide clinical training guidelines**
- D. To ensure compliance with safety regulations**

The focus of the AMT practice exam for medical technologists is to assess the knowledge and skills necessary for competency in medical technology. This exam is designed to ensure that medical technologists possess the foundational and advanced understanding required to perform their roles effectively. It tests various areas of medical technology, including laboratory procedures, instrumentation, quality control, and safety practices, ensuring that those who pass meet the standards set for professionals in the field. The emphasis is on competency, which is crucial for delivering accurate and reliable laboratory results that directly impact patient care. By concentrating on the knowledge and skills required in medical technology, the practice exam helps identify areas where additional study or training might be necessary, thus promoting ongoing professional development and competency in the field.

7. What is the recommended site for adult venipuncture?

- A. Saphenous vein
- B. Median cubital vein**
- C. Radial artery
- D. Basilic vein

The median cubital vein is generally considered the preferred site for adult venipuncture due to its accessibility and the fact that it is typically positioned centrally in the arm. This vein is located in the antecubital fossa, which is the area in front of the elbow, making it easy to locate and puncture. Additionally, the median cubital vein is usually larger than other veins and has a lower risk of complications, such as nerve damage or arteriovenous fistula formation, when engaged for blood collection. While other veins can be utilized for venipuncture, they may not offer the same level of comfort, safety, and success rate as the median cubital vein. For example, the basilic vein, while also a viable option, is located closer to major nerves and arteries, making it more challenging to use and increasing the risk of complications. The saphenous vein is generally used for interventions in the leg and is not appropriate for routine venipuncture in adults. Similarly, the radial artery is located in the wrist and is primarily used for arterial blood sampling rather than venipuncture, which focuses on drawing blood from veins.

8. Which type of laboratory testing is primarily performed in hematology?

- A. Blood glucose tests
- B. Complete blood count (CBC)**
- C. Microbial cultures
- D. Urinalysis

The complete blood count (CBC) is a fundamental test in hematology, which is the study of blood, blood-forming organs, and the disorders that affect them. The CBC evaluates various components of the blood, including red blood cells, white blood cells, hemoglobin, hematocrit, and platelets. This comprehensive assessment provides crucial information about a person's overall health and helps in diagnosing conditions such as anemia, infections, and leukemia, among others. In contrast, blood glucose tests primarily measure blood sugar levels and are typically associated with diabetes management rather than hematology. Microbial cultures are used to identify pathogens in samples, which falls under microbiology, not hematology. Urinalysis involves the examination of urine and is used to assess the renal and metabolic status of an individual, again placing it outside the realm of hematological testing. Thus, the complete blood count stands out as the specific test that aligns with the focus of hematology.

9. Which blood group is considered the universal donor?

- A. AB positive (AB+)**
- B. A positive (A+)**
- C. B negative (B-)**
- D. O negative (O-)**

The universal donor blood group is O negative (O-). This designation arises from the presence or absence of specific antigens on the red blood cells. Individuals with O negative blood do not have A, B, or Rh antigens, which means their blood can be transfused to any recipient without the risk of an immune reaction. In transfusion practices, compatibility between donor and recipient blood types is crucial; the absence of antigens makes O negative blood universally acceptable, as it will not trigger an immune response in recipients with any other blood type. The other blood groups contain one or more antigens that can lead to allergic reactions or immune responses in recipients with different blood types, thereby limiting their use as universal donors. While AB positive blood types have all the necessary antigens to receive blood from all types, they cannot donate universally due to the presence of these antigens. Similarly, A positive and B negative blood types have specific antigens that could cause reactions in certain recipients, hence they cannot be considered universal donors.

10. What type of samples does heparinized plasma typically provide?

- A. Samples for blood typing**
- B. Samples for coagulation testing**
- C. Samples for metabolic panel testing**
- D. Samples for microbiological analysis**

Heparinized plasma is obtained by adding heparin, an anticoagulant, to blood samples to prevent clotting. This type of plasma is primarily used for coagulation testing, as it allows for the evaluation of clotting factors without the interference of clot formation. In coagulation tests, it's pivotal to analyze the blood's ability to form clots under specific conditions, making heparinized plasma an essential sample type for such assessments. In contrast, samples for blood typing typically require serum or EDTA (another type of anticoagulant), as the presence of heparin can interfere with certain types of serological reactions required for typing. Similarly, metabolic panels assess various chemical substances in the blood and usually utilize serum rather than heparinized plasma, as the biochemical properties can be altered by the presence of heparin. Microbiological analysis generally involves the use of whole blood or specific culture media rather than plasma, since the presence of anticoagulants is not beneficial and can affect the growth of microorganisms. The usage of heparinized plasma in coagulation tests is key for accurate diagnostics in clinical settings, highlighting its importance in evaluating hemostatic function.

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://amt.examzify.com>

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