

COLLECTION OF BLOOD AND NON- BLOOD SPECIMENS PRACTICE EXAM (SAMPLE) STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE

<https://collofbloodnonbloodspecimen.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	16

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.

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

SAMPLE

- 1. What might cause petechiae during blood collection?**
 - A. Needle being too shallow
 - B. Tourniquet applied too tight
 - C. Fast withdrawal of needle
 - D. Using a small gauge needle
- 2. How should blood specimens be stored if they cannot be processed immediately?**
 - A. At room temperature
 - B. In the freezer
 - C. In a refrigerator
 - D. Under direct sunlight
- 3. What are the indications for using a green-top tube for blood collection?**
 - A. For tests requiring serum
 - B. For tests requiring plasma, as it contains sodium heparin
 - C. For coagulation tests, as it has no additives
 - D. For glucose testing, as it contains fluoride
- 4. Which type of blood sample is most affected by hemolysis?**
 - A. Plasma samples
 - B. Serum samples
 - C. A whole blood sample
 - D. Capillary blood samples
- 5. What can be a consequence of inadequately collecting a specimen?**
 - A. The test results may be accurate
 - B. A new sample may need to be collected
 - C. The cost of testing may be reduced
 - D. Delaying the testing process
- 6. What type of urine specimen is typically collected for culture?**
 - A. Random urine
 - B. 24-hour urine
 - C. Clean-catch midstream urine
 - D. First morning urine

- 7. What does the systolic value in a blood pressure measurement represent?**
- A. The lowest pressure during cardiac cycle
 - B. The average pressure during the heartbeat
 - C. The highest pressure during the cardiac cycle
 - D. The pressure when the heart is at rest
- 8. What is the recommendation for the frequency of changing gloves between patients?**
- A. After every 5 patients
 - B. After every patient
 - C. Only when they become visibly soiled
 - D. At the beginning of each shift
- 9. What can happen if an anticoagulant tube is not mixed properly after blood collection?**
- A. Test results will be unaffected
 - B. Clot formation can occur, affecting test results
 - C. The tube will break
 - D. More blood will need to be drawn
- 10. In clinical practice, what is the importance of monitoring both systolic and diastolic blood pressure over time?**
- A. To establish a diagnosis for all patients
 - B. To track changes in arterial health
 - C. To determine blood type compatibility
 - D. To measure respiratory rates

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What might cause petechiae during blood collection?

- A. Needle being too shallow
- B. Tourniquet applied too tight**
- C. Fast withdrawal of needle
- D. Using a small gauge needle

The formation of petechiae during blood collection is primarily associated with the application of a tourniquet that is too tight. When a tourniquet is applied, it temporarily restricts blood flow in the veins of the arm. If the pressure is excessive, it can lead to capillary rupture, resulting in small red or purple spots known as petechiae. This occurs because the increased pressure impairs venous return while still allowing arterial blood flow to continue, causing engorgement of the capillaries and subsequently leading to their rupture. Other factors such as the depth of the needle, the speed at which it is withdrawn, and the gauge of the needle typically have less direct influence on the immediate formation of petechiae compared to the effect of an overly tight tourniquet. While those factors can contribute to discomfort or other complications, the primary cause of petechiae is related to capillary pressure and damage when tourniquet pressure exceeds normal levels.

2. How should blood specimens be stored if they cannot be processed immediately?

- A. At room temperature
- B. In the freezer
- C. In a refrigerator**
- D. Under direct sunlight

Blood specimens should be stored in a refrigerator if they cannot be processed immediately to preserve their stability and integrity. Refrigeration slows down the metabolic processes of cells and helps to maintain the viability of various components such as enzymes, proteins, and cellular elements, which are crucial for accurate test results. Most blood specimens should ideally be kept at temperatures between 2 to 8 degrees Celsius (36 to 46 degrees Fahrenheit) to prevent degradation. Storage at room temperature can lead to changes in the blood composition due to cellular metabolism, bacterial growth, and other factors that may compromise sample quality. Freezing blood specimens can cause the formation of ice crystals that may rupture cells, making the sample unsuitable for analysis. Direct sunlight can also lead to the degradation of certain analytes in the blood, negatively affecting test outcomes. Thus, refrigeration is the most suitable method for storing blood specimens temporarily before processing.

3. What are the indications for using a green-top tube for blood collection?

- A. For tests requiring serum
- B. For tests requiring plasma, as it contains sodium heparin**
- C. For coagulation tests, as it has no additives
- D. For glucose testing, as it contains fluoride

The use of a green-top tube for blood collection is particularly indicated for tests that require plasma samples because it contains sodium heparin as an anticoagulant. Sodium heparin works by preventing the clotting process, thus allowing for the collection of plasma, which is the liquid component of blood that contains water, electrolytes, proteins, hormones, and waste products. This makes green-top tubes suitable for various plasma-based tests, especially those requiring rapid processing or where the integrity of coagulation factors must be preserved. In contrast, other types of tubes, such as red-top tubes, are designed to collect serum, which is the fluid that remains after blood has clotted. Coagulation tests generally require specific additives or no additives at all to measure the clotting ability accurately, making the green-top tube inappropriate for those tests. Additionally, glucose testing typically requires a gray-top tube that contains fluoride to inhibit glycolysis, ensuring the stability of glucose levels during transport and testing.

4. Which type of blood sample is most affected by hemolysis?

- A. Plasma samples
- B. Serum samples
- C. A whole blood sample
- D. Capillary blood samples

Plasma samples are indeed the type of blood sample most affected by hemolysis. When blood is collected and processed, hemolysis occurs when red blood cells are damaged or lyse, releasing hemoglobin into the surrounding fluid. In the case of plasma samples, which are obtained from anticoagulated blood, any hemolysis that occurs will directly impact the plasma and alter the concentrations of various analytes. Hemolysis can influence test results by increasing potassium levels, altering liver enzyme levels, and affecting many other substances, leading to potentially misleading interpretations of the results. The presence of free hemoglobin can interfere with colorimetric assays and can also affect the turbidity of the sample, complicating the analysis. In contrast, serum samples, which are derived from clotted blood, may also be affected by hemolysis, but the overall impact tends to be different since the serum is the liquid that separates after blood has clotted and the cells have settled to the bottom. Whole blood samples, which contain all components of blood including cells, plasma, and platelets, can be affected by hemolysis, but it is the plasma — being the liquid part in direct contact with the lysed cells — that most directly reflects the consequences of hemolysis.

5. What can be a consequence of inadequately collecting a specimen?

- A. The test results may be accurate
- B. A new sample may need to be collected
- C. The cost of testing may be reduced
- D. Delaying the testing process

Inadequately collecting a specimen can lead to the necessity of collecting a new sample. When a specimen is not collected properly, whether due to improper technique, contamination, incorrect container use, or insufficient volume, the integrity of the sample is compromised. This can result in unreliable or unusable test results, meaning that the original sample cannot provide the information needed for accurate diagnosis or treatment. Collecting a new sample ensures that the testing is based on a specimen that meets all necessary quality standards, which is crucial for obtaining accurate and reliable test results. This step, though inconvenient, is essential to avoid errors in patient management that could arise from relying on faulty data.

6. What type of urine specimen is typically collected for culture?

- A. Random urine
- B. 24-hour urine
- C. Clean-catch midstream urine**
- D. First morning urine

Culture tests require a urine specimen that is less likely to be contaminated by bacteria that are normally present in the urethra or on the skin. A clean-catch midstream urine specimen is the preferred method for culture because it minimizes the risk of contamination. This collection technique involves discarding the first few milliliters of urine, which are more likely to contain contaminants. The midstream portion, which is collected after the initial flow, provides a more accurate sample of urine from the bladder, where any potential pathogens causing urinary tract infections would originate. Other types of urine specimens, such as random urine, may not adequately represent a sterile sample due to possible contamination from the urethra and external genitalia. A 24-hour urine collection is primarily used for assessing renal function and measuring specific substances over an entire day, rather than for detecting infections. First morning urine can also be used for certain tests but might not be ideal for cultures due to its potential to be more concentrated with shedding of cells or bacteria overnight. Therefore, the clean-catch midstream urine specimen is the most appropriate choice for culture, as it provides a more accurate sample for identifying any infectious organisms present in the urine.

7. What does the systolic value in a blood pressure measurement represent?

- A. The lowest pressure during cardiac cycle
- B. The average pressure during the heartbeat
- C. The highest pressure during the cardiac cycle**
- D. The pressure when the heart is at rest

The systolic value in a blood pressure measurement represents the highest pressure in the arteries when the heart contracts and pumps blood into the circulation. During each heartbeat, the heart squeezes (contracts) to push blood out into the arteries, producing a maximum pressure which is recorded as the systolic pressure. This measurement reflects how well the heart is functioning in pumping blood and indicates the amount of work the heart is doing. Understanding the aspects of blood pressure helps to clarify why other answers are not suitable. For instance, while the lowest pressure is indicative of diastolic pressure, and the average pressure relates to mean arterial pressure calculations, the defining characteristic of systolic pressure is its peak value during the cardiac cycle. The pressure when the heart is at rest pertains to when the heart chambers are filling with blood, corresponding to diastole, not systole. This distinction is fundamental in interpreting blood pressure readings accurately.

8. What is the recommendation for the frequency of changing gloves between patients?

- A. After every 5 patients
- B. After every patient**
- C. Only when they become visibly soiled
- D. At the beginning of each shift

The recommendation for changing gloves between patients is to do so after every patient. This practice is crucial for maintaining proper infection control and preventing cross-contamination. By changing gloves between each patient, health care providers minimize the risk of transmitting pathogens that may be present on the gloves after interacting with one patient, which could otherwise be passed on to the next patient. This protocol is fundamental in healthcare settings, particularly in environments where there is a high risk of infection, such as hospitals or clinics. It emphasizes the importance of hand hygiene and the use of personal protective equipment, such as gloves, as part of standard precautions to ensure patient safety and reduce the spread of infections. Other recommendations, such as changing gloves only when they become visibly soiled or at the beginning of each shift, do not provide adequate protection and can lead to increased risk of healthcare-associated infections. Therefore, the practice of changing gloves after every patient is the most effective method to protect both patients and healthcare workers alike.

9. What can happen if an anticoagulant tube is not mixed properly after blood collection?

- A. Test results will be unaffected
- B. Clot formation can occur, affecting test results**
- C. The tube will break
- D. More blood will need to be drawn

When an anticoagulant tube is not mixed properly after blood collection, it can lead to clot formation within the tube. Anticoagulants, such as EDTA or heparin, are added to blood collection tubes to prevent clotting and preserve the integrity of the blood sample for accurate testing. If the collected blood is not adequately mixed with the anticoagulant, the anticoagulant may not interact effectively with the blood, resulting in the formation of clots. Clots can significantly affect the results of various laboratory tests. For example, tests that require plasma or serum may yield erroneous results if clots are present, as they can interfere with the assay processes and lead to inaccurate interpretations by healthcare providers. Proper mixing ensures that the anticoagulant evenly coats the cells, thus preventing any potential clotting and ensuring reliable test outcomes.

10. In clinical practice, what is the importance of monitoring both systolic and diastolic blood pressure over time?

- A. To establish a diagnosis for all patients
- B. To track changes in arterial health**
- C. To determine blood type compatibility
- D. To measure respiratory rates

Monitoring both systolic and diastolic blood pressure over time is crucial for tracking changes in arterial health. Systolic blood pressure, the higher number, measures the pressure in the arteries when the heart beats, while diastolic blood pressure, the lower number, measures the pressure in the arteries when the heart is resting between beats. Assessing these values over time allows healthcare providers to detect trends that may indicate conditions such as hypertension, heart disease, or other cardiovascular disorders. Elevated blood pressure readings can signal increased strain on the cardiovascular system and could lead to long-term complications if not managed properly. By monitoring changes in both systolic and diastolic pressures, clinicians can implement preventive measures or treatment strategies to maintain optimal arterial health and prevent the progression of diseases. The other options, such as establishing a diagnosis for all patients, determining blood type compatibility, or measuring respiratory rates, do not directly relate to the significance of blood pressure monitoring and thus do not reflect the primary importance of tracking both systolic and diastolic values in clinical practice.

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://collofbloodnonbloodspecimen.examzify.com>

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

SAMPLE