NCLEX Hematology Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

Copyright **1**

Table of Contents **2**

Introduction **3**

How to Use This Guide **4**

Questions **5**

Answers **9**

Explanations **11**

Next Steps **17**

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. **Why are multiple drugs often used in combination to treat leukemia and lymphoma?**

   A. There are fewer toxic and side effects.

   B. The chance that one drug will be effective is increased.

   C. The drugs are more effective without causing side effects.

   D. The drugs work by different mechanisms to maximize killing of malignant cells.

2. **Deficiency of iron in the diet leads to which hematologic reduction in iron deficiency anemia?**

   A. Plasma

   B. WBCs

   C. Hemoglobin

   D. Antibodies

3. **What is the primary reason for staying at the bedside during the initial phase of a blood transfusion?**

   A. To detect signs of a transfusion reaction

   B. To monitor vital signs every 15 minutes

   C. To ensure patient comfort

   D. To verify the patient's identity

4. **One of the most elementary home interventions to help prevent a sickle cell crisis is to which of the following?**

   A. Take iron supplements daily.

   B. Maintain adequate fluid intake.

   C. Engage in daily exercise.

   D. Eat leafy green vegetables.

5. **A client with idiopathic thrombocytopenic purpura (ITP) should report possible small-vessel clotting when which finding is assessed?**

   A. Petechiae on the upper chest

   B. Hypotension

   C. Cyanotic nail beds

   D. Severe headache

6. A patient with sickle cell anemia says they are planning a ski trip to a high-altitude area. The nurse assesses for the need for further instruction when the patient states:

A. I will avoid iced drinks.

B. I miss my beers in the afternoon.

C. I walk every day instead of strenuous exercise.

D. I am looking forward to my annual ski trip to Colorado.

7. In polycythemia, the increased blood viscosity most commonly predisposes patients to which complication?

A. Thrombosis

B. Hypotension

C. Anemia

D. Bradycardia

8. What is the purpose of collecting blood and urine specimens during suspected transfusion reaction?

A. To analyze for incompatibility and to identify the reaction

B. To assess kidney function only

C. To measure cholesterol levels

D. To perform genetic testing

9. The presence of which cells indicates Hodgkin's lymphoma?

A. Abnormal B cells

B. Abnormal T cells

C. Cytotoxic T cells

D. Reed-Sternberg (R-S) cells

10. Pernicious anemia differs from aplastic anemia in that pernicious anemia results from a lack of intrinsic factor leading to poor absorption of vitamin B12, whereas aplastic anemia is primarily due to:

A. Pernicious anemia results from marrow suppression; aplastic anemia from intrinsic factor

B. Pernicious anemia results from excessive intrinsic factor; aplastic anemia from increased red blood cell production

C. Pernicious anemia results from lack of intrinsic factor; aplastic anemia from bone marrow suppression

D. Pernicious anemia is caused by infection; aplastic anemia by autoimmune disease

Answers

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

Explanations

1. Why are multiple drugs often used in combination to treat leukemia and lymphoma?

A. There are fewer toxic and side effects.

B. The chance that one drug will be effective is increased.

C. The drugs are more effective without causing side effects.

D. The drugs work by different mechanisms to maximize killing of malignant cells.

Using multiple drugs in combination targets leukemia and lymphoma cells in several complementary ways. Each agent often acts on a different vulnerability—one might damage DNA, another disrupt cell division, and another inhibit a separate essential process. By attacking cancer cells through distinct mechanisms, the therapy covers more cellular weaknesses and works across different phases of the cell cycle. This makes it harder for malignant cells to survive and develop resistance, which improves overall kill rates and chances of remission. Dosing is planned to balance effectiveness with safety, so using several drugs can allow lower doses of each while still achieving a strong effect, though toxicity can still rise with combinations.

2. Deficiency of iron in the diet leads to which hematologic reduction in iron deficiency anemia?

A. Plasma

B. WBCs

C. Hemoglobin

D. Antibodies

Iron is needed to form heme, the part of hemoglobin that carries oxygen. When dietary iron is lacking, the body can't synthesize as much heme, so hemoglobin production drops. This leads to a lower hemoglobin level in the blood—the defining feature of iron deficiency anemia. The red blood cells also become smaller and paler (microcytic, hypochromic), but the key hematologic change is the decrease in hemoglobin. Plasma volume, white blood cell counts, and antibodies aren't inherently reduced by iron deficiency in the same way.

3. What is the primary reason for staying at the bedside during the initial phase of a blood transfusion?

A. To detect signs of a transfusion reaction

B. To monitor vital signs every 15 minutes

C. To ensure patient comfort

D. To verify the patient's identity

The key idea is that the initial moments of a blood transfusion carry the highest risk for an acute reaction, so being at the bedside allows immediate observation for any troubling signs. Early reactions can appear quickly, with symptoms such as fever, chills or rigors, hives or itching, flushing, shortness of breath, chest or back pain, or sudden changes in vital signs. If any of these occur, you can stop the transfusion right away, assess the patient, and initiate the emergency protocol to prevent further harm. Verifying the patient's identity is essential and should be done before starting the transfusion, not during the initial observation period. Monitoring vital signs is important for ongoing safety, but the primary reason for staying with the patient at the start is to detect a transfusion reaction as soon as it begins.

4. One of the most elementary home interventions to help prevent a sickle cell crisis is to which of the following?

A. Take iron supplements daily.

B. Maintain adequate fluid intake.

C. Engage in daily exercise.

D. Eat leafy green vegetables.

Maintaining adequate fluid intake is a simple, effective way to reduce sickle cell crises because dehydration can trigger red blood cell sickling. When the body is dehydrated, blood becomes more viscous and hemoglobin S tends to polymerize, causing red cells to stiffen and obstruct small vessels. Keeping well hydrated helps keep the blood less viscous and the red cells more pliable, lowering the risk of vaso-occlusive events. This is especially important at home during illness, hot weather, or physical activity, when fluid losses are higher. Encourage regular fluids throughout the day and increase intake during fever, vomiting, diarrhea, or heavy sweating, while watching for signs of dehydration like dark urine or thirst. Iron supplements aren't a preventive measure for crises unless there's true iron deficiency, exercise can contribute to fluid losses if not balanced with fluids, and leafy greens don't directly prevent crises.

5. A client with idiopathic thrombocytopenic purpura (ITP) should report possible small-vessel clotting when which finding is assessed?

A. Petechiae on the upper chest

B. Hypotension

C. Cyanotic nail beds

D. Severe headache

In this scenario, the key idea is that microvascular clotting would impair blood flow to distal tissues. If small vessels are occluded, oxygen delivery to the extremities can drop, causing cyanosis of the nail beds. That bluish discoloration reflects poor perfusion from microthrombi in the small vessels, which is the sign you'd look for when considering a thrombotic process in a patient with ITP. Petechiae, a common finding in ITP, result from bleeding due to low platelets, not from clotting. Hypotension points to significant blood loss or another severe process, not clot formation in small vessels. Severe headache could signal a hemorrhagic event such as intracranial bleeding rather than clotting in the microcirculation. So cyanotic nail beds best indicate possible small-vessel clotting in this context.

6. A patient with sickle cell anemia says they are planning a ski trip to a high-altitude area. The nurse assesses for the need for further instruction when the patient states:

A. I will avoid iced drinks.

B. I miss my beers in the afternoon.

C. I walk every day instead of strenuous exercise.

D. I am looking forward to my annual ski trip to Colorado.

High altitude reduces oxygen availability, which can trigger more sickling in people with sickle cell disease. That makes travel to a high-altitude environment a situation where careful planning and education are essential to prevent a crisis or serious complications. The statement about looking forward to an annual ski trip to Colorado best signals a need for further instruction because it shows a plan to be in a high-altitude setting without demonstrated awareness of the necessary precautions. The nurse would discuss how to travel safely with SCD: stay well hydrated to reduce blood viscosity, avoid dehydration and extreme exertion, pace activities and acclimate gradually, monitor for early signs of a crisis (increasing pain, chest symptoms, fever), and seek medical advice before travel (and consider having a plan for emergencies, oxygen needs if prescribed, and a medical letter or arrangements with a hematologist). The other comments don't indicate a lack of preparedness for altitude-related risk: avoiding iced drinks isn't a major risk signal, missing alcohol could even reduce dehydration risk, and walking daily instead of strenuous exercise reflects a generally safer approach for routine activity.

7. In polycythemia, the increased blood viscosity most commonly predisposes patients to which complication?

A. Thrombosis

B. Hypotension

C. Anemia

D. Bradycardia

In polycythemia, the red blood cell mass is increased, which makes the blood thicker or more viscous. This higher viscosity slows blood flow and promotes a prothrombotic state—platelets and clotting factors are more likely to interact, and sluggish flow can lead to clot formation in the vessels. Because of this, thrombotic events—such as deep vein thrombosis, pulmonary embolism, stroke, or heart attack—are the most common complications. The other options don't fit the physics of polycythemia. Thickened blood doesn't typically cause hypotension; in fact, high viscosity can contribute to hypertension or vascular resistance rather than low blood pressure. Anemia is the opposite of polycythemia's effect on red blood cells. Bradycardia isn't driven by the viscosity change and isn't the usual cardiovascular response to polycythemia.

8. What is the purpose of collecting blood and urine specimens during suspected transfusion reaction?

A. To analyze for incompatibility and to identify the reaction

B. To assess kidney function only

C. To measure cholesterol levels

D. To perform genetic testing

When a transfusion reaction is suspected, collecting blood and urine helps confirm that a reaction is happening and pinpoint its cause. Blood samples from the patient (and, if possible, from the transfused unit) are used for post-transfusion testing to check compatibility—ABO/Rh typing and crossmatching—and to perform a direct antiglobulin (Coombs) test to see if antibodies are coating donor or patient red cells. A positive direct test with evidence of hemolysis supports an acute hemolytic reaction due to incompatibility. Urine is checked for hemoglobinuria, which indicates intravascular hemolysis, and bilirubin or other labs may support the diagnosis of a hemolytic process. Together, these specimens distinguish immune-mediated hemolytic reactions from other transfusion reactions and guide urgent management and future transfusion safety. This approach focuses on detecting incompatibility and identifying the reaction, rather than assessing unrelated things like cholesterol or genetic testing.

9. The presence of which cells indicates Hodgkin's lymphoma?

A. Abnormal B cells

B. Abnormal T cells

C. Cytotoxic T cells

D. Reed-Sternberg (R-S) cells

Reed-Sternberg cells are the hallmark finding in classical Hodgkin lymphoma. These are very large lymphoid cells, usually derived from B cells, that often show two nuclei or a bilobed nucleus with prominent nucleoli—giving an owl's-eye appearance under the microscope. Their presence in a biopsy strongly points to Hodgkin lymphoma because RS cells are distinctive for this disease and aren't typically seen in other lymphomas. While other abnormal B or T cells can appear in different lymphoid malignancies, the identification of Reed-Sternberg cells specifically supports Hodgkin lymphoma.

10. Pernicious anemia differs from aplastic anemia in that pernicious anemia results from a lack of intrinsic factor leading to poor absorption of vitamin B12, whereas aplastic anemia is primarily due to:

A. Pernicious anemia results from marrow suppression; aplastic anemia from intrinsic factor

B. Pernicious anemia results from excessive intrinsic factor; aplastic anemia from increased red blood cell production

C. Pernicious anemia results from lack of intrinsic factor; aplastic anemia from bone marrow suppression

D. Pernicious anemia is caused by infection; aplastic anemia by autoimmune disease

Pernicious anemia and aplastic anemia differ by where the problem lies in blood formation. Pernicious anemia is a vitamin B12 deficiency caused by a lack of intrinsic factor, which is needed for B12 absorption in the gut. Without intrinsic factor, B12 isn't absorbed efficiently, leading to impaired DNA synthesis in red blood cell precursors and a megaloblastic (macrocytic) anemia, with possible neurologic symptoms. Aplastic anemia, on the other hand, is bone marrow failure—the marrow stops producing adequate amounts of all blood cell lines (red cells, white cells, and platelets), causing pancytopenia. So the correct idea is that pernicious anemia arises from absence of intrinsic factor affecting B12 absorption, whereas aplastic anemia arises from bone marrow suppression.

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://nclexhematology.examzify.com

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