Registered Nurse Certified in Neonatal Intensive Care Unit (RNC-NICU) Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Sample study guide. For the full version with hundreds of questions, visit: https://rncnicu.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

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. **A heart rate of 200 bpm with a weak central pulse on day 3 of life is most concerning for which condition requiring immediate evaluation?**

   A. Neonatal sepsis

   B. Normal adaptation

   C. Hypothermia

   D. Hyperglycemia

2. **Two indicators of effective newborn resuscitation that would prompt continuing advanced interventions, and what is the typical next step if heart rate remains <60 bpm after initial ventilation?**

   A. Improvement in oxygen saturation alone.

   B. Heart rate improving to 70 bpm but color remains pale.

   C. Improvement in color, tone, or heart rate >60 bpm with ongoing ventilation; if HR remains <60 bpm after 30 seconds of effective ventilation, start chest compressions with a 3:1 compression-to-ventilation ratio and give epinephrine per protocol.

   D. Delay in action until after 2 minutes.

3. **In expressing milk, which statement BEST describes the difference between foremilk and hindmilk?**

   A. The fat content is up to 3x greater in hindmilk than foremilk

   B. Foremilk contains more fat than hindmilk

   C. Hindmilk contains more lactose but less fat

   D. Foremilk and hindmilk have identical fat content

4. **Which interpretation best fits the blood gas with pH 7.01, PCO2 39, PO2 180, HCO3 16, BE -19 in a term infant?**

   A. Metabolic Acidosis

   B. Respiratory Acidosis

   C. Metabolic Alkalosis

   D. Respiratory Alkalosis

SAMPLE

5. Which pulmonary air leak presents with abrupt hypotension, bradycardia, and muffled heart sounds?

A. Pneumothorax

B. Pneumomediastinum

C. Pulmonary hemorrhage

D. Atelectasis

6. Herniation of abdominal contents through a defect lateral to the umbilical ring is called what?

A. Gastroschisis

B. Omphalocele

C. Umbilical hernia

D. Intestinal atresia

7. Which scalp condition involves swelling that can extend across the entire scalp and may be life-threatening due to blood loss and shock?

A. Subgaleal hemorrhage

B. Caput succedaneum

C. Cephalohematoma

D. Molding

8. A NICU nurse operating as a patient advocate is an example of which ethical principle?

A. Autonomy

B. Beneficence

C. Nonmaleficence

D. Justice

9. An 800 gram infant has a UAC line running NS at 1 mL/hr. NS contains 0.154 mEq/mL of Na. How many mEq of sodium does this infant receive in 24 hours from this infusion?

A. 3.696 mEq

B. 0.3696 mEq

C. 0.8 mEq

D. 24 mEq

SAMPLE

10. A 36-week infant is admitted to the NICU for hypoglycemia. The best method to assist a Spanish-speaking mother in making informed decisions is to:

A. Use a certified language interpreter

B. Use a family member as translator

C. Rely on written materials in English only

D. Speak louder and slower

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. A heart rate of 200 bpm with a weak central pulse on day 3 of life is most concerning for which condition requiring immediate evaluation?

A. Neonatal sepsis

B. Normal adaptation

C. Hypothermia

D. Hyperglycemia

A heart rate of 200 bpm with a weak central pulse in a 3-day-old infant signals significant poor perfusion and is most concerning for neonatal sepsis with potential septic shock. Neonates normally run about 120–160 bpm; a rate as high as 200 is a marked tachycardic response, and a weak central pulse shows that the heart is not delivering adequate blood flow to the core organs. Infections can trigger widespread inflammation that causes vasodilation, capillary leak, and reduced effective circulating volume, so the heart compensates with a faster rate, but perfusion remains compromised. This combination—rapid heart rate plus weak pulses—points to a systemic process like sepsis that requires immediate evaluation and urgent management. While hypothermia can accompany infection and hyperglycemia can occur in ill neonates, the specific pattern of tachycardia with a weak central pulse is most strongly aligned with septic shock in this age group, making sepsis the primary concern to address right away. Initiate the sepsis workup and begin empiric antibiotics after obtaining cultures, along with supportive care and close monitoring.

2. Two indicators of effective newborn resuscitation that would prompt continuing advanced interventions, and what is the typical next step if heart rate remains <60 bpm after initial ventilation?

A. Improvement in oxygen saturation alone.

B. Heart rate improving to 70 bpm but color remains pale.

C. Improvement in color, tone, or heart rate >60 bpm with ongoing ventilation; if HR remains <60 bpm after 30 seconds of effective ventilation, start chest compressions with a 3:1 compression-to-ventilation ratio and give epinephrine per protocol.

D. Delay in action until after 2 minutes.

In newborn resuscitation, perfusion is monitored mainly through heart rate and signs of circulation such as color and tone. If ventilation is effective and you see improvement—heart rate rising above 60 bpm or the baby showing better color and tone—this means ventilation is successfully supporting circulation, so you continue with ongoing ventilation and monitoring rather than escalating interventions. If, after 30 seconds of effective ventilation, the heart rate remains below 60 bpm, that's a sign perfusion is not adequate yet. The next step is to begin chest compressions using a 3:1 compression-to-ventilation ratio and administer epinephrine per protocol. This combination increases blood flow to the heart and brain when ventilation alone isn't restoring adequate perfusion. Why other scenarios aren't as appropriate: improvement in oxygen saturation alone or color/tone changes without a heart rate above 60 don't guarantee adequate perfusion, and delaying action until later steps risks worse outcomes.

SAMPLE

3. In expressing milk, which statement BEST describes the difference between foremilk and hindmilk?

A. The fat content is up to 3x greater in hindmilk than foremilk

B. Foremilk contains more fat than hindmilk

C. Hindmilk contains more lactose but less fat

D. Foremilk and hindmilk have identical fat content

During a single breastfeeding session, milk composition shifts from the initial foremilk to the later hindmilk. Foremilk is the thinner, early milk that provides hydration and more lactose, while hindmilk appears creamier and has a higher fat content, delivering more calories. The statement that best describes this difference is that fat content is up to three times greater in hindmilk than in foremilk. This captures the main point—that hindmilk is richer in fat, though the exact amount varies from feeding to feeding and among individuals. The other ideas don't fit the pattern: foremilk is not higher in fat than hindmilk, hindmilk is not richer in lactose with less fat, and foremilk and hindmilk do not have identical fat levels. In practice, ensuring a full feeding helps the infant receive the fatty, energy-dense hindmilk. When expressing milk, note that the early expressed milk is foremilk and the later portions are more likely to be hindmilk.

4. Which interpretation best fits the blood gas with pH 7.01, PCO2 39, PO2 180, HCO3 16, BE -19 in a term infant?

A. Metabolic Acidosis

B. Respiratory Acidosis

C. Metabolic Alkalosis

D. Respiratory Alkalosis

Primary disturbance: metabolic acidosis. The acidemia (pH 7.01) with a low bicarbonate concentration (HCO3- = 16) and a markedly negative base excess (-19) points to a loss of base and accumulation of acids from a metabolic process. In metabolic acidosis, you expect the pH to be low and the HCO3- to be low, which is exactly what is seen here. The PCO2 is 39, close to normal. In metabolic acidosis, the body usually compensates by blowing off CO2 to lower the acidity (respiratory compensation), which would bring the PCO2 down toward the mid-30s or lower depending on severity. Here the PCO2 is not reduced as much as expected, indicating incomplete compensation and potentially a mixed picture, but the dominant abnormality remains metabolic acidosis given the clear bicarbonate deficit and negative base excess. The high PO2 simply reflects oxygenation status and doesn't drive the acid-base interpretation. So the best fit is metabolic acidosis due to the low HCO3- and negative base excess with acidemia.

SAMPLE

5. Which pulmonary air leak presents with abrupt hypotension, bradycardia, and muffled heart sounds?

A. Pneumothorax

B. Pneumomediastinum

C. Pulmonary hemorrhage

D. Atelectasis

The main idea is recognizing a tension pneumothorax, a life-threatening pulmonary air leak that rapidly compresses the heart and great vessels. When air collects under pressure in the pleural space, the lung on the affected side collapses and shifts the mediastinum. This compression reduces venous return to the heart, sharply decreasing cardiac output, which explains the abrupt hypotension and, in severe cases, bradycardia from profound hypoxia. The muffled heart sounds come from the heart being compressed by the surrounding air, dampening the sound transmission. In this emergency, immediate decompression is required—needle thoracostomy or chest tube placement with prompt reassessment of ventilation. Other air leaks can produce different signs (air in the mediastinum, subcutaneous emphysema) or symptoms like bleeding or dull breath sounds, but they don't fit this rapid cardiopulmonary collapse as well as a tension pneumothorax.

6. Herniation of abdominal contents through a defect lateral to the umbilical ring is called what?

A. Gastroschisis

B. Omphalocele

C. Umbilical hernia

D. Intestinal atresia

Gastroschisis is the condition described. It involves herniation of abdominal contents through a defect located to the side of the umbilicus, usually the right, and there is no protective sac covering the exposed viscera. This distinguishes it from other abdominal wall defects: an omphalocele occurs at the umbilicus with the intestines covered by a membranous sac and often associated with other anomalies; an umbilical hernia protrudes through the umbilical ring itself; and intestinal atresia is a blockage or absence of a segment of intestine, not a herniation through a defect.

SAMPLE

7. Which scalp condition involves swelling that can extend across the entire scalp and may be life-threatening due to blood loss and shock?

A. Subgaleal hemorrhage

B. Caput succedaneum

C. Cephalohematoma

D. Molding

This describes a subgaleal hemorrhage. Bleeding into the subgaleal space beneath the galea aponeurotica can spread widely across the entire scalp, because that space is a large potential area for blood to accumulate. In a newborn, a substantial amount of blood can collect there, leading to rapid blood loss, poor perfusion, and shock. That combination makes it life-threatening if not recognized and treated quickly. Understand that other scalp findings behave differently. Caput succedaneum is superficial swelling from birth trauma that crosses the scalp, including across any sutures, but it is usually mild and resolves within a few days without significant blood loss. Cephalohematoma is a subperiosteal bleed tucked between a skull bone and its periosteum; it remains confined by the sutures and does not cross them, and while it can take time to resolve, it doesn't typically cause rapid blood loss or shock. Molding refers to temporary overlapping of skull bones during birth and does not involve a fluid-filled scalp swelling. Recognition hinges on a rapidly enlarging, boggy, diffuse scalp swelling that can extend across the scalp and is accompanied by signs of hypovolemia as bleeding continues. Prompt fluid and blood resuscitation, careful monitoring, and assessment for ongoing hemorrhage are essential.

8. A NICU nurse operating as a patient advocate is an example of which ethical principle?

A. Autonomy

B. Beneficence

C. Nonmaleficence

D. Justice

Beneficence is the ethical principle at play here—the obligation to promote the patient's well-being and act in their best interest. In the NICU, a nurse who advocates for the patient is prioritizing actions and decisions that will improve the infant's health and outcomes, coordinating care that benefits the baby, and clearly communicating with families to support beneficial choices. This goes beyond simply avoiding harm; it's about actively doing what will help the patient thrive, within the context of neonate care. Autonomy concerns the patient's or family's right to make decisions, but neonates can't decide for themselves, so advocacy centers on promoting the infant's welfare. Nonmaleficence is about not causing harm, which is foundational, but beneficence specifically emphasizes doing good and advancing the patient's health. Justice involves fairness in resource distribution and access, which is a broader consideration beyond the individual advocate role. Therefore, advocating for the patient in the NICU best reflects beneficence.

SAMPLE

9. An 800 gram infant has a UAC line running NS at 1 mL/hr. NS contains 0.154 mEq/mL of Na. How many mEq of sodium does this infant receive in 24 hours from this infusion?

A. 3.696 mEq

B. 0.3696 mEq

C. 0.8 mEq

D. 24 mEq

Sodium delivered from IV fluids is found by multiplying the solution's sodium concentration by the total volume infused. The infant receives 1 mL per hour, so over 24 hours the volume is 24 mL. With a sodium concentration of 0.154 mEq per mL, the total sodium is 0.154 × 24 = 3.696 mEq. Therefore, the infusion provides 3.696 mEq of sodium in 24 hours. The weight isn't needed here since this is a straightforward concentration × volume calculation.

10. A 36-week infant is admitted to the NICU for hypoglycemia. The best method to assist a Spanish-speaking mother in making informed decisions is to:

A. Use a certified language interpreter

B. Use a family member as translator

C. Rely on written materials in English only

D. Speak louder and slower

Communicating with a mother who speaks Spanish in the NICU requires accurate, culturally appropriate language support to ensure informed decisions. A certified language interpreter provides professional translation of medical information, clarifies complex terms, and helps confirm that the mother truly understands the risks, benefits, and alternatives before consenting to care for her infant. Using a family member as translator can introduce inaccuracies, bias, and breaches of confidentiality, and may miss essential medical details. Written materials in English only exclude her from understanding, and speaking louder or slower does not resolve comprehension and can be disrespectful. Professional interpreters support ethical and legal language access, improve understanding, and promote safer, patient-centered care.

SAMPLE

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://rncnicu.examzify.com

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

SAMPLE