

Medical-Surgical Endocrine Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

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 are typical manifestations of hypocalcemia and how should it be treated after thyroid surgery?**
 - A. Chest pain and diarrhea; treat with fluids.**
 - B. Perioral numbness, tingling, and muscle cramps; treat with calcium supplementation and vitamin D; monitor levels and adjust dosing.**
 - C. Weight gain and fatigue; treat with thyroid meds.**
 - D. Nausea and vomiting; treat with antiemetics.**

- 2. Maintenance of extracellular fluid volume is controlled by ____.**
 - A. prolactin**
 - B. glucocorticoids**
 - C. mineralocorticoids**
 - D. thyroid-stimulating hormone**

- 3. Goiter is the enlargement of which gland?**
 - A. Thyroid**
 - B. Kidney**
 - C. Liver**
 - D. Pancreas**

- 4. Insulin that is produced by a person's body is ____.**
 - A. exogenous**
 - B. genetic**
 - C. endogenous**
 - D. synthetic**

- 5. Endogenous hypoglycemia is most likely caused by which mechanism?**
 - A. Taken an overdose of hypoglycemic drugs.**
 - B. Been following a very restricted fasting diet or is malnourished.**
 - C. Excessive secretion of insulin or an increase in glucose metabolism.**
 - D. Exercised unwittingly without replenishing needed fluids and nutrients.**

- 6. Which combination best describes Addison disease features?**
- A. Weight loss with obesity and flushed skin**
 - B. Jaundice and pruritus**
 - C. Severe muscle cramps with tetany**
 - D. Fatigue, weakness, orthostatic hypotension, hyperpigmentation; hyponatremia, hyperkalemia, metabolic acidosis, possible hypoglycemia**
- 7. Hemoglobin A1c provides information about glucose control:**
- A. Shows what the glucose level has done during the last 3 months.**
 - B. Shows how a high level of glucose can cause a significant drop in the hemoglobin level.**
 - C. Indicates a true picture of the patient's nutritional state.**
 - D. Reflects the effect of a high level of glucose on the ability to produce red blood cells (RBCs).**
- 8. What is the most common precipitating factor for diabetic ketoacidosis?**
- A. overeating**
 - B. not taking enough insulin**
 - C. drinking alcohol**
 - D. taking too much insulin**
- 9. Which finding during a health history would indicate a possible thyroid problem?**
- A. Eats three well-balanced meals a day**
 - B. Has gained 15 pounds in the last 3 months**
 - C. Sleeps 8 hours a night**
 - D. Reports a regular menstrual cycle**
- 10. Which insulin is an example of intermediate-acting insulin?**
- A. Lispro**
 - B. NPH insulin**
 - C. Regular insulin**
 - D. Ultralente**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What are typical manifestations of hypocalcemia and how should it be treated after thyroid surgery?

A. Chest pain and diarrhea; treat with fluids.

B. Perioral numbness, tingling, and muscle cramps; treat with calcium supplementation and vitamin D; monitor levels and adjust dosing.

C. Weight gain and fatigue; treat with thyroid meds.

D. Nausea and vomiting; treat with antiemetics.

Hypocalcemia after thyroid surgery is most often from damage or devascularization of the parathyroid glands, leading to low PTH and reduced calcium regulation. The classic manifestations are perioral numbness and tingling, muscle cramps or tetany due to increased neuromuscular excitability. In more severe cases you can see carpal spasm, facial twitching, or even seizures. Treatment aims to restore calcium and ensure adequate vitamin D to promote calcium absorption. This means calcium supplementation with an active form of vitamin D (calcitriol) and careful dose titration based on serum calcium and symptoms. If the patient is acutely symptomatic or has very low calcium, IV calcium (calcium gluconate) is given to rapidly correct levels, followed by transition to oral calcium with calcitriol and dose adjustments as stabilization occurs. Ongoing monitoring should include serial calcium (and often phosphorus and magnesium) and clinical assessment, adjusting doses to keep calcium in the low-normal to normal range without causing hypercalcemia. The other options described do not reflect the typical pattern or treatment strategy for hypocalcemia after thyroid surgery.

2. Maintenance of extracellular fluid volume is controlled by

_____.

A. prolactin

B. glucocorticoids

C. mineralocorticoids

D. thyroid-stimulating hormone

Maintenance of extracellular fluid volume is governed mainly by mineralocorticoids, especially aldosterone. Aldosterone acts on the distal nephron and collecting ducts to increase sodium reabsorption via upregulation of ENaC channels and Na⁺/K⁺-ATPase. Water follows sodium, so this Na⁺ reabsorption expands the extracellular fluid compartment. This process is tightly controlled by the renin-angiotensin-aldosterone system: when blood pressure or renal perfusion drops, renin is released, leading to angiotensin II formation and stimulated aldosterone release. Glucocorticoids have some mineralocorticoid effects at high concentrations but their primary role is metabolism and stress response, not fluid-volume regulation. Prolactin and thyroid-stimulating hormone do not control extracellular fluid volume.

3. Goiter is the enlargement of which gland?

- A. Thyroid**
- B. Kidney**
- C. Liver**
- D. Pancreas**

Goiter is the enlargement of the thyroid gland, the butterfly-shaped organ in the front of the neck that produces thyroid hormones and helps regulate metabolism. When the thyroid enlarges, it's called a goiter, which can occur with iodine deficiency or autoimmune thyroid diseases like Hashimoto's or Graves. Clinically, you can often feel a swelling in the anterior neck that moves with swallowing, since the thyroid sits around the trachea and is connected to the larynx/trachea. The other organs listed—kidney, liver, and pancreas—are not thyroid tissue and aren't described as goiters; their enlargements occur for different reasons and have different terms.

4. Insulin that is produced by a person's body is ____.

- A. exogenous**
- B. genetic**
- C. endogenous**
- D. synthetic**

Insulin produced by the body is endogenous. Endogenous means originating from within the organism, produced by the pancreatic beta cells in the islets of Langerhans to help regulate blood glucose. This is different from exogenous insulin, which comes from outside the body (such as injections), and from synthetic insulin, which is a manufactured form of exogenous insulin. Genetic relates to genes, not the source of insulin. So endogenous is the correct description for insulin made inside the body.

5. Endogenous hypoglycemia is most likely caused by which mechanism?

- A. Taken an overdose of hypoglycemic drugs.**
- B. Been following a very restricted fasting diet or is malnourished.**
- C. Excessive secretion of insulin or an increase in glucose metabolism.**
- D. Exercised unwittingly without replenishing needed fluids and nutrients.**

Endogenous hypoglycemia occurs when internal regulatory processes drive glucose down, most often from excessive insulin secretion or from tissues using glucose at a higher rate than it can be produced. Insulin lowers blood glucose by promoting uptake into muscle and fat and by suppressing hepatic glucose output; when insulin is secreted in excess (as with an insulin-secreting tumor) or when glucose is consumed more rapidly than it's produced, blood glucose falls. The other options describe external factors (drug overdose) or decreased glucose production (starvation) rather than a dysregulated internal insulin/metabolic process, so they don't explain the classic endogenous mechanism as clearly.

6. Which combination best describes Addison disease features?

- A. Weight loss with obesity and flushed skin**
- B. Jaundice and pruritus**
- C. Severe muscle cramps with tetany**
- D. Fatigue, weakness, orthostatic hypotension, hyperpigmentation; hyponatremia, hyperkalemia, metabolic acidosis, possible hypoglycemia**

Addison disease is primary adrenal insufficiency, causing loss of both glucocorticoids and mineralocorticoids. This leads to fatigue and weakness from cortisol deficiency, orthostatic hypotension from salt-wasting and volume depletion due to aldosterone deficiency, and hyperpigmentation from ACTH cross-reacting with melanocyte receptors. Electrolyte disturbances are hallmark: hyponatremia and hyperkalemia from aldosterone deficiency, plus a tendency toward metabolic acidosis; hypoglycemia can occur because cortisol helps maintain blood glucose. The described combination captures all of these features, making it the best fit for Addison disease. The other options describe patterns that fit different diseases (for example, obesity with flushed skin isn't typical of Addison's; jaundice points to liver/biliary disease; tetany suggests calcium or magnesium disturbances) and don't align with the adrenal failure picture.

7. Hemoglobin A1c provides information about glucose control:

- A. Shows what the glucose level has done during the last 3 months.**
- B. Shows how a high level of glucose can cause a significant drop in the hemoglobin level.**
- C. Indicates a true picture of the patient's nutritional state.**
- D. Reflects the effect of a high level of glucose on the ability to produce red blood cells (RBCs).**

Hemoglobin A1c measures long-term glycemic control by exploiting the fact that red blood cells live about 120 days. Glucose attaches irreversibly to hemoglobin over the life of the cell, so the percentage of glycosylated hemoglobin reflects the average blood glucose that the patient has experienced over the previous roughly two to three months. This makes HbA1c a marker of sustained glucose exposure, not a snapshot of today's level. It does not indicate a nutritional state, nor does it reflect a drop in hemoglobin caused by high glucose, and it isn't a test of red blood cell production or erythropoiesis. So the statement that best describes what HbA1c provides is information about glucose control over the last few months.

8. What is the most common precipitating factor for diabetic ketoacidosis?

- A. overeating**
- B. not taking enough insulin**
- C. drinking alcohol**
- D. taking too much insulin**

Diabetic ketoacidosis occurs when there is a severe lack of insulin, allowing ongoing glucose production and fat breakdown to produce high glucose and ketones with metabolic acidosis. The most common precipitating factor is not taking enough insulin or missing doses, which removes the insulin signal that normally suppresses liver glucose output and ketone formation. Without adequate insulin, glucose rises, lipolysis increases, ketones accumulate, and acidosis develops, often brought on by stress or illness but fundamentally due to insufficient insulin delivery. Other options—overeating, drinking alcohol, or taking too much insulin—can affect glucose control in different ways, but they are not the typical trigger for DKA in the way inadequate insulin is.

9. Which finding during a health history would indicate a possible thyroid problem?

- A. Eats three well-balanced meals a day**
- B. Has gained 15 pounds in the last 3 months**
- C. Sleeps 8 hours a night**
- D. Reports a regular menstrual cycle**

Thyroid hormones drive your body's baseline energy use. When the thyroid is underactive, metabolism slows and weight gain can occur even if appetite and meals are normal. A health history showing a noticeable weight gain, like gaining 15 pounds in a few months, points to a potential thyroid problem because it reflects a slower metabolic rate. In contrast, eating three well-balanced meals, sleeping eight hours, and having a regular menstrual cycle are not specific clues of thyroid dysfunction; they can occur with or without thyroid issues. (Thyroid problems can sometimes cause menstrual changes, but a regular cycle by itself doesn't indicate a thyroid problem.)

10. Which insulin is an example of intermediate-acting insulin?

A. Lispro

B. NPH insulin

C. Regular insulin

D. Ultralente

Insulin preparations are grouped by how quickly they act and how long they provide coverage. An intermediate-acting insulin has a slower onset and a longer duration than rapid- or short-acting forms, typically starting in about 1-3 hours and lasting roughly 14-18 hours. This profile comes from the way it's formulated (often with protamine) to slow absorption, giving a steady basal effect without a sharp peak. NPH insulin fits this middle-ground pattern, making it the classic example of intermediate-acting insulin. In contrast, rapid-acting insulins (like lispro) act quickly, within minutes and last only a few hours, while regular insulin is short-acting with a longer but still relatively limited window. Ultralente is long-acting, providing coverage over a full day or more with a much slower onset. So, the intermediate option is the one that best matches the described timing.

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://medsurgendocrine.examzify.com>

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

SAMPLE