

VETSKILL PCA LAB AND DIAGNOSTICS PRACTICE TEST (SAMPLE)

STUDY GUIDE



**SAMPLE STUDY GUIDE
WITH LIMITED QUESTIONS**

**VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE**

<https://vetskillpcalabdiagnostics.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	15

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. Which organism is a hair follicle mite commonly associated with patchy hair loss in dogs?**
 - A. Sarcoptes scabiei
 - B. Demodex
 - C. Otodectes cynotis
 - D. Cheyletiella yasguri

- 2. Which statement about glucose on a urine dipstick in animals is true?**
 - A. Glucosuria is always due to diabetes.
 - B. Glucosuria is never related to stress.
 - C. Glucosuria indicates kidney failure.
 - D. Glucosuria can occur with diabetes mellitus or stress hyperglycemia.

- 3. What CBC finding typically suggests a regenerative process?**
 - A. Reticulocytosis or elevated reticulocytes
 - B. Leukocytosis
 - C. Thrombocytopenia
 - D. Anisocytosis

- 4. What term describes the presence of crystals in urine?**
 - A. Crystaluria
 - B. Crystalluria
 - C. Crystallization
 - D. Crystal analysis

- 5. QA/QC in a diagnostic laboratory is primarily about ensuring which characteristics of analytical results?**
 - A. Accuracy, precision, and reliability
 - B. Speed and throughput
 - C. Exclusively regulatory compliance
 - D. Only instrument cleanliness

- 6. In the context of glucose testing, what outcome is expected if the patient has been fasting properly?**
- A. Increased variation in glucose
 - B. Reduced variability in glucose measurement
 - C. No change
 - D. Inaccurate results due to low sugar
- 7. Which term describes tissue that returns fewer echoes than the surrounding tissues?**
- A. Hypoechoic
 - B. Anechoic
 - C. Isoechoic
 - D. Hyperechoic
- 8. Which ultrasound mode is primarily used to assess motion, such as cardiac structures?**
- A. A-mode
 - B. B-mode
 - C. M-mode
 - D. C-mode
- 9. Which ultrasound mode provides the basic two-dimensional grayscale image?**
- A. A-mode
 - B. B-mode
 - C. M-mode
 - D. C-mode
- 10. Which regulation provides guidance for employers and health professionals who carry out medical radiological procedures?**
- A. Ionising Radiation Regulations 2017
 - B. Health and Safety at Work Act 1974
 - C. COSHH regulations
 - D. Data Protection Act

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which organism is a hair follicle mite commonly associated with patchy hair loss in dogs?

- A. *Sarcoptes scabiei*
- B. *Demodex***
- C. *Otodectes cynotis*
- D. *Cheyletiella yasguri*

Demodex mites live and reproduce in hair follicles and associated sebaceous glands. When they proliferate, especially in young dogs or those with some immune impairment, they cause demodicosis, which commonly presents as patchy hair loss with localized areas of alopecia on the face and front legs. This follicle-centered habitat explains why patchy alopecia is a hallmark presentation. In contrast, *Sarcoptes scabiei* is a surface-dwelling mite that causes intense itching and more generalized crusting and hair loss; *Otodectes cynotis* targets the ear canal and causes ear itching and discharge; *Cheyletiella yasguri* causes walking dandruff with scaling on the surface of the skin. These patterns are not the characteristic follicle-centered cause of patchy hair loss, making *Demodex* the best fit for this presentation.

2. Which statement about glucose on a urine dipstick in animals is true?

- A. Glucosuria is always due to diabetes.
- B. Glucosuria is never related to stress.
- C. Glucosuria indicates kidney failure.
- D. Glucosuria can occur with diabetes mellitus or stress hyperglycemia.**

Glucosuria happens when blood glucose exceeds what the kidneys can reabsorb, so glucose spills into the urine. The most common reason animals have glucosuria is persistent high blood glucose from diabetes mellitus, but it can also occur with stress hyperglycemia—an acute surge in blood glucose due to illness, surgery, or other stressors. In both cases, the filtered glucose overwhelms the renal tubules' reabsorption capacity, leading to glucose in the urine. That makes the statement that glucosuria can occur with diabetes mellitus or stress hyperglycemia true and the best description of practical scenarios. It's not solely tied to diabetes, and it's not an automatic sign of kidney failure, which would rely on additional kidney-specific issues.

3. What CBC finding typically suggests a regenerative process?

- A. Reticulocytosis or elevated reticulocytes**
- B. Leukocytosis
- C. Thrombocytopenia
- D. Anisocytosis

Regeneration is reflected by an increased number of immature red blood cells released from the bone marrow. When the body is repairing RBC loss (due to hemolysis or bleeding), the marrow ramps up production and releases more reticulocytes into circulation. This rise in reticulocytes, or reticulocytosis, is the clearest signal that the marrow is actively regenerating red blood cells. Leukocytosis indicates an increase in white blood cells, which points to infection or inflammation rather than red cell regeneration. Thrombocytopenia means a low platelet count, unrelated to RBC regeneration. Anisocytosis is a variation in red cell size and can occur with various anemias but does not specifically indicate a regenerative response. Therefore, elevated reticulocytes best demonstrate regeneration.

4. What term describes the presence of crystals in urine?

- A. Crystaluria**
- B. Crystalluria
- C. Crystallization
- D. Crystal analysis

In urinalysis, the presence of crystals in urine is called crystalluria. This term combines crystal and uria (urine) to describe the microscopic finding of crystals in a urine sample. It differs from crystallization, which is the process of forming crystals, and from crystal analysis, which would refer to examining crystals rather than simply noting their presence. Crystaluria with a single 'l' is a common misspelling; the standard spelling uses two 'l's.

5. QA/QC in a diagnostic laboratory is primarily about ensuring which characteristics of analytical results?

- A. Accuracy, precision, and reliability**
- B. Speed and throughput
- C. Exclusively regulatory compliance
- D. Only instrument cleanliness

QA/QC in a diagnostic laboratory focuses on ensuring analytical results are accurate, precise, and reliable. Accuracy is how close a measurement is to the true value or a reference standard. Precision is the consistency of repeated measurements under the same conditions. Reliability means you can trust the results over time and across different runs, instruments, and operators, supported by proper controls, calibration, and proficiency testing. Together, these aspects make results trustworthy for clinical decisions and patient care. Speed, throughput, and efficiency relate to how fast tests are run, but they don't guarantee the correctness of the results. Regulatory compliance is important, but QA/QC aims at the quality of the data itself. Instrument cleanliness matters for function, but on its own it doesn't ensure accuracy or precision.

6. In the context of glucose testing, what outcome is expected if the patient has been fasting properly?

- A. Increased variation in glucose
- B. Reduced variability in glucose measurement**
- C. No change
- D. Inaccurate results due to low sugar

Fasting before glucose testing helps the body settle into a stable baseline for glucose, removing the large fluctuations caused by recent meals. Without food to raise blood sugar, post-meal spikes disappear and the body's glucose production and uptake operate at a more consistent rate, so the measured value becomes more uniform across measurements. This is why the expected outcome is reduced variability in glucose measurement. The notion of no change isn't accurate because fasting changes the glucose dynamics from postprandial to basal levels, and "inaccurate due to low sugar" isn't a typical result of proper fasting.

7. Which term describes tissue that returns fewer echoes than the surrounding tissues?

A. Hypoechoic

B. Anechoic

C. Isoechoic

D. Hyperechoic

Echo intensity on ultrasound reflects how much sound a tissue returns. When tissue produces fewer echoes than its neighbors, it appears darker because its echogenicity is lower. The term for that is hypoechoic. For contrast: anechoic means no echoes at all (completely black, like a fluid-filled cyst); isoechoic means the same brightness as surrounding tissues; hyperechoic means brighter than surrounding tissues. So describing tissue that returns fewer echoes than surrounding tissues fits hypoechoic.

8. Which ultrasound mode is primarily used to assess motion, such as cardiac structures?

A. A-mode

B. B-mode

C. M-mode

D. C-mode

Tracking motion over time is what this item tests. M-mode ultrasound records depth along a single line as time progresses, producing a motion trace of structures along that line. This gives exceptionally high temporal resolution, so rapid cardiac movements—such as valve opening and closing, and how the walls of the chambers move during systole and diastole—can be seen and measured precisely. That precision is why M-mode is the go-to when you need exact timing and excursion data for cardiac structures. A-mode provides only a one-dimensional depth signal with no motion context, so it can't show how structures move over time. B-mode offers a two-dimensional image of anatomy but with lower temporal resolution, making dynamic events harder to quantify in real time. C-mode isn't commonly used for assessing motion in clinical practice.

9. Which ultrasound mode provides the basic two-dimensional grayscale image?

A. A-mode

B. B-mode

C. M-mode

D. C-mode

Two-dimensional grayscale ultrasound images come from brightness mode. The system sends pulses and scans many lines across the area; for each line, the strength of echoes at each depth is converted into a brightness value. When thousands of these brightness points along many lines are put together, a cross-sectional image appears, with grayscale levels reflecting how strongly tissues reflect ultrasound. A-mode, by contrast, plots echo amplitude versus depth along a single line, giving a one-dimensional spike trace rather than an image. M-mode shows motion along a single line over time, useful for tracking structures such as heart valves. C-mode isn't used for standard 2D grayscale anatomy imaging.

10. Which regulation provides guidance for employers and health professionals who carry out medical radiological procedures?

A. Ionising Radiation Regulations 2017

B. Health and Safety at Work Act 1974

C. COSHH regulations

D. Data Protection Act

Protection of patients and workers in medical radiology is guided by a regulation that sets clear duties for employers and those performing radiological procedures. It requires that every exposure is justified by clinical need, that doses are kept as low as reasonably achievable, and that organizations have proper governance, local rules, and trained staff. It also mandates appointing a Radiation Protection Adviser and a Responsible Person, implementing dose monitoring, incident reporting, and ensuring staff competence. These provisions create a framework specifically for medical radiology rather than general safety or unrelated areas. While the Health and Safety at Work Act provides broad safety duties, COSHH covers hazardous substances, and the Data Protection Act handles personal data, none of these address radiology-specific requirements like justification, optimization, and local governance. Therefore, the regulation that provides guidance for employers and health professionals who carry out medical radiological procedures is the Ionising Radiation Regulations 2017.

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://vetskillpcalabdiagnostics.examzify.com>

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

SAMPLE