

CERTIFIED OPHTHALMIC MEDICAL TECHNOLOGIST (COMT) PRACTICE EXAM (SAMPLE)

STUDY GUIDE



Prepare with structure. Pass with confidence



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 retinal finding can be caused by the drug Plaquenil, used to treat rheumatoid arthritis?**
 - A. Macular degeneration
 - B. Bull's eye maculopathy
 - C. Retinal hemorrhage
 - D. Optic neuritis
- 2. F-numbers are used to refer to the size of which component in a camera?**
 - A. Aperture
 - B. Shutter
 - C. Film
 - D. Sensor
- 3. What medical condition is associated with the presence of uric acid crystals?**
 - A. Rheumatoid arthritis
 - B. Gout
 - C. Osteoarthritis
 - D. Psoriatic arthritis
- 4. During the measurement of NPA, what is the appropriate condition for testing?**
 - A. Bright sunlight conditions
 - B. Normal room illumination
 - C. Dim lighting for sensitivity
 - D. Direct sunlight for clarity
- 5. True or False: A streak retinoscope can assess the fit of soft contact lenses.**
 - A. True
 - B. False
 - C. Depends on the lens type
 - D. Only for rigid gas permeable lenses

- 6. Why are medications like Propine dispensed in opaque, white bottles?**
- A. To reduce contamination risk
 - B. To enhance patient privacy
 - C. To protect the drug from light exposure
 - D. To make the medication appear more appealing
- 7. What optical phenomenon causes discomfort in spectacles with near add power that lacks slab off?**
- A. Double vision
 - B. Image blending
 - C. Image jump
 - D. Distorted vision
- 8. What three aspects must be included in an informed consent discussion with a patient?**
- A. Duration, risks, and costs
 - B. Risks, opportunities, and techniques
 - C. Benefits, risks, and alternatives
 - D. Effects, alternatives, and side effects
- 9. Which of the following symptoms is NOT associated with temporal arteritis?**
- A. Pain in the jaw or tongue when chewing
 - B. Intermittent visual loss
 - C. Persistent headaches
 - D. Inflammation over the temporal arteries
- 10. What change can cataracts and diabetes mellitus cause in relation to myopia?**
- A. Increased lens curvature
 - B. Increased refractive index of the crystalline lens
 - C. Reduced lens flexibility
 - D. Thickening of the cornea

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What retinal finding can be caused by the drug Plaquenil, used to treat rheumatoid arthritis?

- A. Macular degeneration
- B. Bull's eye maculopathy**
- C. Retinal hemorrhage
- D. Optic neuritis

Bull's eye maculopathy is a characteristic retinal finding associated with the use of Plaquenil (hydroxychloroquine), which is commonly prescribed for conditions like rheumatoid arthritis and lupus. This condition is known to cause specific changes in the macula, resulting in a distinct pattern of parafoveal retinal pigmentary changes. These changes typically manifest as a 'bull's eye' appearance due to the loss of retinal pigment epithelium (RPE) and the accumulation of pigment at the fovea. This finding is a direct consequence of the drug's toxicity to the retinal cells, particularly after prolonged exposure or at higher doses. Early detection of bull's eye maculopathy is crucial since it can lead to permanent vision loss if not monitored and managed properly. Regular eye examinations, including visual field tests and optical coherence tomography (OCT), are important for patients on hydroxychloroquine to monitor for this potential adverse effect, highlighting the significance of understanding this specific retinal finding in clinical practice.

2. F-numbers are used to refer to the size of which component in a camera?

- A. Aperture**
- B. Shutter
- C. Film
- D. Sensor

F-numbers, or f-stop numbers, specifically refer to the aperture of a camera. The aperture is the opening in the lens that allows light to enter the camera. The f-number indicates the size of this aperture opening relative to the focal length of the lens. The f-stop is calculated as the ratio of the lens's focal length to the diameter of the aperture. A lower f-number signifies a larger aperture, which allows more light to hit the sensor, while a higher f-number indicates a smaller aperture, allowing less light. Understanding f-numbers is crucial for controlling exposure and depth of field in photography. A larger aperture (lower f-number) can create a shallow depth of field, resulting in a blurred background, while a smaller aperture (higher f-number) increases the depth of field, bringing more of the scene into focus. This characteristic is essential for photographers to manipulate effectively for desired artistic effects and lighting conditions. Thus, the correct answer directly connects to an essential aspect of photography and imaging systems.

3. What medical condition is associated with the presence of uric acid crystals?

- A. Rheumatoid arthritis
- B. Gout**
- C. Osteoarthritis
- D. Psoriatic arthritis

The presence of uric acid crystals is primarily associated with gout, a form of inflammatory arthritis. Gout occurs when there is an excess of uric acid in the blood, leading to the formation of sharp, needle-like crystals that deposit in the joints, causing extreme pain and inflammation. This condition typically affects the big toe but can impact other joints as well. In contrast, the other conditions listed do not involve uric acid crystals. Rheumatoid arthritis is an autoimmune disorder that leads to chronic inflammation of the joints but is not characterized by uric acid deposition. Osteoarthritis is primarily a degenerative joint disease that results from wear and tear on the joints over time, and it does not involve uric acid crystallization. Psoriatic arthritis is a type of inflammatory arthritis that can occur in people with psoriasis but is also not linked specifically to uric acid crystals. Thus, gout is the distinct condition related to the crystallization of uric acid in the joints.

4. During the measurement of NPA, what is the appropriate condition for testing?

- A. Bright sunlight conditions
- B. Normal room illumination**
- C. Dim lighting for sensitivity
- D. Direct sunlight for clarity

In the measurement of near point of accommodation (NPA), normal room illumination is the appropriate condition for testing. This lighting condition helps ensure that the patient can clearly see the target while maintaining comfort and reducing glare. Adequate lighting is necessary for accurate assessment of the eye's ability to focus on close objects, which can be adversely affected by either excessive brightness or insufficient light. Other lighting conditions, like bright sunlight or direct sunlight, could introduce glare and visual discomfort, making it difficult for the patient to focus on the test target accurately. Dim lighting might compromise the ability to see the target well enough for reliable measurement, making normal room illumination the ideal choice to support effective and accurate testing for NPA.

5. True or False: A streak retinoscope can assess the fit of soft contact lenses.

A. True

B. False

C. Depends on the lens type

D. Only for rigid gas permeable lenses

The statement is true because a streak retinoscope is a valuable tool for assessing the fit of soft contact lenses. It allows the practitioner to evaluate the alignment and centration of the lens on the cornea by observing the reflex of the light off the retina. This instrument can help determine whether the contact lens is fitting appropriately and if it is allowing adequate tears to flow beneath it, which is crucial for comfort and eye health. Using a streak retinoscope, practitioners can also gauge the patient's refractive error and how well the lens corrects vision. Proper assessment with this tool can lead to identifying issues such as excessive movement, excessive tightness, or inadequate tear exchange, all of which are crucial for fitting soft contact lenses effectively. On the other hand, certain options imply limitations or conditionality that do not apply broadly. Assessing soft contact lenses with a streak retinoscope is not dependent on the lens type but rather the technique and application of the instrument used.

6. Why are medications like Propine dispensed in opaque, white bottles?

A. To reduce contamination risk

B. To enhance patient privacy

C. To protect the drug from light exposure

D. To make the medication appear more appealing

Medications like Propine are often dispensed in opaque, white bottles primarily to protect the drug from light exposure. Many pharmaceutical compounds, including certain eye drops, can be sensitive to light, which may lead to degradation or loss of efficacy over time. By using opaque packaging, manufacturers ensure that the active ingredients remain stable and effective for a longer duration, thus ensuring the safety and efficacy of the medication for patients. Reducing contamination risk primarily involves the use of sterile techniques and containers designed for that purpose, rather than the color of the bottle. Enhancing patient privacy isn't a primary function of the bottle's color or material; most prescription bottles serve to inform the patient rather than conceal information. Finally, while visual appeal may influence a patient's perception, it is not the principal reason for choosing an opaque white bottle for medication. The fundamental purpose lies in preventing light damage to the drug itself.

7. What optical phenomenon causes discomfort in spectacles with near add power that lacks slab off?

- A. Double vision
- B. Image blending
- C. Image jump**
- D. Distorted vision

The optical phenomenon that causes discomfort in spectacles with near add power that lacks slab off is image jump. This occurs at the boundary between the distance and near zones of a bifocal or multifocal lens. When there is a significant difference in power between these zones, as is common in lenses with a near add, the transition can result in a noticeable shift of the image when the line of demarcation is crossed. This abrupt change can lead to what patients often describe as a jumping sensation of the image, which can be quite disorienting and uncomfortable. In the absence of a slab off, which is a technique used to create a gradual change in the lens thickness and thereby smooth out the transition, this unpleasant visual experience is exacerbated. Slab off involves modifying the lower portion of the lens to help with the compensatory effects of prismatic displacement that occur at the add power, thereby reducing the image jump effect and improving visual comfort for the wearer. This aspect of lens design highlights the importance of customized fitting and adjustment of eyewear, especially for patients requiring significant near vision correction alongside distance vision correction.

8. What three aspects must be included in an informed consent discussion with a patient?

- A. Duration, risks, and costs
- B. Risks, opportunities, and techniques
- C. Benefits, risks, and alternatives**
- D. Effects, alternatives, and side effects

Informed consent is a critical component of ethical patient care and its discussion must cover essential aspects that empower patients to make knowledgeable decisions about their treatment options. The inclusion of benefits, risks, and alternatives ensures that the patient is well-informed about what to expect from a proposed treatment or procedure. Benefits highlight the potential positive outcomes and what the patient stands to gain from the intervention. This could include improvements in health, symptom relief, or enhanced well-being. By discussing the benefits, healthcare providers help patients understand the reasoning behind recommending a particular treatment. Risks involve any potential negative outcomes or side effects that could arise from the treatment. This is important because it prepares the patient for the possible complications and allows them to weigh these against the benefits. Alternatives provide patients with other options that may be available, including different treatments, no treatment, or even a watchful waiting approach. Presenting alternatives allows patients to consider their choices and encourages shared decision-making, which is crucial in patient-centered care. In contrast, the other options do not encompass all critical facets of informed consent. For example, discussing duration and costs does not give patients a thorough understanding of the implications of their treatment choice. Similarly, opportunities or techniques alone do not adequately inform a patient of the full spectrum

9. Which of the following symptoms is NOT associated with temporal arteritis?

- A. Pain in the jaw or tongue when chewing
- B. Intermittent visual loss
- C. Persistent headaches**
- D. Inflammation over the temporal arteries

The symptom that is not associated with temporal arteritis is persistent headaches. While headaches are a common symptom in many patients with temporal arteritis, they are often described as a new type of headache, and the pain is usually localized in the temporal region. However, many patients may experience other presenting symptoms that are more characteristic of the condition. Temporal arteritis, or giant cell arteritis, primarily affects the temporal arteries and can lead to serious complications such as vision loss if not treated promptly. The other symptoms mentioned, such as pain in the jaw or tongue when chewing (known as jaw claudication), intermittent visual loss, and inflammation over the temporal arteries, are more directly linked to the inflammation of blood vessels in this condition. They represent the classic triad of symptoms that healthcare providers look for when diagnosing temporal arteritis. In contrast, while persistent headaches might occur, they are not a definitive or primary symptom used in the diagnosis of temporal arteritis compared to the others listed. Therefore, recognizing that the hallmark symptoms of this condition include jaw pain, visual disturbances, and localized inflammation helps in understanding why persistent headaches are not categorized in the same way.

10. What change can cataracts and diabetes mellitus cause in relation to myopia?

- A. Increased lens curvature
- B. Increased refractive index of the crystalline lens**
- C. Reduced lens flexibility
- D. Thickening of the cornea

Cataracts and diabetes mellitus can lead to an increased refractive index of the crystalline lens, which affects vision. In the case of cataracts, the lens becomes cloudy and its optical properties change, which can result in a higher refractive index. This change means that light entering the eye is bent differently, potentially leading to shifts in refractive error, including progression towards myopia (nearsightedness). Diabetes mellitus, on the other hand, can lead to lens swelling due to changes in lens metabolism and fluid changes. This swelling can also increase the refractive index. As the lens becomes more myopic, individuals may find that their distance vision is affected while their near vision may seem to improve temporarily. The other factors mentioned, such as increased lens curvature, reduced lens flexibility, and thickening of the cornea, may also be related to eye health but do not directly address the specific changes in refractive properties associated with cataracts and diabetes in the context of myopia development. Thus, the shift in the refractive index is the most pertinent change to consider in this scenario.

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://comtmedicaltechnologist.examzify.com>

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

SAMPLE