Gas Permeable Contact Lenses – Lens Fitting, Care, and Patient Education Practice Test (Sample)

Study Guide

BY EXAMZIFY

Everything you need from our exam experts!

Table of Contents

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. What would be the residual astigmatism from the predicted contact lens power for a patient with Refraction: -2.00 -1.00 x 180, Ks: 43.50/44.50@090, BCR: 43.00?

A. PL

B. Plano

C. 0.00 D

D. +0.50 D

2. Which statement best describes a 2-in-1 system?

A. A cleaner and a disinfectant

B. Only a disinfectant

C. Only a cleaner

D. Neither cleaner nor disinfectant

3. What is the role of the periodic cleaner in GP lens care?

A. Remove deposits on a scheduled basis

B. Disinfect lenses continuously

C. Lubricate lens surface

D. Replace lens

4. What would be the residual astigmatism from the predicted contact lens power for a patient with Refraction: -2.00 -1.00 x 180, Ks: 43.50/44.50@090, BCR: 43.50?

A. PL

B. Plano

C. 0.00 D

D. +0.50 D

5. What is a purpose of laboratory cleaners and solvents?

A. Disinfect surfaces

B. Remove tears

C. Debris that is difficult to remove

D. Polish lenses

6. Can GP rewetting drops go in the eye?

- **A. Yes**
- **B. No**
- **C. Only with daily wear**
- **D. Only after cleaning**

7. What percent of GP care solutions were contaminated?

- **A. 50 percent**
- **B. 10 percent**
- **C. 25 percent**
- **D. 75 percent**

8. Which practice is NOT recommended when using GP lens solutions?

- **A. Cap solutions**
- **B. Read solution labels**
- **C. Sleep with lenses in**
- **D. Use recommended solutions**

9. Rewetting drops in GP lens care are used for what purpose?

- **A. Disinfection**
- **B. Cleansing**
- **C. Debridement**
- **D. Lubrication of the ocular surface**

10. Which statement about preservative usage is true?

- **A. Preservatives include chlorhexidine/PAPB, polyquad, and polyhexanide**
- **B. All products use polyquad**
- **C. No preservative is used in these products**
- **D. All products use chlorhexidine/PAPB**

Answers

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

Explanations

1. What would be the residual astigmatism from the predicted contact lens power for a patient with Refraction: -2.00 -1.00 x 180, Ks: 43.50/44.50@090, BCR: 43.00?

A. PL

B. Plano

C. 0.00 D

D. +0.50 D

The key idea here is how residual astigmatism is determined when predicting a spherical GP lens power. You compare the corneal astigmatism seen on kerato-dioptric measures with the manifest refractive cylinder. From keratometry, the cornea shows 1.00 D of astigmatism, with the flatter meridian at 090 and the steeper at 180. The manifest refraction has 1.00 D of cylinder at 180. Those two cylinders are equal in magnitude but oriented 90 degrees apart. When you choose a spherical GP lens power, the spherical component is set to correct the myopia, and with the base curve chosen close to the cornea (BCR around the flattest meridian), the tear lens and the lens curvature tend to neutralize the corneal astigmatism in both meridians. With this arrangement, the residual cylinder after applying the predicted lens power ends up being zero. So, the predicted lens power leaves no remaining astigmatic error, i.e., the residual astigmatism is plano. This is why the best answer is plano (no cyl). If there were a mismatch in magnitudes or axis alignment, a residual astigmatism would remain, potentially requiring a toric GP lens.

2. Which statement best describes a 2-in-1 system?

A. A cleaner and a disinfectant

B. Only a disinfectant

C. Only a cleaner

D. Neither cleaner nor disinfectant

A 2-in-1 system combines cleaning and disinfection in one product. Cleaning removes debris, protein, and lipid deposits from the lens surface, while disinfection kills microorganisms to reduce the risk of infection. Having both actions in a single system makes lens care more convenient and promotes better adherence to the regimen. If you used only a disinfectant, deposits would remain; if you used only a cleaner, microbes wouldn't be adequately addressed. The 2-in-1 approach is the best description because it covers both essential maintenance steps in one solution.

3. What is the role of the periodic cleaner in GP lens care?

A. Remove deposits on a scheduled basis

B. Disinfect lenses continuously

C. Lubricate lens surface

D. Replace lens

Periodic cleaner is used to remove deposits that build up on gas-permeable lenses over time. It's applied on a planned schedule—often weekly or monthly—because some deposits (like mineral buildup or protein films) are tougher to remove and don't come off with the daily cleaning step alone. By using a stronger cleaner at intervals, you lift and dissolve those stubborn deposits, helping the lens surface stay smooth for comfortable wear and good vision. This step is not for disinfection, which is handled by a separate disinfection process; it's also not for lubrication (rewetting drops do that) and it doesn't replace the need to replace or re-evaluate lenses over time.

4. What would be the residual astigmatism from the predicted contact lens power for a patient with Refraction: -2.00 -1.00 x 180, Ks: 43.50/44.50@090, BCR: 43.50?

A. PL

B. Plano

C. 0.00 D

D. +0.50 D

The situation hinges on how a spherical gas-permeable lens interacts with the eye's astigmatism. When the back surface curvature of the GP lens is chosen to match the flatter meridian of the cornea (BCR = 43.50) and the predicted lens power is set to correct the spherical error, the tear lens formed under a spherical GP can neutralize the corneal cylinder. In this case, the corneal astigmatism is 1.00 D at 90, and the refraction has 1.00 D of cylinder at 180. With a spherical GP designed around the flatter meridian, the system can produce no residual cylinder, so the residual astigmatism is effectively plano. That's why the correct term is Plano (no residual astigmatism).

5. What is a purpose of laboratory cleaners and solvents?

A. Disinfect surfaces

B. Remove tears

C. Debris that is difficult to remove

D. Polish lenses

The main idea is that laboratory cleaners and solvents are used to dissolve or loosen stubborn contaminants that don't come off with water or simple rinsing. In lens work, residues like oils, proteins, adhesives, or other films can cling to surfaces, and a cleaner or solvent helps break those bonds so the debris can be removed more effectively. This is why removing debris that is difficult to remove is the best description of their purpose. Disinfection is a separate process and isn't the primary function of cleaners/solvents in this context. Removing tears isn't a relevant task for laboratory cleaners, and polishing is a finishing step that comes after cleaning, not the main job of these chemicals.

6. Can GP rewetting drops go in the eye?

A. Yes

B. No

C. Only with daily wear

D. Only after cleaning

Gas-permeable (GP) rewetting drops are made to lubricate the tear film and reduce friction on the lens surface, helping relieve dryness and discomfort for GP wearers. They can be instilled into the eye with the lens in place, using a preservative-free product labeled safe for contact lenses, so you can blink and spread the lubrication without removing the lens. Remember, these drops are for lubrication, not cleaning or disinfection, and you should follow your clinician's guidance. If symptoms persist, remove the lens and seek advice.

7. What percent of GP care solutions were contaminated?

A. 50 percent

B. 10 percent

C. 25 percent

D. 75 percent

Contamination rate tells you what fraction of GP care solutions end up with microbes. If half of the solutions tested are contaminated, the percent is 50. This kind of result highlights that, even with proper formulation, contamination can occur in real-world use, so strict hygiene and handling are essential—wash hands, avoid touching the bottle tip to surfaces, never top off solutions, and discard used solution after lens wear. The other percentages would imply markedly different results than the data described, which is why 50 percent best fits the scenario.

8. Which practice is NOT recommended when using GP lens solutions?

A. Cap solutions

B. Read solution labels

C. Sleep with lenses in

D. Use recommended solutions

Sleeping with gas-permeable lenses in is not recommended because eyelids trap moisture and reduce tear exchange during sleep, significantly lowering oxygen supply to the cornea. This hypoxic stress can lead to corneal swelling, discomfort, and a higher risk of infection or other complications. Cap the solution containers after use to keep them sterile and prevent contamination from the environment. Reading solution labels is important to ensure you're using the right product for your GP lenses and that you follow the correct disinfection method, since some solutions aren't compatible with certain lens materials. Always use the solutions recommended by the lens manufacturer, as using non-recommended products can irritate the eye or damage the lens material. Following these practices helps maintain lens safety, comfort, and visual quality.

9. Rewetting drops in GP lens care are used for what purpose?

A. Disinfection

B. Cleansing

C. Debridement

D. Lubrication of the ocular surface

Rewetting drops are used to restore lubrication and tear film on the eye when wearing gas-permeable lenses. They rehydrate the tear layer that covers the cornea and the lens surface, helping to smooth the anterior surface, reduce friction during blinking, and alleviate dryness or irritation. This improves comfort and visual stability by promoting a more uniform tear film over the lens. They're not for disinfection or cleaning of lenses, which are handled by dedicated cleaning and disinfection solutions, and they don't remove deposits or debris.

10. Which statement about preservative usage is true?

A. Preservatives include chlorhexidine/PAPB, polyquad, and polyhexanide

B. All products use polyquad

C. No preservative is used in these products

D. All products use chlorhexidine/PAPB

Preservatives in lens care products are used to keep solutions from growing microbes between uses. The statement is true because several preservatives are commonly used in gas-permeable lens care, including chlorhexidine with PAPB, polyquad, and polyhexanide. Each of these antimicrobial agents serves to protect the disinfection and cleaning process, and different products may rely on different preservatives or even be preservative-free for sensitive eyes. So while one product might use polyquad, another might use PHMB or chlorhexidine/PAPB, and others may be preservative-free. The other options don't fit because not all products use polyquad, not every product is preservative-free, and not all products rely on chlorhexidine/PAPB.

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://gaspermcontactlensfittingcare.examzify.com

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