# Emerald™ Design Fitting Certification Course

## *Test Booklet*

Gelflex Incorporating ACL

*Let's start the Emerald Design Certification process. Here are the directions for completing your **Answer Sheet** (last page).*

- *Be sure to completely fill-out the personal information on the answer sheet & forward to ACL. PLEASE PRINT LEGIBLY*
- *Choose the **best** answer from those offered.*
- *Mark your choice by circling your answer.*
- *If you decide to change your answer draw an "X" through the answer you do not want and circle your next choice.*

## Question 1

**In which direction are the fluids compressed or redistributed when a ortho-k lens is worn?**

a. From the centre toward the periphery
b. From the anterior toward the posterior
c. From the periphery toward the centre
d. From the posterior toward the anterior

## Question 2

**What is the value of topography in the course of ortho-k treatment?**

a. It has limited or no value in the ortho-k treatment process.
b. It is only required for choosing the initial ortho-k shaping trial lens in some fitting systems
c. Whether used for choosing the initial ortho-k shaping lens or not, topography is necessary to monitor the entire ortho-k treatment effect process
d. It is used in conjunction with keratometry to determine the initial ortho-k shaping trial lens or the first shaping lens to be ordered.

## Question 3

**What is the function of the second fitting/reverse curve of the ortho-k shaping lens?**

a. To provide the optical correction
b. To promote movement of the ortho-k shaping lens across the cornea
c. To aid the forces controlling ortho-k shaping lens centration
d. To allow fluid and cell "movement" which promotes mid-peripheral corneal thickening

## Question 4

**What is the function of the third or alignment curve of the ortho-k shaping lens?**

a. To promote edge lift
b. To stabilize the ortho-k shaping lens and promote optimal centration
c. To link the back optic zone radius (BOZR) to the reverse curve
d. To minimize movement of the ortho-k shaping lens

## Question 5

**What is the approved maximum *"against-the-rule"* astigmatism that can be attempted with Emerald ortho-k fitting?**

a. -0.75 Diopters
b. -2.75 Diopters
c. -0.25 Diopters
d. -1.75 Diopters

## Question 6

**What is the approved amount of myopic reduction that can be achieved with Emerald ortho-k treatment?**

a. 10.00 Diopters
b. 8.00 Diopters
c. 5.00 Diopters
d. 2.00 Diopters

## Question 7

**Why may people with a large pupil size experience problems with ortho-k?**

a. The treatment zone will not be large enough and will cause visual problems
b. The treatment zone will be too large and will cause myopic regression
c. The treatment zone will be too large and will cause night-time blur
d. The treatment zone will not be large enough and will cause lens decentration

## Question 8

**Why is significant internal or lenticular astigmatism a problem with ortho-k fitting?**

a. Ortho-k shaping lenses are only produced with a back-surface cylinder correction
b. Ortho-k always causes a decrease in the cylinder correction
c. Ortho-k shaping lenses only impact corneal astigmatic changes
d. Ortho-k shaping lenses are difficult to manufacture

## Question 9

**Which patient symptoms with vision shaping treatment are of most concern to the contact lens practitioner?**

a. Comfortable wear of the ortho-k shaping lens and facial redness
b. Lid twitching and loss of lashes
c. Pain, lacrimation, redness, photophobia
d. Inability to sleep and sweating

## Question 10

**What is the most important common observation that the wearer should make prior to attempting removal the ortho-k shaping lenses after waking?**

a. Check for mucus build-up in the nasal canthus
b. Check for adherence of the ortho-k shaping lens to the cornea
c. Check for redness around the limbus
d. Check for excessive discomfort in the eye

## Question 11

**Which of the following patients would be considered a *poor candidate* to be fitted with the Emerald Design?**

a. -3.00 -1.00 X 180
b. -0.50 -1.75 X 180
c. -5.00 -0.50 X 90
d. -2.50 -1.50 X 180

## Question 12

**The recommended data needed for designing an Emerald lens is?**

a. Refraction, accurate “K’s”, and VD
b. Refraction, accurate “K’s”, and HVID
c. Refraction, accurate “K’s”, and IOP
d. Refraction, accurate “K’s”, and VST

## Question 13

**Which description best identifies the Emerald Ortho-k Design?**

a. A four-zone reverse geometry lens available in three diameters
b. An ortho-k design with spherical central zone and toric periphery
c. Aspheric back surface with a front surface add
d. A bi-aspheric lens with two variable parameters

## Question 14

**The initial recommended Emerald lens diameter is?**

a. 11.5 mm
b. 10.2 mm
c. 10.0 mm
d. 10.6 mm

## Question 15

**The Emerald design typically uses an Alignment Curve radius that is?**

a. Steeper than the Flat “K” radius
b. Flatter than the Flat “K” radius
c. Equal to the Flat “K” radius
d. Aspheric

## Question 16

**What parameter change would likely be required if an Emerald Design lens decentres horizontally?**

a. Increase the overall lens diameter
b. Decrease the overall lens diameter
c. Steepen the Base (BOZR) curve
d. Steepen the Peripheral Curve

## Question 17

**A Subtractive or Difference map is used to determine?**

a. The optimum design for the back surface of the ortho-k shaping lens
b. The difference between the pre and post-fit cornea
c. The sagittal height of the cornea
d. The baseline eccentricity value of the cornea

## Question 18

**A “Central Island” topography map would indicate that the Emerald lens?**

a. Has the proper sagittal height
b. Has a sagittal height that is too low
c. Has a sagittal height that is too high
d. Needs to have the diameter changed

## Question 19

**A “Smiley Face” topography map would indicate that the Emerald lens?**

a. Is centering ideally
b. Is centering high on the cornea during sleep
c. Is centering low on the cornea during sleep
d. Is decentred nasally on the cornea

## Question 20

**A “Bull’s Eye” topography map would indicate that the Emerald lens?**

a. Has the proper sagittal height
b. Has a sagittal height that is too low
c. Has a sagittal height that is too high
d. Needs to have the diameter changed

***Thank You for Completing the Test***

Gelflex Incorporating ACL

## CERTIFICATION TEST ANSWER SHEET

**Date:**

**First Name:** **Last Name:**

**Practice Name:**

**Address:**

**State:** **Postcode:**

**Phone:** **E-mail address:**

**Please circle one answer for each question.**
(If you decide to change an answer, please cross out the incorrect answer with an "X" and circle new choice.)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. | A | B | C | D | 11. | A | B | C | D |
| 2. | A | B | C | D | 12. | A | B | C | D |
| 3. | A | B | C | D | 13. | A | B | C | D |
| 4. | A | B | C | D | 14. | A | B | C | D |
| 5. | A | B | C | D | 15. | A | B | C | D |
| 6. | A | B | C | D | 16. | A | B | C | D |
| 7. | A | B | C | D | 17. | A | B | C | D |
| 8. | A | B | C | D | 18. | A | B | C | D |
| 9. | A | B | C | D | 19. | A | B | C | D |
| 10. | A | B | C | D | 20. | A | B | C | D |

**Please submit completed answer sheet to Australian Contact Lenses via email aclorders@gelflex.com or Fax 03 9793 1635.**

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