

作业 3

Material Covered:
***Units 2.1, 2.2 and 2.3 of Module 2
of the IACLE Contact Lens Course***

作业 3

仔细阅读题目，将答案写在答题纸上。

1. **According to Holden and Mertz (1984), what should the transmissibility of an extended wear contact lens be to limit or prevent corneal oedema?**

- a. $Dk/t = 24 \times 10^{-9}$
- b. $Dk/t = 24 \times 10^{-11}$
- c. $Dk/t = 87 \times 10^{-9}$
- d. $Dk/t = 87 \times 10^{-11}$

1. 根据 Holden and Mertz (1984)的研究，要减少和避免角膜水肿，长戴型镜片的氧传导性必须达到：

- a. $Dk/t = 24 \times 10^{-9}$
- b. $Dk/t = 24 \times 10^{-11}$
- c. $Dk/t = 87 \times 10^{-9}$
- d. $Dk/t = 87 \times 10^{-11}$

2. **A patient has a spectacle refraction of -9.00 D at a vertex distance of 14 mm. If we wanted to fit this patient with contact lenses, what back vertex power (BVP) would be required for the contact lens?**

- a. -8.00 D
- b. -8.75 D
- c. -9.50 D
- d. -10.00 D

2. 一患者框架眼镜的屈光度为 -9.00 D，角膜顶点距离为 14mm，如此患者选择配戴接触镜，则接触镜度数为：

- a. -8.00 D
- b. -8.75 D
- c. -9.50 D
- d. -10.00 D

3. **Who is said to be the first person to describe the concept of a "contact" lens?**

- a. René Descartes
- b. Leonardo da Vinci
- c. Otto Wichterle
- d. Carl Zeiss

3. 是谁最早描述了接触镜的概念

- a. René Descartes
- b. Leonardo da Vinci
- c. Otto Wichterle
- d. Carl Zeiss

4. **Which method of manufacture is normally used for low volume production and custom-made soft contact lenses?**

- a. Cast molding
- b. Spin casting
- c. Wet molding
- d. Lathe cutting

4. 下述哪种制造方法主要用于低批量的、定制的联系镜加工？

- a. 浇铸膜压法
- b. 旋转成形法
- c. 湿性膜压法
- d. 车削法

5. **A patient is wearing a rigid gas permeable trial contact lens with the following parameters:**

BOZR = 7.75 mm

Total diameter = 9.30 mm

BVP = -6.50 DS

Evaluation of the lens on the eye with fluorescein shows slight central pooling, so you decide to order a new lens of the same diameter, that is 0.05 mm flatter. What should the BVP of this new lens be?

- a. -6.00 D
- b. -6.25 D
- c. -6.75 D
- d. -7.00 D

5. 一患者配戴的 RGP 镜片，参数如下：基弧 (BOZR) = 7.75 mm，总直径=9.30 mm，后顶点屈光度 = -6.50 DS，配适的荧光素图显示为中央区轻微荧光素积聚，所以你想重新订镜片，直径不变，基弧平坦 0.05 mm，则新镜片的后顶点屈光度为多少：

- a. -6.00 D
- b. -6.25 D
- c. -6.75 D
- d. -7.00 D

6. **Which of the ocular complications below does NOT occur as a result of contact lens-induced hypoxia?**

- a. Endothelial blebs
- b. Epithelial microcysts
- c. Superior epithelial arcuate lesions
- d. Endothelial polymegathism

6. 下述哪种并发症并不是因为接触镜所导致的缺氧造成的？

- a. 内皮空泡
- b. 上皮微囊
- c. 上方上皮弓形缺损
- d. 内皮细胞多形性改变

7. Which statement regarding the assessment of the wettability of contact lens materials is NOT true?

- a. In the sessile drop method, a large contact angle indicates poor wettability
- b. In the Wilhelmy plate method, the receding angle is greater than the advancing angle
- c. In the sessile drop method, the advancing angle is determined by adding more water
- d. In the captive bubble method, air is introduced under a lens in a wet cell

7. 下述有关接触镜材料湿润性的评价中，哪点是错误的？

- a. “sessile drop”方法中，接触角大则为湿润性差
- b. “Wilhelmy plate”方法中，后退角大于前进角
- c. “sessile drop”方法中，前进角的大小取决于加入水的量
- d. “captive bubble”方法中，在湿装置中，空气被导入到镜片下

8. Who is credited with having conceived the idea of a “throw away lens”?

- a. Orlando A Battista
- b. Normal O Stahl
- c. John de Carle
- d. Thomas Young

8. 是谁被认为提出“抛弃型镜片”概念的？

- a. Orlando A Battista
- b. Normal O Stahl
- c. John de Carle
- d. Thomas Young

9. Which of the following statements regarding rigid bifocal contact lenses is NOT true?

- a. An implanted segment bifocal is an example of a translating lens
- b. In a progressive addition lens, the near addition increases with increasing displacement from the centre of the lens
- c. Due to the alternation of powers in a diffractive lens, it is very much dependent on pupil size
- d. Concentric bifocals are made using conventional lathing or molding techniques

9. 下述哪点有关双焦点硬镜的描述是不正确的？

- a. 植入子镜片的双焦镜是变换型镜片的例子
- b. 在渐变镜中，离镜片中央越远，近附加量越大
- c. 在衍射型镜片中由于屈光度的不断变化，故瞳孔大小影响很大
- d. 同心圆型双焦点镜片通常用车削法或膜压技术

10. A myope transferring from spectacles to contact lenses will use:

- a. More accommodation and less convergence
- b. More accommodation and more convergence
- c. Less accommodation and more convergence
- d. Less accommodation and less convergence

10. 近视患者从框架眼镜转为接触镜，则会使用：

- a. 更多调节和更少集合
- b. 更多调节和集合
- c. 更少的调节和更多的集合
- d. 更少的调节和集合

11. **Which statement regarding soft hydrogel lenses is NOT true?**

- a. Higher water content materials have a lower refractive index than their low water content counterparts
- b. A lens stored in a hypertonic solution will show a reduction in water content
- c. The lens water content decreases as the pH of the surrounding medium becomes more alkaline
- d. Thin low water content lenses are less likely to cause pervaporation staining than thin high water content lenses

11. 下述哪点有关水凝胶镜片的叙述是不正确的？

- a. 材料含水量越高，屈光指数越低
- b. 镜片储存在高渗溶液中，含水量会降低
- c. 镜片周围媒介越偏碱性，则镜片含水量降低
- d. 薄的低含水量镜片比薄的高含水量镜片更难产生因蒸发所致染色

12. **A patient is wearing an RGP trial lens has a BOZR of 8.00 mm and a BVP of +8.00 DS, which accurately compensates for his refractive error. The lens shows an apical touch fluorescein pattern on the patient's eye, so you decide to order a final lens of the same overall diameter, but with a BOZR of 7.90 mm. What should the BVP of this final lens be?**

- a. +7.50 D
- b. +7.75 D
- c. +8.25 D
- d. +8.50 D

12. 一患者配戴 RGP 镜片，BOZR 为 8.00 mm，屈光度 (BVP) 为 +8.00 DS, 此镜片屈光度矫正理想，荧光素图示镜片中央接触，如你想订一相同直径的镜片，但 BOZR 为 7.90 mm，则镜片的屈光度必须为多少？

- a. +7.50 D
- b. +7.75 D
- c. +8.25 D
- d. +8.50 D

13. **Theoretically, contact lenses may be contra-indicated in cases of:**

- a. Irregular astigmatism
- b. Axial anisometropia
- c. Oblique astigmatism
- d. Refractive anisometropia

13. 从理论上而言，接触镜在下述哪种情况下是禁忌的？

- a. 不规则散光
- b. 轴性屈光参差
- c. 斜轴散光
- d. 屈光性屈光参差

14. Which of the following statements is NOT true?

- a. Hyperopes experience a smaller image size with contact lenses than they do with spectacles of equivalent power
- b. Spectacle magnification is the ratio of the retinal image sizes in an ametropic eye in the corrected and uncorrected state
- c. Image size in an optical system is directly proportional to the focal length of the system
- d. In myopia, the contact lens focal length is shorter than the equivalent spectacle focal length

14. 下述哪点的叙述是不正确的？

- a. 远视患者配戴接触镜所视物体比戴相等同度数的框架眼镜小
- b. 眼镜放大率为在屈光不正眼中在矫正和非矫正状态下视网膜像大小之比
- c. 在光学系统中像的大小与系统的焦距成正比
- d. 在近视中，接触镜焦距比相等同度数的框架眼镜短

15. The Dk value of a 40–55% water content hydrogel lens, measured through the coulometric technique at a temperature of 34°C, would be approximately:

- a. 5 – 8
- b. 7 – 19
- c. 18 – 28
- d. > 50

15. 镜片含水量为 40~55%，在温度为 34°C,用 coulometric 技术，则大致的 DK 值为：

- a. 5 – 8
- b. 7 – 19
- c. 18 – 28
- d. > 50

16. A patient has a spectacle refraction of -11.00 DS at a vertex distance of 14 mm. He is fitted with a trial contact lens with a back vertex power (BVP) of -5.00 D, and the over-refraction is -6.00 D. What BVP should be ordered for the final contact lens?

- a. -9.50 D
- b. -10.00 D
- c. -10.50 D
- d. -11.50 D

16. 一患者框架眼镜屈光度为 -11.00 DS，角膜顶点距离为 14 mm.，试戴镜片屈光度为 -5.00 D，戴镜验光度数为 -6.00 D.，则最后所订镜片的屈光度为多少？

- a. -9.50 D
- b. -10.00 D
- c. -10.50 D
- d. -11.50 D

17. Which statement regarding Siloxane Acrylate (SA) materials for RGP lens manufacture is NOT true?

- a. Relatively 'hard' surfaces that do not scratch easily
- b. Low rigidity may cause flexure problems
- c. Susceptible to surface 'burning' during manufacture
- d. Surface charge and surface chemistry make them more deposit prone

17. 下述哪点有关 Siloxane Acrylate (SA) 材料用于 RGP 的制造描述是不正确的？

- a. 表面相当硬，不容易被刮
- b. 坚硬度低容易造成翘曲的问题
- c. 在制造过程中易受表面加热影响
- d. 表面的电荷和化学物质使他们更容易吸附沉淀

18. A patient has a spectacle refraction of +8.00 D at a vertex distance of 14 mm. If we wanted to fit this patient with contact lenses, what back vertex power (BVP) should be ordered?

- a. +7.25 D
- b. +7.75 D
- c. +8.50 D
- d. +9.00 D

18. 一患者框架眼镜屈光度为+8.00 D，角膜顶点距离为 14 mm.，如此患者配戴接触镜，则屈光度为：

- a. +7.25 D
- b. +7.75 D
- c. +8.50 D
- d. +9.00 D

19. According to Holden and Mertz (1984), how much oxygen is needed through daily wear contact lenses to limit or prevent corneal oedema?

- a. 5.7%
- b. 9.9%
- c. 13.4%
- d. 17.9%

19. 根据 Holden and Mertz (1984)的研究，要减少和避免角膜水肿，通过日戴型镜片，角膜所需要的氧至少为：

- a. 5.7%
- b. 9.9%
- c. 13.4%
- d. 17.9%

20. Which of the following statements is NOT true?

- a. Spectacle wearing hyperopes accommodate more than spectacle wearing myopes
- b. With contact lens wear, the accommodation required in ametropia is approximately the same as for an emmetrope
- c. If a myope is switched from spectacles to contact lenses the need for a near vision correction may be postponed
- d. The accommodative demand of a hyperope is greater with spectacles than with contact lenses

20. 下述哪点叙述是不正确的？

- a. 远视戴框架眼镜比近视框架眼镜使用更多调节
- b. 戴接触镜，屈光不正者所需的调节与正视者相同
- c. 近视患者从框架眼镜转为接触镜，则近用附加需求将延期
- d. 远视患者戴框架眼镜的调节需求大于戴接触镜