

# 作业 1

**参考范围:**

***Units 1.1 and 1.2 of Module 1  
of the IACLE Contact Lens Course***

## 作业 1

仔细阅读题目，将答案写在答题纸上。

1. **What is considered a normal blink rate?**
  - a. 5 blinks per minute
  - b. 10 blinks per minute
  - c. 15 blinks per minute
  - d. 25 blinks per minute
1. **正常的瞬目频率是：**
  - a. 5次/分
  - b. 10次/分
  - c. 15次/分
  - d. 25次/分
2. **What is the average centre thickness of the human cornea?**
  - a. 0.52 mm
  - b. 0.67 mm
  - c. 0.82 mm
  - d. 1.00 mm
2. **人角膜中央平均厚度为：**
  - a. 0.52 mm
  - b. 0.67 mm
  - c. 0.82 mm
  - d. 1.00 mm
3. **Which of the following regional divisions of the conjunctiva is known as the "bulbar conjunctiva"?**
  - a. Fold of conjunctiva at the inner canthus
  - b. Conjunctival tissue overlying the sclera and limbus
  - c. Conjunctiva lining the inner eyelids, extending to the lid margins
  - d. Conjunctival tissue nasal to the plica semilunaris, defining the medial canthus
3. **下述哪部分的结膜划分被称为“球结膜”？**
  - a. 在内眦部结膜皱褶处
  - b. 覆盖在巩膜和角巩膜缘的结膜组织
  - c. 覆盖在眼睑内面，并延伸至睑缘的结膜组织
  - d. 鼻侧至半月皱襞，被称为中眦部的结膜组织
4. **What is the average eccentricity value of the human cornea?**
  - a. 0.25
  - b. 0.32
  - c. 0.47
  - d. 0.58



4. 人角膜平均的偏心率为：
- 0.25
  - 0.32
  - 0.47
  - 0.58
5. **Which of the accessory lacrimal glands contribute to the aqueous phase of the basal tears?**
- Gland of Zeiss
  - Crypts of Henle
  - Conjunctival goblet cells
  - Glands of Krause and Wolfring
5. 下述哪种腺体与泪膜中水液层的分泌有关？
- Zeiss 腺
  - Henle 管
  - 结膜杯状细胞
  - Krause 和 Wolfring 腺
6. **Ignoring the tear film, what is the actual refractive index of the cornea?**
- 1.3375
  - 1.354
  - 1.376
  - 1.470
6. 忽略泪膜的因素，角膜的实际的屈光指数为：
- 1.3375
  - 1.354
  - 1.376
  - 1.470
7. **Which of the following are mainly responsible for secreting the mucin layer of tears?**
- Conjunctival goblet cells
  - Meibomian glands
  - Glands of Krause
  - Glands of Wolfring
7. 下述哪种组织与泪膜中黏液层的分泌有关？
- 结膜杯状细胞
  - Meibomian 腺
  - Krause 腺
  - Wolfring 腺
8. **How much oxygen does the cornea need to maintain regular function?**
- 7.5%
  - 13.1%
  - 20.9%
  - 33%



8. 角膜维持正常的功能所需的氧含量为：

- a. 7.5%
- b. 13.1%
- c. 20.9%
- d. 33%

9. *Which of the following is the main source of glucose for the corneal epithelium?*

- a. Limbal vasculature
- b. Tears
- c. Palpebral conjunctiva
- d. Aqueous humour

9. 下述哪种途径是角膜上皮所需的葡萄糖的主要来源？

- a. 角巩膜缘血管
- b. 泪液
- c. 睑结膜
- d. 房水

10. *What is the typical pH of human tears under normal open eye conditions?*

- a. 6.5
- b. 7.4
- c. 8.5
- d. 8.8

10. 正常睁眼情况下泪膜的 PH 值为：

- a. 6.5
- b. 7.4
- c. 8.5
- d. 8.8

11. *What is the average front apical radius of the human cornea?*

- a. 2.60 mm
- b. 6.50 mm
- c. 7.80 mm
- d. 11.70 mm

11. 人角膜前表面的曲率半径是：

- a. 2.60 mm
- b. 6.50 mm
- c. 7.80 mm
- d. 11.70 mm

12. *Which cranial nerve is responsible for corneal innervation?*

- a. Optic (N2)
- b. Oculomotor (N3)
- c. Trigeminal (N5)
- d. Facial (N7)

12. 支配角膜的神经是下述何颅神经的分支？

- a. 视神经(N2)
- b. 动眼神经(N3)
- c. 三叉神经(N5)
- d. 面神经(N7)

13. *The hydrophilicity of which of the following induces the natural tendency for water imbibition into the stroma?*

- a. Corneal fibroblasts
- b. Glycosaminoglycans
- c. Descemet's membrane
- d. Collagenous lamellae

13. 下述哪种物质的亲水特性是维持角膜基质有吸水性的主要原因？

- a. 角膜纤维细胞
- b. 粘多糖
- c. 后弹力层
- d. 胶原板层

14. *What is the average amount of overnight corneal oedema in normal eyes without contact lenses?*

- a. <2%
- b. 3-4%
- c. 6-8%
- d. >10%

14. 正常眼在未戴接触镜过夜时，平均角膜的水肿度为：

- a. <2%
- b. 3-4%
- c. 6-8%
- d. >10%

15. *What is the main oxygen supply of the corneal endothelium during closed eye conditions?*

- a. Limbal blood vessels
- b. Palpebral conjunctiva
- c. Aqueous humour
- d. Tear layer

15. 在闭眼情况下角膜内皮的主要氧供来源为：

- a. 角膜缘血管
- b. 睑结膜
- c. 房水
- d. 泪膜

**16. Which statement regarding the endothelium pump is NOT true?**

- a. Fuelled by glucose
- b. Mainly responsible for recovering from corneal oedema
- c. Each cell pumps its own volume every five minutes
- d. An active transport mechanism

16. 下述哪点关于角膜内皮泵的陈述是不正确的？

- a. 葡萄糖提供能量
- b. 主要对角膜水肿的恢复起作用
- c. 每 5 分钟，每个细胞泵出自我承受的量
- d. 是一种主动的转运机制

**17. What is the oxygen requirement of the cornea in order to prevent corneal sensitivity loss?**

- a. 3%
- b. 5%
- c. 8%
- d. 13%

17. 为防止角膜敏感度的下降，角膜所需的氧供为：

- a. 3%
- b. 5%
- c. 8%
- d. 13%

**18. In cases of complete stripping of the corneal epithelium, how long does it take for complete wound healing and cell regeneration?**

- a. 6 hours
- b. 24 hours
- c. 1 week
- d. 6 weeks

18. 角膜上皮脱落后，需要多少时间才能完成伤口的修复和细胞的再生？

- a. 6 小时
- b. 24 小时
- c. 1 周
- d. 6 周

**19. What is the average thickness of the pre-corneal tear layer?**

- a. 0.5  $\mu\text{m}$
- b. 2.0  $\mu\text{m}$
- c. 7.0  $\mu\text{m}$
- d. 11.0  $\mu\text{m}$

19. 角膜前泪膜层的平均厚度为：

- a. 0.5  $\mu\text{m}$
- b. 2.0  $\mu\text{m}$
- c. 7.0  $\mu\text{m}$
- d. 11.0  $\mu\text{m}$



**20. What are the average horizontal and vertical visible iris diameters respectively?**

- a. 11.7 mm and 10.6 mm
- b. 11.7 mm and 10.6 mm
- c. 12.5 mm and 10.6 mm
- d. 12.5 mm and 11.7 mm

20. 平均可见虹膜水平径和垂直径分别为：

- a. 11.7 mm 和 10.6 mm
- b. 11.7 mm 和 10.6 mm
- c. 12.5 mm 和 10.6 mm
- d. 12.5 mm 和 11.7 mm