

ASSIGNMENT 9

Material Covered:
*Unit 4.5 of Module 4 and Units 5.1 and 5.2 of Module 5
of the IACLE Contact Lens Course*

ASSIGNMENT 9

Read the questions carefully and record your answers on the answer sheet provided.

1. **Which of the following slit-lamp illumination techniques could be used to detect the depth of a corneal lesion?**
 - a. Direct illumination with an optic section
 - b. Diffuse illumination
 - c. Specular reflection with a parallelepiped
 - d. Tangential illumination

2. **Which one of the following techniques would be MOST useful in assessing the movement and centration of a rigid lens on the eye?**
 - a. Direct illumination with an optic section and medium magnification
 - b. Direct retro-illumination at high magnification
 - c. Diffuse illumination at medium magnification
 - d. Marginal retro-illumination at medium magnification

3. **On average, the pH of normal human tears is:**
 - a. 6.7
 - b. 7.2
 - c. 7.9
 - d. 8.5

4. **Which one of the following is a viscosity-enhancing agent often used in lubricating drops?**
 - a. Thiomersal
 - b. Benzalkonium chloride
 - c. Chlorhexidine gluconate
 - d. Polyvinyl alcohol

5. **When using the Van Herrick technique to estimate the anterior chamber angle with an optic section, what should the angle between the slit lamp's microscope and illumination arm be?**
 - a. 30°
 - b. 45°
 - c. 60°
 - d. 90°

6. **Which of the following slit-lamp illumination techniques is viewed monocularly?**
 - a. Specular reflection
 - b. Sclerotic scatter
 - c. Tangential illumination
 - d. Conical beam

- 7. Which one of the following statements regarding the cleaning and rinsing of soft contact lenses is NOT true?**
- Daily disposable lenses do not need cleaning and rinsing
 - When multi-purpose solutions are used, there is no need to 'rub and rinse' the lenses
 - Extended wear lenses should be cleaned each time they are removed from the eye
 - Hypertonicity may improve the efficacy of lens cleaners
- 8. When examining the eye with a slit-lamp, a conical beam is best used to view:**
- Epithelial oedema
 - Crystalline lens opacities
 - Cells and flare in the anterior chamber
 - Corneal staining
- 9. Which one of the following is NOT a suitable rinsing solution for soft contact lenses?**
- Unpreserved, unit-dose saline solution
 - Multi-purpose solution
 - Preserved saline solution
 - Distilled water
- 10. Which one of the following illumination techniques would be MOST useful for observing mucus and other forms of surface contamination on a soft contact lens on the eye?**
- Diffuse illumination
 - Direct retro illumination
 - Tangential illumination
 - Specular reflection
- 11. According to the studies by Carney et al (1990, 1991), which one of the following properties of saline solution shows the LEAST variability after opening?**
- pH
 - Buffering capacity
 - Refractive index
 - Osmolality
- 12. Each of the following factors warrant consideration when selecting a contact lens care and maintenance system EXCEPT:**
- Lens back vertex power
 - Ocular sensitivity
 - Lens material
 - Wearing and replacement schedule

- 13. Which one of the following filters is used to eliminate unfluoresced blue light from the slit-lamp view during sodium fluorescein-assisted investigation of the cornea?**
- Red-free filter
 - Neutral density filter
 - Removable diffuser
 - Kodak Wratten #12 filter
- 14. The best view of corneal neovascularization using a slit-lamp is obtained by:**
- Diffuse illumination
 - Retro-illumination
 - Specular reflection
 - Conical beam
- 15. Which one of the following contact lens solution properties would have the LEAST effect on initial comfort upon lens insertion?**
- Tonicity
 - pH
 - Viscosity
 - Preservative concentration
- 16. Which one of the following statements is NOT true?**
- Ionic lenses attract more protein deposits than non-ionic lenses
 - Daily disposable lenses do not require use of a surfactant cleaner
 - The human cornea can tolerate 0.6 to 1.5% sodium chloride
 - Low water content lenses accumulate more deposits than high water content lenses
- 17. Which one of the following statements regarding hydrogen peroxide-based contact lens disinfecting solutions is NOT true?**
- Normally formulated with a 0.3% H₂O₂ concentration
 - Neutralization is required following disinfection and before lens insertion
 - pH is usually acidic
 - Disinfection in H₂O₂ is reasonably effective in 45 minutes
- 18. Which one of the following slit-lamp illumination techniques is ideal for observing endothelial polymegethism?**
- Sclerotic scatter
 - Specular reflection
 - Retro-illumination
 - Diffuse illumination
- 19. What concentration of saline solution is considered isotonic or 'normal', i.e. having an overall sodium chloride concentration equivalent to that of human tears?**
- 0.09%
 - 0.5%
 - 0.9%
 - 5.0%

20. Which slit-lamp illumination technique is BEST suited to an examination of epithelial microcysts?

- a. Optic section
- b. Tangential illumination
- c. Sclerotic scatter
- d. Marginal retro-illumination