



Name :

Roll No. :

Invigilator's Signature :

CS/B.OPTM/SEM-6/BO-604/2010

2010

CONTACT LENS-II

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :

10 × 1 = 10

- i) Keratoconus shows presence of vertical lines in the Cone Apex known as
 - a) Krukenberg spindle b) Sampaolesis's line
 - c) Vogt's striae d) Munson's sign.

- ii) The reference marks on the soft toric lenses are used to
 - a) assess lens orientation *in situ*
 - b) cylindrical power
 - c) Cylinder axis
 - d) movement.

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[Turn over



- iii) DK value of a material is defined as
- a) oxygen permeability
 - b) oxygen transmissibility
 - c) oxygen flux
 - d) oxygen probability.
- iv) Which slit lamp technique provides the best view of corneal neovascularisation ?
- a) Specular reflection
 - b) Tangential illumination
 - c) Retro-illumination
 - d) Sclerotic scatter.
- v) Which position of prism is used in the prism ballasted stabilization design ?
- a) Base up
 - b) Base down
 - c) Base in
 - d) Base out.
- vi) HEMA (Hydroxy Ethyl Methacrylate) belongs to the which of the following FDA group classifications ?
- a) Group I
 - b) Group II
 - c) Group III
 - d) Group IV.
- vii) What is the term for discrete pooling of fluorescein in depressions / pits in corneal epithelium caused by air bubbles trapped underneath a rigid contact lens ?
- a) Central corneal clouding
 - b) Corneal desiccation
 - c) Dimple veiling
 - d) Punctate staining.
- viii) A soft lens wearer reports that his vision is fairly good in the primary position. However, it blurs immediately following a blink and then reverts to the previously good quality. What is the MOST likely cause of these fluctuations in vision ?
- a) Total lens diameter is too big
 - b) The lens fit is too flat
 - c) The lens does not move enough with the blink
 - d) The lens fit is too steep.



- ix) What is the desired amount of post-blink movement that an RGP lens should display ?
- a) 0.00 mm to 0.50 mm b) 0.25 mm to 0.75 mm
 c) 1.00 mm to 2.00 mm d) 2.25 mm to 3.75 mm.
- x) 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.
- xi) Which one of the following statements regarding the cleaning and rinsing of soft contact lenses is NOT true ?
- a) Daily disposable lenses do not need cleaning and rinsing
 b) Extended wear lenses should be cleaned each time they are removed from the eye
 c) Hypertonicity may improve the efficacy of lens cleaners
 d) When multipurpose solutions are used there is no need to rub and rinse the lenses.
- xii) What is the best way for a patient to remove RGP lens lipid deposits ?
- a) Use an enzymatic cleaner weekly
 b) Polishing the lens surface
 c) Switch to hydrogen peroxide disinfection
 d) Using an alcohol-based surfactant cleaner.



GROUP – B

(Short Answer Type Questions)

Write short notes on any *three* of the following.

3 × 5 = 15

2. Residual Astigmatism.
3. Contact lens fitting in Keratoconus.
4. Piggy back contact lens.
5. Double slab-off stabilization technique.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. 3 × 15 = 45

6. a) Write about the complications of soft contact lenses.
b) What are the advantages of disposable contact lenses in minimizing those ? 10 + 5
7. a) Explain how a spherical RGP lens corrects corneal astigmatism.
b) Mention the early & late signs of Keratoconus.
c) Write down the differences between fitting contact lens in an adult & a child. 5 + 5 + 5
8. How does the cornea receive oxygen during contact lens wear ? What are the causes of corneal oedema in contact lens use ? How do you manage it ?
9. How will you diagnose and manage suspected mild dry eye syndrome in a patient desperately wanting to use SCL ? In case, you prescribe an SCL for him, what special precaution will you take ?