



Name :

Roll No. :

Invigilator's Signature :

CS/B.OPTM/SEM-5/BO-502/2011-12

2011

CONTACT LENS - I

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) Each of the following instruments can be used to measure overall diameter of RGP lens *except*
- a) V-gauge
 - b) Radiuscope
 - c) Moire-fringe deflectometer
 - d) Megnification loupe.
- ii) Who can be considered as the 'father of contact lenses' ?
- a) René Descartes
 - b) Leonardo da Vinci
 - c) Otto Wichterle
 - d) Sir John Herschel.

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iii) "Parallelepiped, wider beam" illumination technique of SLB is used to

- a) Assess Corneal thickness
- b) Determining the anterior chamber angle
- c) Assessing the wettability of a contact lens material
- d) Observe corneal stroma, epithelium, lens surface and endothelium.

iv) The temperature for heat disinfection is

- a) 30 – 60° celsius
- b) 100 – 140° celsius
- c) 70 – 80° celsius
- d) 10 – 30° celsius.

v) All are properties of contact lense *except*

- a) Wettability
- b) Elasticity
- c) Oxygen permeability
- d) Oxygen transmissibility.

vi) Bausch and Lomb Keratometer is a

- a) Two position Keratometer
- b) One position Keretometer
- c) None of these
- d) Both (a) and (b).



- vii) DK value of PMMA is practically
- a) > 60
 - b) zero
 - c) 12 – 60
 - d) < 40.
- viii) A flet fitting lens is characterized by all *except*
- a) excessive movement
 - b) high or low riding horizontally displaced lens
 - c) little or no movement
 - d) none of these.
- ix) The percentage of tear exchanged with a Rigid contact lens on a blink is
- a) 5 – 10
 - b) 1 – 4
 - c) 20 – 25
 - d) 16 – 19.
- x) The method which produces aspheric soft contact lens is
- a) cast moulding
 - b) lathe cut
 - c) spin cast
 - d) reverse process III.
- xi) TD neutraliser in hydrogen peroxide system is
- a) catalase
 - b) cyclase
 - c) sodium thiosulphate
 - d) sodium transferase.

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GROUP – B

(Short Answer Type Questions)

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

3 × 5 = 15

2. Indications and Contraindications of contact lens wear.
3. Advantages and disadvantages of 'Lathing'.
4. The base curve and peripheral curves of a RGP lens.
5. Oxygen permeability and oxygen transmissibility.

GROUP – C

(Long Answer Type Questions)

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

6. Discuss the fitting procedure for R.G.P. lenses.
7. a) Explain the spin cast technique of soft lens manufacture.
b) How does a contact lens stay on the eye ? 10 + 5
8. a) Discuss the role of various components of a typical contact lens solution.
b) What are the complication that can occur due to an improperly fitted contact lens ? 10 + 5
9. a) What are the important contact lens materials as per FDA classification ?
b) Discuss the benefits of an initial trial lens fitting, before final ordering of a soft contact lens. 7 + 8

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