	UNIVERSITY OF TROMOLOGY
Name :	
Roll No. :	A County Sounday and Station
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 :

 $10 \times 1 = 10$

- 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.

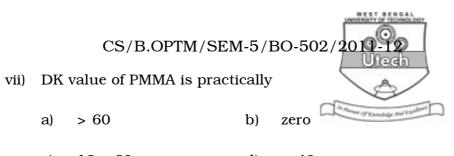
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- iii) "Parallelepiped, wider beam" illumination technique of SLB is used to
 - a) Assess Corneal thickness
 - b) Determining the anterior chamber angle
 - c) Assessing the wettability of a contact lens material
 - d) Observe corneal stroma, epithelium, lens surface and endothelium.
- iv) The temperature for heat disinfection is
 - a) $30 60^{\circ}$ celsius b) $100 140^{\circ}$ celsius
 - c) $70 80^\circ$ celsius d) $10 30^\circ$ celsius.
- v) All are propecties 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).

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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.

 $3 \times 5 = 15$

- 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. $3 \times 15 = 45$

- 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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