

## **INSTRUCTIONS TO THE CANDIDATES :**

- 1. This Booklet is a Question-cum-Answer Booklet. The Booklet consists of **32 pages**. The questions of this concerned subject commence from Page No. 3.
- 2. a) In **Group A**, Questions are of Multiple Choice type. You have to write the correct choice in the box provided **against each question**.
  - b) For Groups B & C you have to answer the questions in the space provided marked 'Answer Sheet'. Questions of Group B are Short answer type. Questions of Group C are Long answer type. Write on both sides of the paper.
- 3. **Fill in your Roll No. in the box** provided as in your Admit Card before answering the questions.
- 4. Read the instructions given inside carefully before answering.
- 5. You should not forget to write the corresponding question numbers while answering.
- 6. Do not write your name or put any special mark in the booklet that may disclose your identity, which will render you liable to disqualification. Any candidate found copying will be subject to Disciplinary Action under the relevant rules.

#### 7. Use of Mobile Phone and Programmable Calculator is totally prohibited in the examination hall.

- 8. You should return the booklet to the invigilator at the end of the examination and should not take any page of this booklet with you outside the examination hall, **which will lead to disqualification**.
- 9. Rough work, if necessary is to be done in this booklet only and cross it through.

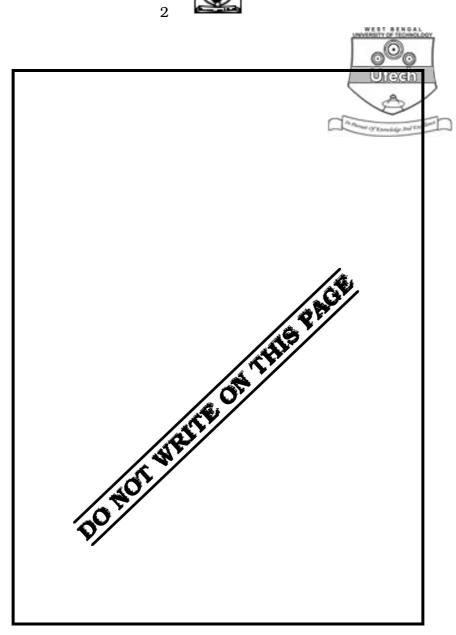
#### No additional sheets are to be used and no loose paper will be provided

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				Ma	arks	Obt	aine	d					
	Gre	oup – A					Gro	up –	B	Gro	oup – C		
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Marks Obtained													

# Head-Examiner/Co-Ordinator/Scrutineer

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# ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE - 2009 CONTACT LENS - II SEMESTER - 6

Time : 3 Hours ]

# **GROUP** – A

[Full Marks : 70

# ( Multiple Choice Type Questions )

l.	Choo	ose th	e correct alternatives for any te	n of th	e following :	$10 \times 1 = 10$							
	i)	Exte	ended wearing is possible with										
		a)	PMMA lens	b)	Hydrophilic lens								
		c)	Steep fit lens	d)	none of these.								
	ii)	Ban	dage lens is used										
		a)	to cover the eye	b)	to protect the eye from tr	auma							
		c)	for therapeutic purpose	d)	none of these.								
	iii)	Aspł	oheric back surface bifocal contact lens works best in										
		a)	туоре	b)	hyperope								
		c)	astigmatic	d)	keratoconus.								
	iv)	More	e the sagittal depth of the C/L										
		a)	Flatter is the lens fit	b)	Steeper is the lens fit								
		c)	No effect on lens fit	d)	None of these.								
	V)	Which of the following is not an indication for therapeutic lens wear ?											
		a)	Bullous keratopathy	b)	Filamentary keratopathy								
		c)	Meibomian gland dysfunction	d)	Recurrent erosion.								
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- vi) Piggy back-I refers to
  - a) fitting of an RGP lens over a soft lens
  - b) fitting of an RGP lens over a RGP lens
  - c) fitting of an soft lens over a RGP lens
  - d) none of these.
- vii) Temperature used for heat disinfection of CL is
  - a)  $37^{\circ} 60^{\circ}$  b)  $80^{\circ} 100^{\circ}$

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- c)  $70^{\circ} 80^{\circ}$  d)  $60^{\circ} 90^{\circ}$ .
- viii) Scissors reflex is an indication of
  - a) regular astigmatism of cornea
  - b) high myopia
  - c) pseudo-myopia
  - d) irregular astigmatism of cornea.

ix) A toric lens of  $P_x = 3.00/-1.50 \times 10^\circ$  rotates 15° to the left side on the eye, the final prescription will be

- a)  $-3.00/-1.50 \times 25^{\circ}$  b)  $-3.00/-1.50 \times 85^{\circ}$
- c)  $-3.00/ 1.50 \times 177^{\circ}$  d) none of these.
- x) 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 <u>MOST</u> 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.

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- xi) Lens orientation and stabilization with prism ballast toric soft lenses is achieved primarily through
  - a) alignment of the lens edge with the lower lid margin
  - b) base in and base out prisms
  - c) prism-induced thickness differences
  - d) gravitational forces.
- xii) The reference marks on soft toric lenses are used to assess which of the following ?
  - a) Cylinder axisb) Lens orientation in situc) Stablization methodd) Cylinder power.

# GROUP – B ( Short Answer Type Questions )

- Write short notes on any *three* of the following.  $3 \times 5 = 15$
- 2. X-chrome ( contact ) Lenses.
- 3. Toric soft C/L Stabilization techniques.
- 4. Signs of an inadequate soft contact lens fitting.
- 5. Reverse Geometry Lens.
- 6. "Preservatives" used in contact leans solutions.
- 7. Multifocal contact lenses.

## **GROUP – C**

## (Long Answer Type Questions)

Answer any *three* questions.  $3 \times 15 = 45$ 

- 8. Explain the role of contact lens in the management of Keratoconus patients, Discuss the different contact lens options available to manage such cases. 15
- 9. What are the indications for use of contact lens in children ? What are the different types of lenses available ? Discuss the advantages and disadvantages of each. 5 + 10
- 10. a) Explain the term "BOZR" in respect to a "back surface toric" soft or RGP contact lens.
  - b) Discuss the fitting procedure of Piggy back 1 contact lens ( step by step ).

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6 + 9



- 11. a) State the differences of fitting of contact lens in adult and in child.
  - b) Discuss prosthetic contact lenses.
- 12. Name the constituents used in, any very commonly used, ( commercially available ), contact lens solution. Explain the role of each of the components.

What should be the properties of an "ideal contact lens care solution, if possible ?

10 + 5

8 + 7

END

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