

III. B.Optom - Sem-V : SUMMER- 2019
SUBJECT: CONTACT LENSES (I)

Note: Section-A is given on a separate sheet and has to be answered on same sheet .This sheet should be completed within first 30 minutes of starting of examinations. This sheet with Section A only will be collected by the supervisor.

Seat No.- _____

Date: 25-03-2019

Day: Monday

Max. Marks: 20

S-2019-4011

SECTION-A

Q.1 Fill in the blanks: (10)

- a) Contact lenses are choice of correction in case of _____ anisometropia.
- b) The source of subtilisin enzyme is _____.
- c) Overnight corneal oedema is _____ % in healthy eye.
- d) Dymed disinfecting system is also known as _____.
- e) Hybrid lens contains _____ at center and _____ at periphery.
- f) Burton lamp is used to check _____.
- g) Use of contact lenses in aphakia reduces the magnification to _____ %.
- h) Other names of ortho keratology are _____ and _____.
- i) _____ RGP material causes heavy deposit on the lens surface.
- j) Long term RGP wearers complain of appearance of small eye due to _____.

Q.2 Encircle the correct answer : (10)

- a) Which of the following tear film assessment technique is considered as non-invasive-
 - i) Phenol red thread test
 - ii) Schirmer's test
 - iii) NIBUT
 - iv) Jones test I and II
- b) Who said to be the first person to describe the concept of a contact lens?
 - i) Rene Descartes
 - ii) Otto Wichterle
 - iii) Leonardo da Vinci
 - iv) Carl Zeiss
- c) A patient has a spectacle refraction of -9.00 DS at vertex distance of 14 mm .If we wanted to fit this patient with contact lenses ,what back vertex power(BVP) would be required?
 - i) -8.00 DS
 - ii) -8.75 DS
 - iii) -9.50 DS
 - iv) -10.00 DS

P.T.O.

- d) Which of the following filter is used to enhance the view of fluorescein patterns with cobalt blue light?
- i) Red free filter
 - ii) Wratten #12 filter
 - iii) Diffuses
 - iv) Neutral Density Filter
- e) K readings of 47.25 @ 180 / 45.50 @ 90 indicate which type of corneal astigmatism?
- i) With the rule
 - ii) against the rule
 - iii) Oblique
 - iv) irregular
- f) Consider the following case, K 7.94 mm @ 175 (42.50D) and 7.34 mm @ 85 (46.00D), subjective refraction: -3.75/-2.75X75, the amount of corneal astigmatism of this eye is?
- i) -2.75DCX85
 - ii) -3.50 DCX85
 - iii) -2.75DCX175
 - iv) -3.50DCX175
- g) Which of the following is a contraindication to contact lens wear?
- i) sever blepharitis
 - ii) Keratoconus
 - iii) Bullous Keratopathy
 - iv) Irregular Astigmatism
- h) In case of complete stripping of the corneal epithelium how long does it take for complete wound healing and cell regeneration?
- i) 6 hours
 - ii) 24 hours
 - iii) 1 week
 - iv) 6 week
- i) Theoretically contact lenses may be contraindicated in case of :
- i) Irregular astigmatism
 - ii) Axial anisometropia
 - iii) Oblique astigmatism
 - iv) Refractive anisometropia
- j) Who is credited with having conceived the idea of a 'throw away lens'?
- i) Orlando A Battista
 - ii) Norman A Stalei
 - iii) John de Carle
 - iv) Thomas Young

Marks Obtained : _____

Signature of Invigilator _____

Signature of Examiner _____

III -B.OPTOM. SEM – V : SUMMER - 2019

SUBJECT: CONTACT LENSES (I)

Day: Monday
Date: 25/03/2019

Time: 02.00 PM TO 05.00 PM
Max. Marks: 50

S-2019-4011

N.B.:

- 1) There are **THREE** sections as:
Section-A= Objective types questions =20 Marks
Section-B= long questions =20 Marks
Section-C=short questions =30 Marks
- 2) **Section-A** is given on **SEPARATE** sheet has to be answered on the same sheet.
- 3) section-B has 3 Long questions and any **TWO** questions have to be answered On the **SEPARATE** answer sheet.
- 4) **Section- C** has Short questions and any **FIVE** questions have to be answered on **SEPARATE** answer sheet.
- 5) Draw neat and labeled diagram **WHEREVER** necessary.

SECTION-B

Q.3 Answer ANY TWO of the following : (20)

- a) Calculate tear lens ,over refraction and final lens power for the following cases-
 - i) K 41.50 D @ 180, 43.50 D @ 90
Refractive error -5.00DS /-2.00 DC X180
BVP of the trail lens is -5.00DS
CL fitted on 'ON' K and 'Average' K values.
 - ii) K 44.75 D @ 180, 46.25 D @ 90
Refractive error -5.00 DS
BVP of the trail lens is -5.00DS
CL fitted on 'ON' K and 'Steep' K values.
- b) What is disinfection? Explain the types of disinfection process for RGP lens
- c) What about the different methods used for manufacturing RGP contact lenses, their procedure advantages and disadvantages.

SECTION-C

Q.4 Answer ANY FIVE of the fallowing : (30)

- a) Write a short note on 3& 9 O'Clock staining.
- b) In follow up visit if patient complaints of variable vision .what are the probable causes and how to manage them?
- c) Draw a labeled diagram of tri curve of lens design. How will you select BOZR?
- d) Write a note on ordering of RGP contact lens with example.
- e) Explain the characteristics in steep fit contact lens. What will happen if steep fit prescribed to the patient?
- f) Explain Front toric design, Back toric design and Bitoric Design .Which design is suitable for which type of patents.

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