

SECOND YEAR M. OPTOM. : SUMMER - 2019
SUBJECT : OPTICS & CONTACT LENSES

Day : Friday
Date : 19/04/2019

S-2019-4021

Time : 09.30 A.M. TO 11.30 A.M.
Max. Marks : 50

N.B.:

- 1) **Section – A** is of objective questions for total **20** marks.
- 2) **Section – B** is of short questions for total **30** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer books.

SECTION – A

Q.1 Fill in the blanks: **[20]**

- 1) On blinking, the percentage of tears exchanged with hydrogel lens is _____.
- 2) The most stable toric contact lens will be for an eye which requires minus cylindrical axis _____ degrees.
- 3) _____ tints are used to change colour of the eye.
- 4) In hydrogen peroxide disinfection system, the percentage of hydrogen peroxide used for disinfection is _____.
- 5) Oxygen transmission through a contact lens is inversely proportional to _____.
- 6) Modern day Ortho K lenses are based on _____ designs.
- 7) The desired post blink movement of a soft contact lens is _____.
- 8) The scribe marks in toric soft contact lenses indicate _____.
- 9) _____ is the commonest symptom of CLPC.
- 10) 3 & 9 O' clock staining is caused due to _____.
- 11) More than 5% of corneal edema will show _____ in cornea.
- 12) Increasing the centre thickness of a contact lens shifts the centre of gravity _____.
- 13) Visual acuity can worsen after blinking in case of _____ contact lens fit.
- 14) The concentration of oxygen at the surface of cornea under a contact lens is termed _____.
- 15) Fusarium Solani is a _____ type of micro-organisms.
- 16) _____ is the most widely accepted fitting philosophy in Keratoconus.

P.T.O.

- 17) _____ lenses show more chances of lens adherence when used on extended wear basis.
- 18) Corneal infiltrates are composed of _____.
- 19) _____ % oxygen is required to prevent suppression of corneal epithelial mitosis.
- 20) _____ is a major benefit of adding fluorine to RGP materials.

SECTION – B

Q.2 Attempt ANY SIX of the following:

[30]

- a) Explain the etiology, symptoms and signs of microbial keratitis in contact lens wear.
- b) Explain prism ballast, periballast and double slab off as toric lens stabilization techniques.
- c) Discuss the development of silicone hydrogels.
- d) Write a note on CLARE.
- e) What are disposable and FRP lenses? How will you convince a conventional lens wearer to wear them?
- f) Write a note on Bandage contact lenses.
- g) Discuss 'disinfection efficacy' of multipurpose lens case solution.

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