

SECOND YEAR M. OPTOM. : SUMMER - 2018

SUBJECT : OPTICS & CONTACT LENSES

Day : Tuesday
Date : 17-04-2018
S-2018-3579
Time : 9:30 AM TO 11:30 AM
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 the separate answer books.

SECTION – A

Q.1 Fill in the blanks: [10]

- 1) Increase in BOZR of contact lens shifts centre of gravity _____.
- 2) In ortho.K treatment _____ must be used each day to maintain the corneal flattening, otherwise the myopia will revert to the pre-treatment level.
- 3) Expand PROSE _____.
- 4) Mucin balls are generally observed in _____ quadrant of cornea.
- 5) When secondary curves are steeper than BOZR, the design is said to be _____.
- 6) _____ % is average amount of overnight corneal edema in normal eyes without CL.
- 7) Corneal neovascularization can be best observed by _____ SL illumination technique.
- 8) FDA classification Group III is _____.
- 9) _____ is the most preferred CL manufacturing process employed for disposable CL.
- 10) _____ is added as UV blocker in acuvue lenses.

Q.2 State True or False: [10]

- 1) Holden and Mertz criteria states that the minimum DK/t required for extended wear is 87.
- 2) Accelerated Ortho.K design uses reverse geometry contact lenses.
- 3) The best way for patient to remove RGP lens lipid deposits is by using enzymatic cleaners.
- 4) 3 and 9 O'clock staining seen in DW RGP wearer is due to poor lens wettability or incomplete blinking.
- 5) Water content of CL can be measured by captive bubble test.
- 6) Anisometric amblyopia can be managed better with spectacles in developing age.
- 7) Lens material popular for paediatric aphakia is FSA.
- 8) Steep RGP CLs form convex tear lens under them.
- 9) Three point touch fitting philosophy in Keratoconous is called divided support.
- 10) Long term wearers of SCLs complain of small eye appearance due to mechanical ptosis.

SECTION – B

Q.3 Answer **ANY SIX** of the following: **[30]**

- a) Write a short note on use of topography in contact lens fitting.
- b) Comment on role of anaesthesia in paediatric contact lens fitting.
- c) Write indications, material and design consideration of therapeutic CLs in general.
- d) Compare hydrogel and silicon hydrogels in terms of their properties and features.
- e) Explain following terms with diagrams (if necessary):
 - i) Edge clearance and edge lift.
 - ii) Movement and lag in soft CLs.
- f) Describe various stabilization techniques used in soft toric CLs.
- g) Define contact lens deposits. Enlist tear related deposits and explain about any two tear related deposits.

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