



Name :
Roll No. :
Invigilator's Signature :

CS/B.OPTM/SEM-4/BO-401/2013

2013

VISUAL OPTICS (OPTICS – IV)

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 the following : $10 \times 1 = 10$
- i) Pelli Robson chart is used for
 - a) V. A. testing
 - b) Glare testing
 - c) Contrast sensitivity testing
 - d) Colour vision testing.
 - ii) 1 mm shortening of axial length of eyeball can produce
 - a) 1D of hyperopia b) 3D of hyperopia
 - c) 1D of myopia d) 3D of myopia.

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- iii) If a myopic patient shifts from spectacle to contact lens
- a) accommodative & vergence demand increase
 - b) accommodative & vergence demand decrease
 - c) accommodative demand increases but vergence demand decreases
 - d) no change occurs in accommodative & vergence demand.
- iv) Spherical equivalent of $+2.00/-2.50$ D cyl 90° is
- a) $+3.25$ Dsph
 - b) -0.50 Dsph
 - c) $+0.75$ Dsph
 - d) $+0.50$ Dsph.
- v) Coma is a type of
- a) off-axis spherical aberration
 - b) chromatic aberration
 - c) peripheral magnification
 - d) none of these.
- vi) A patient having refractive error of -1 Dsph/ -3.00 Dcyl 180 is an example of
- a) with the rule astigmatism
 - b) against the rule astigmatism
 - c) mixed astigmatism
 - d) none of these.

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GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

6. Define F & K relationship. An axial ametropic eye with – 9.00 D spectacle at ant. Focal plane. When the person is corrected with contact lens, find out the new RSM. $5 + 10$
7. Briefly describe different modalities available for aphakia correction with their advantages & disadvantages.
8. Classify astigmatism. Illustrate the characteristics of retinoscopic reflexes found in astigmatic eye. $7 + 8$
9. Define & classify glare. Outline the tests for contrast sensitivity function of eye. $5 + 10$

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