### Second Year B.Sc Optometry Degree Regular/Supplementary Examinations February 2022

# Visual Optics

# (2016 Scheme)

### Time: 2 hours

- Answer all questions to the point neatly and legibly Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

#### Essay

1. Write in detail about Gullstrand-2 simplified schematic eye and reduced eye. Why it is important to know about schematic and reduced eye

#### Short Notes:

- 2. Presbyopia
- 3. Sign convention
- 4. Importance of Keratometry readings in clinical practice

#### Answer briefly

- 5. Write type of astigmatism in each of the following sphero-cylindrical combinations-
  - +3.00DS/-2.50DCX45 +1.00DS/-2.25 DCX 110
- 6. Explain MAR and log MAR value of 6/6
- 7. Explain the factors affecting pupillary size
- 8. Differentiate between facultative and absolute hypermetropia
- 9. Explain non-surgical methods of myopia control

#### One Word Answer

- 10. Donder's reduced eye is an ideal spherical surface having radius of curvature of \_\_\_\_\_mm.
- 11. \_\_\_\_\_ is a condition of refraction wherein a point focus of light cannot be formed upon the retina.
- 12. The linear distance traversed by the point of conjugacy in moving from far point to near point of accommodation is known as \_\_\_\_\_\_.
- 13. In the higher degrees of myopia, whole of the posterior pole of the eye herniated backwards resulting in a condition called \_\_\_\_\_\_

14.+1.75DSph/-1.25Dcyl x 170 is an example for ......type of astigmatism

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## (3x5=15)

(10)

#### (5x2=10)

(5x1=5)

#### Max. Marks: 40