

I-B. Optom. Sem-II: Winter-2018

SUBJECT: OPHTHALMIC OPTICS

Day: Saturday,
Date: 24-11-2018

Time: -
Max Marks. 20

W-2018-3722

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

Seat No. : _____

SECTION - A

Q.1 Fill in the blanks: (10)

- i) _____ is the condition where the natural lens is absent from the anatomical position.
- ii) Relative spectacle magnification is defined as _____.
- iii) LASER stands for _____.
- iv) When checking Visual Acuity for distance, the testing chart should be kept at _____.
- v) 1 mm increase in Axial length of eyeball will lead to _____.
- vi) According to Gullstrand's Schematic eye, the refractive index of cornea and lens is _____.
- vii) Hypermetropia is corrected by giving _____ spectacle lenses.
- viii) _____ is the condition of eye where the power of vertical meridian is greater than power in horizontal meridian.
- ix) Amplitude of accommodation is calculated by _____.
- x) Magnification of telescope is _____.

Q.2 State True or False: (10)

- i) Jack in the box phenomena is seen in patients with high hypermetropia.
- ii) Physiological condition of eye, which causes decrease in AOA resulting in Presbyopia.
- iii) Nd- YAG laser is not used in surgery.
- iv) The angle between visual axis and optical axis is called as angle kappa.
- v) Vertex distance is the distance measured from back surface of spectacle plane and corneal apex.
- vi) 1 mm increase in corneal curvature leads to hypermetropic refractive error.
- vii) Donder's schematic eye considers total power of eyeball as + 60.00D.
- viii) Astronomical telescope has one positive objective and one negative eyepiece lens.
- ix) $-1.00DS / -2.00C \times 180^\circ$, is a type of compound myopic astigmatism.
- x) Vision is absolutely same as Visual acuity there is no difference.

Marks Obtained: _____

Signature of the Invigilator: _____

Signature of the Examiner: _____

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I -B.OPTOM. SEM – II : WINTER - 2018

SUBJECT: OPHTHALMIC OPTICS

Day: Saturday
Date: 24/11/2018

W-2018-3722

Time: 10.00 AM TO 01.00 PM
Max Marks. 50

N. B.:

- 1) There are **THREE** sections as:
Section – **A** = objective type questions **20 Marks**
Section – **B** = long questions **20 Marks**
Section – **C** = short questions **30 Marks**
- 2) Section - **A** is given on a **SEPARATE** sheet and has to be answered on the same sheet. This sheet should be completed within the first **30** minutes of starting of the examination. This sheet with Section – **A** only will be collected by the supervisor.
- 3) Section – **B** has long questions and **ANY TWO** questions have to be answered on the separate sheet.
- 4) Section- **C** has **6** short sections and **ANY FIVE** questions have to be answered on the separate answer sheet.
- 5) Draw neat labeled diagrams **WHEREVER** necessary.

SECTION - B

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

- i) Define Astigmatism. Classify the types of Astigmatism giving examples.
- ii) Explain with diagram the basics and construction of LASER.
- iii) Define Presbyopia. Explain its etiology, symptoms, signs and correcting options.

SECTION - C

Q.4 Attempt **ANY FIVE** of the following : **(30)**

- i) Difficulties faced by Aphakic spectacles.
- ii) Compare Gullstrand's schematic eye to that of Donder's reduced eye.
- iii) Write about Pathological Myopia.
- iv) Define Hypermetropia. Explain its classification with its nomenclature.
- v) Write in detail about 'Holography'.
- vi) What is the difference between relative spectacle magnification and spectacle magnification?

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