

II-B.OPTOM-SEM-III: WINTER-2017

SUBJECT: VISUAL OPTICS

Note: Section A is given on a **SEPARTE** sheet and has to be answered on the same sheet. This sheet should be completed within first **30** minutes of the starting of examination. This sheet with Section A only will be collected by the Supervisor.

Seat No: _____

W-2017-3473

Day: Monday

Date: 27-11-2017

SECTION-A

Q.1 Fill in the blanks: **(10)**

- 1) _____ instrument/ device is based on spherical equivalent is maintained.
- 2) _____ type of anisometropia is better corrected with spectacles.
- 3) When patient reports 1 o'clock line clear on an astigmatic fan chart, the correcting-ve cyl is kept at _____ axis.
- 4) _____ in pupil size increases depth of focus.
- 5) If R.I of lens nucleus increases, it leads to _____ (increase/decrease) in myopia.
- 6) Normal AC/A ratio range is _____.
- 7) _____ point of accommodation of a myopic eye lies in front of eye at finite distance.
- 8) Catoptric power of normal human cornea is _____.
- 9) Radial keratotomy is operative procedure for _____ refractive error.
- 10) In aphakic eye, the image size is _____ % magnified with spectacle correction

Q.2 State True or False: **(10)**

- 1) Dioptric difference between near point & far point of accommodation is called range of accommodation.
- 2) Convex spherical mirrors form virtual & magnified image.
- 3) When correcting WTR astigmatism, -ve cylinder axis should be kept at 90°

P.T.O.

- 4) 1st Purkinje image is used for evaluation of cataract.
- 5) For measurement of presbyopic addition JCC can not be used.
- 6) Stenopaic slit refines the axis of cylinder but can't be used to know power of correcting cylinder.
- 7) Iridodonesis is not sign of presbyopia.
- 8) Nuclear sclerosis leads improvement in visual acuity for near in elderly.
- 9) Dynamic retinoscopy gives objective measurement of refraction of eye for near.
- 10) Pencil Push up test can be used to measure near point of accommodation.

Signature of the Invigilator

Signature of the Examiner

Total Marks Obtained

II – B. OPTOM. SEM– III : WINTER - 2017

SUBJECT: VISUAL OPTICS

Day: Monday
Date: 27/11/2017

Time: 10.00 AM TO 01.00 PM
Max. Marks: 70

W-2017-3473

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.
- 3) **Section-B** has 3 Long questions and **ANY TWO** questions have to be answered on the **SEPARATE** answer sheet.
- 4) **Section-C** has short questions and **ANY FIVE** questions have to be answered on the **SEPARATE** answer sheet.
- 5) Draw neat labeled diagrams **WHEREVER** necessary.

SECTION-B

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

- 1) Define astigmatism. Enlist and explain various classifications of astigmatism. Write in detail about symptoms, signs and correction of astigmatism.
- 2) Explain various subjective refraction techniques in detail.
- 3) Describe accommodation, its types, its methods of measurement and their significance.

SECTION-C

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

- 1) Write a short note on: Pseudomyopia
- 2) Explain following terms in brief:
i) Straddling ii) Anisometropia
- 3) Tabulate differences between Snellen's chart and Bailey Lovie Log MAR chart.
- 4) Explain functional classification of Hyperopia.
- 5) Write a note on cardinal points.
- 6) Explain etiology of ametropia in brief.

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