

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

SUBJECT: OPTOMETRIC OPTICS AND LVA

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-2017-3477

Day: Tuesday

Date: 28-11-2017

SECTION-A

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

- 1) The normal AC/A ratio is _____.
- 2) The unit of convergence is _____.
- 3) The contractile power of ciliary muscles required to raise the refractive power of the lens by 1 DS is called _____.
- 4) The Large nasal eye movement will expand the _____.
- 5) Elder people have _____ astigmatism.
- 6) Principle of JCC is _____.
- 7) Vernier acuity means _____.
- 8) Minimum VA requirement to perform duo chrome test is _____.
- 9) 2D of myopic error (Uncorrected) drops visual acuity to _____ lines on Snellen's chart.
- 10) _____ amount is deducted in addition to working distance while Atropinized objective refraction.

Q.2 Encircle the correct option. **(05)**

- 1) Distance devices that may help Low vision patients include all of the following Except.
 - a) Field awareness system
 - b) Spectacle and contact lens
 - c) Absorptive lenses and coatings
 - d) Microscope
 - e) Pinhole lens
- 2) What is the tube length of a telescope when the Ocular lens is -50.00 D and objective lens is $+25.00$ D.
 - a) 1.33 cm
 - b) 2.00 cm
 - c) 3.33 cm
 - d) 4.00 cm
 - e) 4.66 cm

P.T.O.

- 3) The following may be used as visual aid for patients with significant visual field loss due to advance glaucoma.
- a) Convex lens
 - b) Inverted Galilean telescope
 - c) Astronomical telescope
 - d) Prism with base towards the area of scotoma
 - e) Mirror mounted on glasses
- 4) The following may not be used commonly as Low visual aids:
- a) Text Scanner
 - b) Closed Circuit television
 - c) High-add bifocals
 - d) Convex cylinder lens
 - e) Telescope
- 5) Following is type of non optical low vision device
- a) Stand magnifier
 - b) Galilean Telescope
 - c) Typoscope
 - d) Bar magnifier
 - e) Spectacle magnifier

Q.3 Match the following:

(05)

- | | |
|---------------------|---------------|
| 1) Superior Rectors | a) Extortion |
| 2) Superior Oblique | b) Adduction |
| 3) Medical Rectus | c) Depression |
| 4) Inferior Rectus | d) Intortion |
| 5) Inferior Oblique | e) Abduction |
| | f) Elevation |

Signature of the Invigilator

Signature of the Examiner

Total Marks Obtained

II -B.OPTOM. SEM – IV : WINTER - 2017
SUBJECT: OPTOMETRIC OPTICS AND LVA

Day: Tuesday
Date: 28/11/2017

Time: 02.00 PM TO 05.00 PM
Max. Marks: 70

W-2017-3477

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.
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SECTION-B

Q.4 Answer **ANY TWO** of the following: **(20)**

- 1) What are general points to remember while prescribing Low vision devices to children? Discuss in detail.
- 2) Categorize and enlist all types of pediatric visual acuity charts based on age group and write in detail on any one of them.
- 3) Guidelines for prescribing optical correction in geriatric age group.

SECTION-C

Q.5 Answer **ANY FIVE** of the following: **(30)**

- 1) Write short note on rehabilitation of Low vision patient with central field defect.
- 2) Define Binocular vision and explain grades of binocular vision.
- 3) Write note on use of filters in low vision clinic.
- 4) Write note on JCC, power and axis correction technique.
- 5) Discuss MEM retinoscopy. Explain Mohindra retinoscopy.
- 6) Calculate ocular accommodation demand for an object located at 25 cm from the spectacle plane, where the spectacle power is + 6.00 D worn at 15 mm away from the anterior surface of cornea. Compare the ocular accommodation with spectacle accommodation.

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