



Name :

Roll No. :

Invigilator's Signature :

CS/B.OPTM/SEM-5/BO-505/2011-12

2011

**LOW VISION AIDS &
VISUAL REHABILITATION**

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 any *ten* of the following : 10 × 1 = 10

- i) The basic principle of plus lens magnifier is
 - a) Relative distance magnification
 - b) relative image magnification
 - c) angular magnification
 - d) none of these.
- ii) Bar magnifier increases the object size in
 - a) vertical meridian
 - b) horizontal meridian
 - c) both (a) and (b)
 - d) none of these.

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- iii) Angular magnification is the principle of
- a) Stand magnifier
 - b) CCTV
 - c) Bar magnifier
 - d) Galilean telescope.
- iv) Testing distance for light house near acuity card is
- a) 1 m
 - b) 40 cm
 - c) 33 cm
 - d) none of these.
- v) Patient suffering from retinitis pigmentosa initially field of vision loss in
- a) central
 - b) peripheral
 - c) arcuate
 - d) temporal.
- vi) Dioptric value of a plus lens magnifier of 6X magnifier is
- a) 12 D
 - b) 24 D
 - c) 18 D
 - d) 20 D.
- vii) A patient of Parkinsonism must not be prescribed
- a) Reading stand
 - b) Hand held magnifier
 - c) Stand magnifier
 - d) C.C.T.V.
- viii) Colour vision test with Ishihara chart should classically be done in
- a) incandescent light
 - b) fluorescent light
 - c) good daylight
 - d) tungsten bulb light.



- ix) Pin hole contact lens cannot be used as LVA in
- a) albinism
 - b) aniridia
 - c) central corneal opacity
 - d) peripheral cataract.
- x) X-chrome contact lens is
- a) a telemicroscope
 - b) a cosmetic contact lens
 - c) used in correction of defective colour vision
 - d) used in correction of Keratoconus.
- xi) As magnification increases, both the working distance and the field of vision will be
- a) decreased
 - b) increased
 - c) equal
 - d) proportional.

GROUP – B

(Short Answer Type Questions)

Write short notes on any *three* of the following.

3 × 5 = 15

2. Braille system.
3. Amsler Grid Test.
4. Visual rehabilitation of a patient with Albinism.
5. Entrance and Exit pupil.



GROUP – C

(Long Answer Type Questions)

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

6. A retired teacher aged 70 years is unable to teach students due to ARMD in both eyes. However he can read with electronic devices.

Name the device that will be suitable for him. Describe its optics and its use.

7. Define rehabilitation. How will you do “Functional orientation and mobility evaluation” in a case of Low Vision patient? Write in brief about the mobility aids and techniques to be employed in such a case.
8. Write in detail how a Low Vision Aid specialist can help a patient of Low Vision with reduced visual field (with special discussion about role of semi-reflective mirror and Fresnel prism lens).
9. Describe the optics of Galilean telescope with diagram. Differentiate between Galilean and astronomical telescopes.

7 + 8

