



Name :

Roll No. :

Invigilator's Signature :

CS/B.OPTM/SEM-2/BO-202/2013

2013

PHYSIOLOGY (OCULAR)

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 corneal endothelium lines
 - a) Posterior aspect of Bowman's membrane
 - b) Anterior aspect of Bowman's membrane
 - c) Anterior aspect of descemet's membrane
 - d) Posterior aspect of descemet's membrane.

- ii) Secondary action of superior oblique is
 - a) intorsion
 - b) extorsion
 - c) depression
 - d) elevation.

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- iii) Accomodation leads to
- a) Tension of zonules
 - b) Relaxation of zonules
 - c) Disappearance of zonules
 - d) Appearance of zonules.
- iv) In which of the following reflexes the pupil dilates
- a) light reflex
 - b) near reflex
 - c) psychosensory reflex
 - d) all of these.
- v) The size of normal pupil is
- a) 2-4 mm
 - b) 5-8 mm
 - c) 1-2 mm
 - d) none of these.
- vi) The intraocular pressure is measured by
- a) Perimeter
 - b) Pachometer
 - c) Tonometer
 - d) Keratometer.



vii) The amount of water present in cornea is

- a) 60%
- b) 78%
- c) 90%
- d) 20%.

viii) The muscle responsible for blinking of eyes is

- a) medial rectus
- b) ciliary muscle
- c) sphincter pupillae
- d) orbicularis oculi.

ix) The line joining all the points that stimulate corresponding points of retina is

- a) Phorofter
- b) Horopter
- c) Isofter
- d) none of these.

x) Colour vision is due to

- a) rod cells
- b) muller cells
- c) cone cells
- d) none of these.

xi) The far point of emmetropic eye is

- a) at infinity
- b) beyond infinity
- c) between eye & infinity
- d) none of these.



GROUP - B

(Short Answer Type Questions)

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

3 × 5 = 15

2. Vitreous humour
3. Stimulus for accommodation
4. Tear film abnormalities
5. E.O.G.

GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following. 3 × 15 = 45

6. a) Discuss the factors affecting IOP. control.
b) How is aqueous produced ? Discuss its "flow" path and how is it eliminated (drained out) from the eye. 5 + 10
7. a) Discuss briefly the various theories of colour vision defects.
b) Discuss the common types of colour defects. $7\frac{1}{2} + 7\frac{1}{2}$
8. Discuss the following : 5 + 5 + 5
 - a) Functions of the pupil
 - b) The pathway of light reflex
 - c) Near reflex pathway.
9. Discuss the following :
 - a) What are "Yoke muscles" ? Give 2 examples and explain your answer
 - b) What is "accommodation" ? Discuss the role of "lens capsule" in accommodation. $7\frac{1}{2} + 7\frac{1}{2}$

