



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Optomety-2021/B.Optomety-2022

Course Name – Binocular Vision-I

Course Code - BOPTOC502

(Semester V)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

(i) Choose the secondary action of inferior oblique muscle.

- | | |
|--------------|--------------|
| a) Elevation | b) Intorsion |
| c) Extortion | d) Adduction |

(ii) Choose the antagonists muscle of medial rectus.

- | | |
|--------------------|---------------------|
| a) Superior rectus | b) Inferior rectus |
| c) Lateral rectus | d) Inferior oblique |

(iii) Identify which nerve supplied to the superior rectus muscles.

- | | |
|--------------------|---------------------|
| a) Trochlear nerve | b) Oculomotor nerve |
| c) Optic nerve | d) Abducens nerve |

(iv) Choose the secondary action of inferior rectus muscle.

- | | |
|--------------|--------------|
| a) Elevation | b) Intorsion |
| c) Extortion | d) Adduction |

(v) Identify which nerve supplied to the inferior oblique muscles.

- | | |
|--------------------|---------------------|
| a) Trochlear nerve | b) Oculomotor nerve |
| c) Optic nerve | d) Abducens nerve |

(vi) Identify which nerve supplied to the superior oblique muscles.

- | | |
|--------------------|---------------------|
| a) Trochlear nerve | b) Oculomotor nerve |
| c) Optic nerve | d) Abducens nerve |

(vii) State the condition which gives rise to retinal disparity.

- | | |
|----------------|--------------------|
| a) ARC | b) Retinal rivalry |
| c) Suppression | d) Disparity |

(viii) Choose correctly which is the carrier of principal visual direction.

- a) Fovea
c) Lens
- b) Optic nerve
d) Optic disc
- (ix) Select the condition which is treated with patching.
- a) Amblyopia
c) Confusion
- b) Diplopia
d) None of these
- (x) Select which kind of stereopsis provides monocular cues.
- a) Local stereopsis
c) Fine stereopsis
- b) Global stereopsis
d) Coarse stereopsis
- (xi) Show the anomaly which is an age related disorder of accommodation.
- a) Accommodative excess
c) Accommodative insufficiency
- b) Accommodative infacility
d) Presbyopia
- (xii) Choose the correct term in which dissimilar contours when presented to corresponding retinal areas, fusion becomes impossible and it gives rise to.
- a) Simultaneous Macular perception
c) Retinal rivalry
- b) Fusion
d) ARC
- (xiii) Select the correct response when we detect presence of fusion with WFDT with red lens over RE and green lens over LE.
- a) 2 Red
c) all four lights
- b) 3 Green
d) Five lights
- (xiv) Select the correct response when we detect presence of LE Suppression with WFDT with red lens over RE and green lens over LE.
- a) 2 Red
c) all four lights
- b) 3 Green
d) Five lights
- (xv) Name 1st grade of binocular vision.
- a) Stereopsis
c) Fusion
- b) Simultaneous Macular perception
d) Suppression

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain the management strategy of accommodative insufficiency. (3)
3. Explain the management strategy of convergence insufficiency. (3)
4. Explain various components of accommodation. (3)
5. Explain the procedure of Frisby test for stereopsis assessment. (3)
6. One 11 years old patient come to your clinic and having complaints of headache with eyestrain after 10 minutes of reading. His MAF OD and OS is 10 cpm, BAF is 1 cpm, difficulty with plus lens. Explain what you will suspect for that patient and what other possible finding you will get? (3)

OR

One 20 years old patient come to your clinic and having complaints of headache with eyestrain after 10 minutes of reading. His MAF OD and OS is 15 cpm, BAF is 1 cpm, difficulty with both plus and minus lens. Explain what you will suspect for that patient and what other possible finding you will get? (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Discuss heteronymous and homonymous pathological diplopia. (5)

8. Explain origin, course and insertion of superior rectus. (5)
9. Explain the clinical tests that is necessary to differentiate between Accommodative Insufficiency and Ill-sustained Accommodation. (5)
10. Explain the clinical tests that is necessary to differentiate between Accommodative Infacility and Fusional vergence dysfunction. (5)
11. One 25 years old patient come to your clinic and having complaints of headache with eyestrain while reading. His NRA is +0.50 Dshp and PRA is -3.00D. MAF is 11 cpm in both eyes. What you will suspect for this patient. Discuss other clinical features for this patient. (5)
12. Explain the clinical tests that is necessary to differentiate between Convergence Insufficiency and Convergence excess. (5)

OR

Explain the clinical tests that is necessary to differentiate between Accommodative Insufficiency and Accommodative excess. (5)

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