



**BRAINWARE UNIVERSITY**

**Term End Examination 2023**  
**Programme – B.Optomtry-2019/B.Optomtry-2020**  
**Course Name – Visual Optics II**  
**Course Code - BOPTO402**  
**( Semester IV )**

**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) What is the position of far point in myopic eye?
- a) Virtual and behind the eye                      b) Real and in front of eye  
c) Infinity    d) At 40 cm
- (ii) What is the accommodative lag generally found in individuals with accommodative infacility?
- a) Less than +1.00 D                                  b) Greater than +1.00 D  
c) Less than +0.50 D                                  d) Greater than +0.50 D
- (iii) Choose the correct name from the following for the step by which final cylinder axis is confirmed using retinoscope
- a) Skew    b) Straddling  
c) Break    d) All of these
- (iv) Name the cycloplegic drug administered in the form of ointment
- a) Homatropine    b) Scopolamine  
c) Atropine sulphate    d) Tropicamide
- (v) Identify the retinoscopic technique performed at near with active accommodation
- a) Dynamic    b) Static  
c) Near    d) None of these
- (vi) Autorefractometer is based on the following principle
- a) Scheiner's Principle    b) Optometer Principle  
c) Both A and B    d) None of these
- (vii) To check the axis refinement the \_\_\_\_\_ of the JCC is hold parallel to the trial lens
- a) Handle    b) Lens  
c) Both A and B    d) None of these
- (viii) If accommodative response exceeds demand it is termed as
- a) Lead of accommodation                                  b) Lag of accommodation  
c) Lead of ocular response                                  d) Lag of ocular response

- (ix) The accommodation in case of Aphakia is \_\_\_\_\_
- |                   |                      |
|-------------------|----------------------|
| a) Partially lost | b) Present           |
| c) Paralyzed      | d) Completely absent |
- (x) Staphyloma is clinically seen in \_\_\_\_\_ Myopia
- |             |                  |
|-------------|------------------|
| a) Axial    | b) Pathological  |
| c) Acquired | d) None of these |
- (xi) What type of structure is of cornea?
- |                |                |
|----------------|----------------|
| a) Transparent | b) Translucent |
| c) Opaque      | d) Vascular    |
- (xii) The major refractive component of human eye is contributed by
- |                   |                     |
|-------------------|---------------------|
| a) Cornea         | b) Crystalline Lens |
| c) Vitreous Humor | d) Aqueous Humor    |
- (xiii) The total refractive power of cornea is
- |         |         |
|---------|---------|
| a) 48 D | b) 43 D |
| c) 17 D | d) 60 D |
- (xiv) The outermost layer of cornea is known as
- |            |               |
|------------|---------------|
| a) Capsule | b) Epithelium |
| c) Stroma  | d) Cortex     |
- (xv) What is the position of far point in hypermetropic eye?
- |                               |                             |
|-------------------------------|-----------------------------|
| a) Virtual and behind the eye | b) Real and in front of eye |
| c) Infinity                   | d) At 40 cm                 |

**Group-B**

(Short Answer Type Questions)

3 x 5=15

- What is amplitude of accommodation? (3)
- Write about the different types of Retinoscope (3)
- Write a short note on RAF ruler test (3)
- Briefly describe about Anisometropia (3)
- Explain about cycloplegic refraction. (3)

**OR**

Compare between photopic and scotopic vision.

(3)

**Group-C**

(Long Answer Type Questions)

5 x 6=30

- Explain the importance of taking history before performing refraction? (5)
- Draw the schematic representation of reduced eye and mark the cardinal points. (5)
- Write down anomalies of accommodation. Explain in detail about the Accommodative insufficiency (5)
- What is MEM? Illustrate the procedure and finding of MEM retinoscopy. (5)
- Discuss the steps, principle and findings of W4DT. (5)
- Discuss about AC/A ratio along with its measurement techniques (5)

**OR**

Discuss about various components of Accommodation

(5)

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