



## BRAINWARE UNIVERSITY

Term End Examination 2023-2024

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

Course Name – Clinical Examination of Visual System

Course Code - BOPTOC405

( 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) When performing the Krimsky test on a four year old, the corneal reflexes are centered (neutralized) with 25 pd BO. Select which one of the following is indicated?
  - a) 25 pd exotropia
  - b) 25 pd exophoria
  - c) 25 pd esotropia
  - d) 25 pd esophoria
- (ii) When taking case histories for a child this age it probably would NOT be advantageous to record
  - a) birth history
  - b) reading skills and grades in school
  - c) any perinatal trauma
  - d) time of developmental milestones (i.e. walking, talking)
- (iii) Select the most common cause of a vitreous hemorrhage in a child is
  - a) ROP
  - b) Trauma
  - c) Fever
  - d) Coat's disease
- (iv) Identify the use of Maddox wing for mainly evaluating
  - a) Heterophoria
  - b) Heterotropia
  - c) Paralytic squint
  - d) All of these
- (v) Choose the type of strabismus can be measured with Krimsky's corneal reflex test
  - a) Heterotropia
  - b) Heterophoria
  - c) Both a & b
  - d) None of these
- (vi) Which one is affecting contrast sensitivity?
  - a) Systemic diseases
  - b) Refractive errors
  - c) Palpebral apperture
  - d) None of these
- (vii) Predict the reason of ghost images seen in high power spectacles due to
  - a) Internal reflection
  - b) Spherical aberration
  - c) Prismatic effect
  - d) Jack-in-the-box phenomenon
- (viii) Select right answer based on the purkinjee image observed in the Hirschberg test.
  - a) 1st
  - b) 2nd

- c) 3rd  
d) 4th
- (ix) Optic Section in Slitlamp Biomicroscopy is specified to show  
a) Iris  
b) Retina  
c) Corneal layers  
d) Cells and Flares
- (x) Select visual acuity chart to measure the 3-5 year old child.  
a) Snellens chart  
b) LEA symbol test  
c) Allen's Picture Cards  
d) None of these
- (xi) Select which objective lens is commonly used during a routine slit lamp examination?  
a) 4x  
b) 10x  
c) 16x  
d) 25x
- (xii) Report why measuring contrast sensitivity is important?  
a) It can help detect early signs of eye diseases  
b) It can guide the choice of appropriate eyeglasses or contact lenses  
c) It can help monitor the progression of certain eye condition  
d) All of these
- (xiii) What type of illumination technique is often used with a slit lamp to examine the anterior segment of the eye, such as conjunctiva, iris?  
a) Retroillumination  
b) Darkfield illumination  
c) Transillumination  
d) Diffuse illumination
- (xiv) Which unit is typically used to measure contrast sensitivity?  
a) Degrees of visual field  
b) Snellen fractions  
c) Cycles per degree (cpd)  
d) Lumens
- (xv) What is the main reason to do the Krimsky test?  
a) To assess visual acuity  
b) To measure intraocular pressure  
c) To determine the degree of strabismus  
d) none of these

### Group-B

(Short Answer Type Questions)

3 x 5=15

2. Discuss the primary function of the double Maddox rod. (3)
3. Explain the optic section in slit lamp with their uses (3)
4. Explain the procedure of measuring the vertical deviation in clinical practices. (3)
5. Explain how does the Krimsky test help to identify the type and magnitude of ocular deviation? (3)
6. A patient came to your clinic complaining of asthenopic symptoms while doing the near work, how will you evaluate the patient? (3)

OR

A 30-year-old male patient came to your clinic for a regular check-up. Subjective refraction RE: -1.00 Dsph, LE: -1.25 Dsph. During the duochrome test patient reported green better, What will be the next step of your assessment? (3)

### Group-C

(Long Answer Type Questions)

5 x 6=30

7. How is visual acuity tested in a clinical setting, and what are the common procedures involved? (5)
8. Explain briefly two methods of measuring Contrast Sensitivity (5)
9. Write down the limitation of Snellen visual acuity chart. (5)
10. A 24-year-old patient comes to your clinic with the complaint of a pricking sensation, photophobia, watering, redness, and pain in the right eye, How will you manage the patient? (5)

11. A 42-year-old male policeman presents to the clinic reporting a sore and red eye shortly after being elbowed during a drug dealer sting operation. He was not wearing protective eyewear. He reports blurry vision. He reports tenderness over his left eye, eyebrow, and cheekbone. How will you evaluate the patient? (5)
12. A 20-year-old boy came to the clinic complaining of diplopia, how will you assess the patient? (5)

**OR**

A 35 year-old convenient store manager with history of non-insulin dependent DM x 5 years presents to the Eye Clinic for his annual visit. He admits to progressive blurring of vision since his last visit one year ago. Reading street signs while driving seems more difficult. He is unsure of which eye seems worse. He does not wear any glasses or contacts with the exception of over-the counter reading glasses. He denies any flashes or floaters, diplopia, eye discomfort or pain. How will you evaluate the patient? (5)

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