REV-01
BOP/15/20

2025/11

SET A

BACHELOR OF OPTOMETRY
THIRD SEMESTER
VISUAL OPTICS-II
BOP-301

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1hr. 30 mins. **Full Marks: 35**

Objective

Time: 15 mins. **Marks: 10**

Choose the correct answer from the following: ***1×10=10***

1. Vertex distance is most significance when:
   a. The prescription is low
   b. The patient wear contact lenses
   c. The prescription is high
   d. The patient is emmetropic

2. The vertex distance is defined as the distance between:
   a. The centre of the lens and the retina
   b. The back surface of the spectacle lens and the cornea
   c. The front of the spectacle frame and the pupil
   d. The lens and eyelid

3. A common cause of hyperopia is:
   a. Elongated eyeball
   b. Steep cornea
   c. Short axial length
   d. Thick lens

4. The condition of being born without a lens is called:
   a. Pseudophakia
   b. Congenital aphakia
   c. Acquired aphakia
   d. Phakic eye

5. Which of the following is not a type of ammetropia?
   a. Myopia
   b. Hyperopia
   c. Astigmatism
   d. Presbyopia

6. Which structure of the eye is primarily responsible for refractive error in ammetropia?
   a. Retina
   b. Optic Nerve
   c. Cornea and lens
   d. Vitreous body

7. Which type of lens is used to correct astigmatism?
   a. Spherical lens
   b. Convex lens
   c. Cylindrical lens
   d. Concave-convex lens

8. Which of the following is a type of regular astigmatism?
   a. Irregular astigmatism
   b. Compound myopic astigmatism
   c. Keratoconous
   d. Lenticular opacities

9. Against movement of the reflex during retinoscopy typically indicates:
   a. Emmetropia
   b. Hyperopia
   c. Myopia>1.5D
   d. Myopia<1.5D

10. Which of the following can affect the accuracy of retinoscopy?
    a. Media opacities
    b. Uncooperative patient
    c. Wrong working distance
    d. All of the above

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Descriptive

Time : 1 hr. 15 mins. Marks : 25

[Answer question no.1 & any two (2) from the rest]

1. Define oblique astigmatism. Write the classification of astigmatism with an example. 5

2. Mention the principle of retinoscopy. Step by step write about the procedure of retinoscopy in details. 10

3. Write short notes on: aphakia, ammetropia, emmetropia and clinical aspects of aphakia, pseudophakia. 10

4. Explain the optical principles and methods used in the correction of myopia and hypermetropia. Discuss the types of the corrective lenses used in it. 10

5. Define schematic eye and draw a diagram of it in details. Differentiate between the spectacle magnification in a reduced eye and a corrected eye. 10

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