



**Avinashilingam Institute for Home Science and Higher Education for Women  
Coimbatore - 641 043**

**Continuous Internal Assessment II April -2025**

**II Semester**

**Class : I UG  
Branch : OPTOMETRY**

**Time : 2 Hours  
Max. Marks : 60**

**22BOPC08 - Ocular Physiology**

**Course Outcomes:**

CO1: To inspect the physiology of cornea, dynamics of aqueous humor, eyelids and tear film.

CO2: To interpret physiology of lens, vitreous humor, retina, optic nerve and circulation.

CO3: To investigate the physiology of extra ocular muscles

CO4: To examine the physiology of pupils, accommodation and intra ocular pressure

CO5: To understand the neurophysiology of vision.

**Part A**

**6 x 1 = 6**

**Answer ALL questions**

**Choose the Correct Answer**

1. The primary action of Inferior oblique muscle is C02K1
  - a. Elevation
  - b. Incyclotorsion
  - c. Depression
  - d. Excyclotorsion
2. Isocoria is ..... C03K1
  - a. equal pupil size
  - b. unequal pupil size
  - c. RAPD
  - d. pupillary defect
3. The decrease in accommodation with age leads to C03K1
  - a. Accommodation
  - b. Cataract
  - c. Aniridia
  - d. presbyopia
4. The ..... are involved in photopic vision. C05K1
  - a. Rods
  - b. Cones
  - c. Internal limiting membrane
  - d. Bipolar cells
5. The contraction of vitreous can be due to ..... C04K1
  - a. Photocoagulation of retina
  - b. increased hydration
  - c. Cataract
  - d. Break in blood retinal barrier
6. Retinal ..... cells help in releasing glucose into the neurosensory retina C05K1
  - a. Photoreceptors
  - b. Muller
  - c. Ganglion
  - d. Pigment epithelium

**Part B**

**3 x 6 = 18**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

- 7.a. Summarize Versions and vergences (or) C02K2
- 7.b. Enumerate the physiological changes in pupil size C03K2
- 8.a. Enumerate the ocular changes in accommodation (or) C03K2
- 8.b. Summarize on the mechanisms of lens transparency C04K2
- 9.a. Summarize on retinal metabolism (or) C05K2
- 9.b. Describe about vitamin A and Visual pigments C05K3

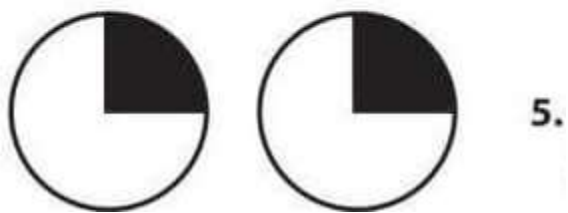
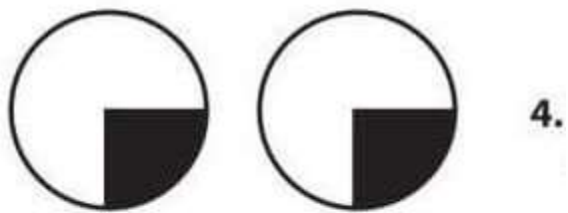
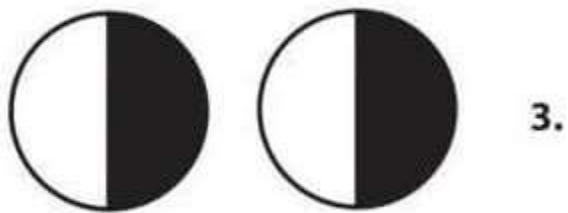
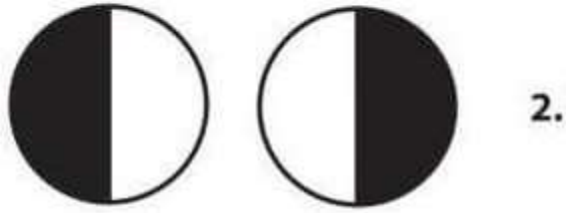
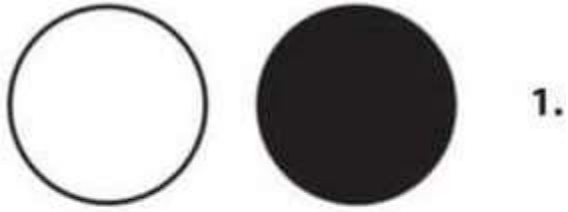
**Part C**

**3 x 12 = 36**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

- 10.A. Explain in detail about Monocular and Binocular eye movements (or) C02K2
- 10.B. Explain and illustrate pupillary pathways of eye C03K2
- 11.a. Explain accommodation and enumerate on theories of accommodation (or) C04K2
- 11.b. Summarize on the physiology of crystalline lens C04K2
- 12.a. Explain physiochemical properties of vitreous and its functions (or) C04K4
- 12.b. Illustrate and explain visual pathway and identify the lesions on the next page. C05K2



12b

\*\*\*\*

26 copies

Staff: Mrs. Supraja K