

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)

B.OPTOMETRY DEGREE EXAMINATION – August 2019
Second Year

VISUAL OPTICS

Time: Three hours

Maximum: 80 marks

I Choose the best answer

(10 x 1 = 10)

1. Nuclear sclerosis cataract produces
 - a) Hypermetopia
 - b) Astigmatism
 - c) Index myopia
 - d) Axial myopia
2. Pelli- Robson chart is used to measure
 - a) Color vision
 - b) visual acuity
 - c) Contrast sensitivity
 - d) Macular function
3. The component of Hypermetropia measured by cycloplegic test is
 - a) Total Hypermetopia
 - b) Manifest hypermetropia
 - c) Absolute hypermetopia
 - d) Latent hypermetropia
4. The signs of aphakia includes all except
 - a) Deep anterior chamber
 - b) High myopic refraction
 - c) Absence of lens
 - d) Iris tremulousness
5. Vertical meridian is more curved than horizontal in
 - a) With the rule astigmatism
 - b) Against the rule astigmatism
 - c) Oblique astigmatism
 - d) Irregular astigmatism
6. The instrument used to find the curvature of cornea is
 - a) Autorefractometer
 - b) Jackson cross cylinder
 - c) Keratometer
 - d) Eikonometer
7. The disparity in retinal image size is called
 - a) Anisometropia
 - b) Anisocoria
 - c) Aniseikonia
 - d) Antimetropia
8. When visual acuity is 6/6, logMAR value is
 - a) 0.00
 - b) 0.10
 - c) 0.20
 - d) 0.30
9. Scissoring reflex in retinoscopy is seen in
 - a) Ametropia
 - b) Aphakia
 - c) Keratoconus
 - d) Cataract
10. The convergence that is independent of accommodation is
 - a) Toric convergence
 - b) Fusional convergence
 - c) Accomodative convergence
 - d) Proximal convergence

(p.t.o)

II State whether the following statements are **TRUE** or **FALSE** (10 x 1 = 10)

1. The prism dioptre is equivalent to 2 degrees of arc.
2. The far point of hyperopic eye is behind the eye.
3. The anomaloscope is used to test contrast sensitivity.
4. Cataract causes discomfort glare.
5. Sheridan- Gardiner chart is used to check visual acuity in children.
6. Bailey- Lovie chart is a LogMAR chart.
7. Amplitude of accommodation of same age is similar.
8. The refraction error in which parallel rays of light focus in front of eye is Hypermetropia.
9. White reflex is seen in arcus senilis.
10. Ring scotoma is seen in aphakic glasses.

III Fill in the blanks: (10 x 1 = 10)

1. _____ is red color blindness.
2. Against the movement reflex in retinoscopy is seen in _____
3. At birth, the refraction of eye is _____
4. Pseudomyopia is caused by _____
5. Papilloedema produces _____ shift.
6. _____ lens is used to correct astigmatism.
7. _____ retinoscopy is done for high refractive errors.
8. The total refractive power of eye is _____
9. Stenopic slit is used to refine _____ of cylinder.
10. Keratoconus causes _____ astigmatism.

IV Write any **FIVE** answers of the following: (5 x 6 = 30)

1. Schematic eye.
2. Treatment of Amblyopia.
3. AC/ A ratio.
4. Mirror retinoscopy.
5. Aphakia.
6. Aniseikonia.
7. What are the various visual acuity charts used for recording vision in adults.

V Write any **TWO** essays of the following: (2 x 10 = 20)

1. Discuss on myopia, types and correction.
2. Principles of retinoscopy in different refractive errors.
3. Describe the various subjective methods for verifying refraction. Add a note on binocular balancing.
