

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

**B.OPTOMETRY DEGREE EXAMINATION – August 2019
Second Year**

**OPTOMETRIC INSTRUMENTS AND CLINICAL EXAMINATIONS
OF VISUAL SYSTEM**

Time: Three hours

Maximum: 80 marks

I Choose the best answer

(10 x 1 = 10)

1. Lantern test is used to measure
 - a) Stereopsis
 - b) Visual acuity
 - c) Colour vision
 - d) Contrast sensitivity
2. Conical Beam helps to observe
 - a) Aqueous flare
 - b) Corneal endothelium
 - c) Corneal dendrites
 - d) Lens opacity
3. The following are characteristics of retinoscopic reflex EXCEPT
 - a) Brilliance
 - b) Width
 - c) Slit
 - d) Speed
4. Red free filter in direct ophthalmoscope is used to view the following EXCEPT
 - a) Arteries
 - b) Veins
 - c) Nerve Fibres
 - d) Cornea
5. The following is a non- contact lens to view the fundus
 - a) Koepee Lens
 - b) Goldman 3 mirror lens
 - c) Hruby lens
 - d) Applantation lens
6. In humphrey filed analyser II, all are true except
 - a) Stimulus distance from eye = 30
 - b) Duration of stimulus = 0.2 seconds
 - c) Maximum luminosity of white stimulus = 1000 asb
 - d) Background illumination = 31.5 asb
7. All are true about balie- lovie designs EXCEPT
 - a) Constant ratio from one size to next
 - b) Same number of letters in each line
 - c) Spacing between letters is equal to the letter size between the penultimate line
 - d) Equal legibility at each level
8. Motor symptoms in orbital diseases include all EXCEPT
 - a) Diplopia
 - b) Pain
 - c) Tightness
 - d) Night vision difficulty

9. Doing retinoscopy at closer distance is called as
- a) Dynamic
 - b) Wet
 - c) Radical
 - d) None of the above

10. The following are reliability indices in visual field testing EXCEPT
- a) Visual Acuity
 - b) Fixation losses
 - c) False - positive
 - d) False - negative

II. Fill in the blanks: (10 x 1 = 10)

1. GDx is based on _____ of nerve fibre layer.
2. Pentacam is based on the _____ principle.
3. _____ is the first grade of binocular single vision.
4. Standard flash (photopic) is _____ cd.s/ m² in an ERG.
5. A 6/ 60 TARGET SUBTENDS 5 min arc at _____
6. The light of the retinoscope seen on the patient's face is called _____
7. In _____ nerve palsy, there is lagophthalmos.
8. When the anterior chamber is _____ the iris becomes convex as it is bowed forward over the lens.
9. A _____ prism is used in Javal Schiötz Kearotmeter.
10. Seeing 3 green dots in WSDT indicates _____

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

1. Synaptophore is based on haploscopic principle.
2. Latent squint can be detected with cover uncover test.
3. Proptosis is the hallmark of orbital disease.
4. Ductions represent the movement of both eyes.
5. 1 disc diameter equals approximately 1.5mm.
6. Hyperfluorescence seen in ICG is called pie effect.
7. 1M is equal to N8.
8. EOG tests RPE layer.
9. Defects in iris can be seen through retro illumination.
10. Forceps delivery can cause squint.

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

1. Illustrate and explain the optics of a B & L Keratometer.
2. Write on slit lamp illumination and viewing techniques and mention one of each.
3. Explain the spikes obtained in A scan.
4. Indications and uses of A-scan
5. Uses of lensometer
6. Explain 3 methods used to examine the lacrimal system.
7. Define brightness, hue and saturation. Name 3 different colour vision tests and their principle.

V Write an essay on any **TWO** of the following:

(2 x 10 = 20)

1. Explain the following to explain visual field examination
 - a. Confrontation
 - b. Amsler
 - c. Bowl Perimetry
2. Explain the principle and illustrate applanation and indentation tonometry in detail on constant force and variable force tonometers.
3. Electrodiagnostics in detail.

(Sl.No. M21669)