Q.P. Code: 281605

Time: Three hours Maximum: 100 Marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. What is corneal topography? List the different instruments used for corneal topography? Write a note on Keratometer.

2. Explain in detail about direct ophthalmoscope.

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. What is tonometry? Write the principles of tonometer.
- 2. Phoropter.
- 3. Lensometer.
- 4. Tests for binocular single vision.
- 5. Accommodation.
- 6. Use of Jackson cross cylinder.
- 7. Types of retinoscopy.
- 8. Uses of Fundus camera.
- 9. Principles of vision screeners.
- 10. Different microscope viewing systems used in slit lamp.

Q.P. Code: 281605

Time: Three hours Maximum: 100 Marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. a) Discuss devices for recording visual fields.

- b) Write a note on analysis of screener results.
- 2. Auto Refraction Instrument principle of function.

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. Infra red optometer devices.
- 2. Indirect ophthalmoscope.
- 3. Lensometer.
- 4. Colour vision testing devices.
- 5. Consulting room illumination.
- 6. Video keratoscopy.
- 7. Orthoptic instruments home devices.
- 8. Slit lamp accessories.
- 9. Near vision.
- 10. Hruby lens.

Q.P. Code: 281605

Time: Three hours Maximum: 100 Marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. Write in detail about retinoscopy.

2. Write in detail about Baush and Lomb refractometer and its various uses.

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. Define principal of auto-refractometer and its uses.
- 2. What are the drugs used for cycloplegic retinoscopy?
- 3. Name various field testing devices.
- 4. What are indications of 'A' scan and 'B' scan?
- 5. Write about colour vision charts and what are colour vision defects?
- 6. Write about binocular single vision.
- 7. Optical and non optical device in low vision.
- 8. Specular microscope.
- 9. Test chart and trial set.
- 10. Classify tonometers.

Q.P. Code: 281605

Time: Three hours Maximum: 100 Marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. Fundus Camera – principles, uses. Add a note on fluorescein angiography.

2. Explain binocular single vision. Tests for BSV and instruments used to measure BSV.

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. Pachymetry.
- 2. Orbscan.
- 3. A Scan biometry.
- 4. Bausch & Lomb Keratometer.
- 5. Anterior segment photography.
- 6. Schiotz tonometer.
- 7. Jackson cross cylinder.
- 8. Kinetic perimeter.
- 9. Lensometer.
- 10. Hess Chart.

Q.P. Code: 281605

Time: Three hours Maximum: 100 Marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. Visual acuity charts – Mention the principle, and charts appropriate for pediatric and adult age groups.

2. Principle of retinoscopy with appropriate diagrams depicting optics.

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. Direct Ophthalmoscope working, advantages, and disadvantages.
- 2. Indirect Ophthalmoscope working, advantages, and disadvantages.
- 3. Static perimetry available testing devices and strategies for visual field testing.
- 4. Lensometry Principle and optics.
- 5. Slitlamp illumination techniques.
- 6. Types of tonometers.
- 7. Synoptophore principle and uses.
- 8. Tools for corneal surface assessment.
- 9. Techniques for fundus camera.
- 10. Filters for Ophthalmoscope and uses.