

## DIPLOMA IN OPTOMETRY TECHNOLOGY

## FIRST YEAR

## PAPER III – PHYSICAL, GEOMETRIC AND VISUAL OPTICS

Q.P. Code : 841503

Time: Three Hours

Maximum: 100 Marks

Answer all questions

**I Elaborate on** **3 x 10 = 30**

1. Define Hypermetropia. Give its components, clinical features and management
2. Define Anisometropia. Give the etiology, clinical types, diagnosis and management
3. Drugs used in refraction and interpretation of retinoscopic values

**II Write notes on** **10 x 5 = 50**

1. Convex lenses
2. Pseudophakia
3. Conducting a screening camp for cataract
4. Duochrome test
5. Pathological Myopia
6. Write down the glass prescription for the following retinoscopy values

|    |        |
|----|--------|
| RE | + 3.50 |
|    | +2.50  |

|    |        |
|----|--------|
| LE | + 2.00 |
|    | +1.00  |

Age – 30 years ; Working distance 1 metre ; Drug used – Cyclopentolate 1 %

7. Laws of reflection and refraction
8. Uses of Prisms in ophthalmology
9. Jackson's cross cylinder
10. Transpose and give the type of refractive error
  - a) + 0.75 Dsph + 1.00 Dcyl x 75°
  - b) - 1.00 Dsph + 1.50 Dcyl x 180°

**III Write short answer on** **10 x 2 = 20**

1. Give two properties of Light
2. Polarization
3. Properties of LASER
4. Illumination
5. Linear magnification
6. Neutralisation
7. Unit of a Prism
8. Types of lenses
9. With the rule and against the rule astigmatism
10. Define Amblyopia