[LI 0216] FEBRUARY 2016 **Sub.Code :1503**

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. Objective refraction and refractive techniques.
2. Presbyopic signs, Symptoms and treatments.
3. Formation of images in a convex lens for different positions of the object.

II. Write notes on: **(10 x 5 = 50)**

1. Formation of image in a concave lens.
2. Refraction of light through a prism.
3. Symptoms and treatments for aniseikonia.
4. How prisms are used in correcting vision.
5. Signs, symptoms and treatments for amblyopia.
6. Aphakia and pseudophakia.
7. Fresnel and Fraunhofer diffraction.
8. Sturm’s conoid.
9. Hypermetropia and its correction.
10. Importance of conducting eye camps.

III. Short answers on: **(10 x 2 = 20)**

1. Refractive index of different ocular media.
2. Uses of crossed cylinder.
3. Power of a lens and its unit.
4. Fluorescence and phosphorescence.
5. Laws of refraction.
6. Conditions for interference of light.
7. Different types of lenses according to their shapes.
8. Power of a prism.
9. Spherocylindrical lens.
10. Eye donation.

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