[LK 0217] FEBRUARY 2017 **Sub. Code: 2703**

B. OPTOM
(New Syllabus 2015-2016)

FIRST YEAR

PAPER III – PHYSICAL AND GEOMETRICAL OPTICS

Q.P. Code: 802703

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Interference phenomenon in Optics and its applications.
2. Laws of reflection and refraction of Light and its Applications in Optics.
3. Laser Optics and its Applications.

II. Write notes on: **(8 x 5 = 40)**

1. Resolving power of optical instruments.
2. Thomas young experiment.
3. Electro Magnetic Spectrum.
4. Spherical Aberrations.
5. Magnifying the power of Simple and Compound Microscopes.
6. Aphakia.
7. Corneal Dystrophies.
8. Keratoconjunctivitis sicca.

III. Short answers on: **(10 x 3 = 30)**

1. Einstein’s Quantum Theory.
2. Raman Effect.
3. Fraunhofer Diffraction.
4. Total Internal Reflection.
5. Achromatic prisms.
6. Double optic lever.
7. Critical angle of Glass.
8. Angular Magnification.
9. Lens power.
10. Vertex distance.

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