

[LP 0819]

AUGUST 2019

Sub. Code: 2733

**B.OPTOM**  
(New Syllabus 2018-2019)

**FIRST YEAR**

**PAPER III – PHYSICAL AND GEOMETRICAL OPTICS**

*Q.P. Code: 802733*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Discuss the construction and working of Thomas Young Expt.
2. Describe the various types Aberrations in a lens and ways to reduce them.
3. Astigmatism.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Resolving power of optical instruments.
2. Double refraction.
3. Spherical aberrations.
4. Total internal reflection.
5. Write short notes on Aphakia.
6. Spatial coherence and temporal coherence.
7. Lambert's law.
8. Flicker's photometer.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Entrance and exit pupil.
2. Define Myopia.
3. Refractive index.
4. Total internal reflection.
5. Glare effect.
6. Angular magnification.
7. Dual nature of light.
8. Explain Emmetropia.
9. Nodal points.
10. Positive and negative crystals.

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