

[LL 1017]

OCTOBER 2017

Sub. Code: 1601

**M. OPTOM EXAMS
FIRST YEAR
PAPER I – OPTOMETRY – I**

Q.P. Code: 281601

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write in detail about various theories of light, mentioning its drawbacks and application.
2. Briefly explain about interference and its application in Spectacle Lenses.

II. Write notes on:

(10 x 6 = 60)

1. What is 'Light'? Draw the spectrum of e.m waves. Mark the 'Visible' part in it.
2. Name the two theories of 'Colour'. Explain each with necessary diagram(s).
3. Define : (i) 'Luminous Flux' (ii) 'Candela' and 'Solid Angle'.
4. Write in brief about Raleigh's scattering.
5. Draw and explain the concept of Nicol Prism.
6. Differentiate between Illuminance and Luminance.
7. Write in short about polarization.
8. Define visual task and explain the factors affecting it.
9. Write in detail about oblique astigmatism aberration and the ways to minimize it.
10. Differentiate between thin and thick lenses in terms of optics involved.
