

[LN 1018]

OCTOBER 2018

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 the electromagnetic spectrum and the properties of the components.
2. Define visual task. What are the factors that affect the visual tasks? What is the relationship between visual task and illumination? Write in detail about the requirements for illumination in work place.

II. Write notes on:

(10 x 6 = 60)

1. State and explain the laws of illumination with necessary diagrams.
2. Write notes on Nicol prism with diagram and its uses.
3. Write about colour temperature and colour rendering of light sources.
4. Elaborate on coma with neat diagram. How will you control coma?
5. Define dispersion and scattering. What are the effects of high dispersion and scattering? What are the remedies?
6. Define interference and the types. Applications of interference of light.
7. Differentiate between luminance and Illuminance.
8. Write about the use of stops and apertures in lens system.
9. Write about the cardinal points in thick lenses.
10. Write about ophthalmic prisms, its base notations and uses in ophthalmology.
