[LJ 0816]

AUGUST 2016

Sub.Code :2704

B. OPTOM (New Syllabus 2015-2016)

FIRST YEAR

PAPER IV – PRINCIPLES OF LIGHTING

Q.P. Code: 802704

Time: Three Hours

Answer All questions

I. Elaborate on:

- 1. Discuss about the theories on light.
- 2. Explain in detail about illumination with regard to ophthalmology.
- 3. Elaborate on the effects of glare and how to prevent it?

II. Write notes on:

- 1. Contrast sensitivity.
- 2. Flicker photometer.
- 3. Infrared spectrum.
- 4. Primary colours.
- 5. Measurement of illuminance.
- 6. Concepts of lighting design.
- 7. Optical fiber communication.
- 8. Photometer.

III. Short answers on:

- 1. Attributes of colour.
- 2. Visual acuity.
- 3. Factors affecting visual task.
- 4. Visual performance.
- 5. Inverse square law.
- 6. Visible range of electromagnetic spectrum.
- 7. Define depreciation factor.
- 8. Secondary colours.
- 9. Applications of ultraviolet rays.
- 10. Light sources.

 $(3 \times 10 = 30)$

 $(8 \times 5 = 40)$

Maximum : 100 Marks

 $(10 \times 3 = 30)$