B.OPTOM (New Syllabus 2015-2016)

FIRST YEAR

PAPER IV - PRINCIPLES OF LIGHTING

Q.P. Code: 802704

Time: Three Hours Maximum: 100 Marks

Answer all questions

I. Elaborate on: $(3 \times 10 = 30)$

1. Computer vision syndrome.

- 2. Discuss about fibre optic communication and its uses.
- 3. Theories of light.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Maxwell's theory.
- 2. Factors affecting visual task.
- 3. Types of glare.
- 4. Fitters used in ophthalmology.
- 5. Colour rendering and temperature.
- 6. Short notes on ultra violet spectrum.
- 7. What is Lambert's cosine law?
- 8. What is solar constant?

III. Short answers on:

 $(10 \times 3 = 30)$

Sub. Code: 2704

- 1. Define prism.
- 2. Write notes on infra red spectrum.
- 3. Define candela.
- 4. Discomfort glare.
- 5. Unit of luminance efficacy.
- 6. Solid angle.
- 7. Visual range of electromagnetic spectrum.
- 8. Addictive colour synthesis.
- 9. Contrast sensitivity.
- 10. Tertiary colours.
