## **FEBRUARY 2018**

**Sub. Code: 2704** 

# 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. Optical fibre communication.
- 2. Relate light and vision.
- 3. Briefly explain filters.

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

- 1. Types of lighting.
- 2. Notes on discomfort glare.
- 3. Explain the 2 colour synthesis.
- 4. Write a note on utilization factor.
- 5. Explain inverse square law.
- 6. Basic aspects of lighting design.
- 7. Factors affecting visual task.
- 8. Notes on light sources.

## III. Short answers on: $(10 \times 3 = 30)$

- 1. Define candela.
- 2. What is a primary colour?
- 3. Define luminous flux.
- 4. Give any 3 properties of light.
- 5. Define prism.
- 6. What is contrast sensitivity?
- 7. What is photometry?
- 8. What is disability glare?
- 9. Psychological consideration of lighting.
- 10. What is Illumination?

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