

[LL 0817]

AUGUST 2017

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 x 10 = 30)

1. Explain all theories of light.
2. Write the concept of lighting design.
3. Define Glare, its types, effects and how to prevent it?

II. Write notes on:

(8 x 5 = 40)

1. What is visual task and write the factors affecting visual tasks?
2. Explain colour temperature and colour rendering.
3. Note on eye and its optical radiation.
4. Filters used in Ophthalmology.
5. What is Lambert's cosine law?
6. Explain utilization factor.
7. Explain the two colour synthesis.
8. Write notes on light source.

III. Short answers on:

(10 x 3 = 30)

1. Give an diagrammatic representation of luminance, illuminance and Luminaire.
2. What are the parts of an optical fibre?
3. Define secondary colour.
4. Explain Luminous efficiency.
5. Define prism.
6. Define photometry and photometer.
7. What is visual ability?
8. Examples of natural and artificial light sources.
9. What is task lighting?
10. Define filters.
