

[LQ 0220]

FEBRUARY 2020

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 the seven reasoning of Goethe's theory.
2. Write the concept of lighting design.
3. Write in detail the various proposed colour theories.

II. Write notes on:

(8 x 5 = 40)

1. Explain the two colour synthesis.
2. Lummer – Brodhum photometer.
3. What is depreciation factor?
4. Write notes on photometry and the eye.
5. What is solid angle?
6. Ultra violet spectrum.
7. Explain colour temperature and colour rendering.
8. Measurement of luminance.

III. Short answers on:

(10 x 3 = 30)

1. Disability glare.
2. Write notes on infra red spectrum.
3. Electric powered light source.
4. What are Fraunhofer lines?
5. Primary colour.
6. Contrast sensitivity.
7. Define prism.
8. Attributes of colour.
9. Define utilization factor.
10. Mention the laws of illumination.
