

Total No. of Questions : 4]

SEAT No. :

PD281

[6411]-57

[Total No. of Pages : 1

B. E. (Electrical Engineering) (Insem)

ILLUMINATION ENGINEERING

(2019 Pattern) (Semester-VIII) (Elective-VI) (403151 B)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Solve Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Use of non-programmable calculator is allowed.*
- 5) *Assume suitable data if necessary.*

Q1) a) Draw a neat & labelled diagram of optical system of human eye. [7]

b) Discuss the function of following parts in human eye: [8]

- i) Iris
- ii) Lens
- iii) Cornea
- iv) Optic nerve

OR

Q2) a) Explain any three properties of light. [7]

b) Compare artificial light and natural light. [8]

Q3) a) Justify the suitability of following material for parts of lamp. [7]

Inert gases, Tungsten, glass, ceramics, phosphor

b) With a schematic diagram, describe the working principle of SOX lamp. [8]

OR

Q4) a) Discuss the advantages and disadvantages of fluorescent lamps. [8]

b) What is a ballast? Enlist its required features. [7]

