

# Model Question paper-1

- 1 a) Discuss in detail the steps to followed lighting design. [7M]
- 1 b) Give the advantages & disadvantages of high pressure mercury vapor lamps over filament lamps. [7M]
- 2 a) What will be the number of lamps, each having 300 lumens, required to obtain an average luminance of 50 lux on a 4m × 3m rectangular room? [7M]
- 2 b) Explain polar curves with a neat labelled sketch. [7M]
- 3 What are the three types of wiring connection in commercial wiring? [14M ]
- 4 a) How will you determine the number of circuit required in a house wiring installation ? [7M]
- 4 b) Enumerate the guidelines for Installation . [7M]
- 5 a) Discuss with neat sketch Arc welding. [5M]
- 5 b) What are advantages of electric heating? [4M]
- 5 c) Compare different methods of electric heating. [5M]
- 6 What are the characteristics of heating? What are the elements used in electric heating devices? [14M ]
- 7 Explain the starting methods of induction motors. [14M ]
- 8 Explain trapezoidal speed-time curves with neat sketch. [14M ]

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# Model Question Paper-2

- 1 a)** Explain with sketch the principle and operation of incandescent lamp and enumerates its advantages and disadvantages. **[7M]**
- 1 b)** Explain with sketch the principle and operation of fluorescent lamp . **[7M]**
- 2 a)** Draw and explain the operation of sodium vapour lamp with neat diagram and enumerate its advantages and disadvantages. **[7M]**
- 2 b)** State the laws of illumination. Explain the laws with the help of suitable diagrams and derive an equation of the same. **[7M]**
- 3 a)** Explain selection and sizing of components in wiring system. **[7M]**
- 3 b)** How do you measure earth wire and explain in detail? **[7M]**
- 4 a)** What are the general I.E rules for wiring Installation? **[10M]**
- 4 b)** How do you decide lighting scheme and number of lamps? **[4M]**
- 5** Discuss briefly about induction and dielectric heating process. **[14M]**
- 6 a)** Compare A.C and D.C welding **[4M]**
- 6 b)** Discuss in detail with neat sketch resistance heating? **[5M]**
- 6 c)** Discuss in brief about electric welding equipment. **[5M]**
- 7** Explain the different types of Industrial loads with their applications. **[14M]**
- 8 a)** Compare A.C traction with D.C traction **[4M]**
- 8 b)** Discuss the speed-time curves for main line services. **[10M]**

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