

B.E. (Elect.) (VIII) (Reg.)  
Design & Estimation of Electrical System

4/12/07

Con. 5050-07.

(REVISED COURSE)

CD-6504

(3 Hours)

[Total Marks : 100  
MADON

N.B. : (1) Question No. 1 is compulsory.  
(2) Attempt any four questions out of remaining six questions.

- 1. (a) Explain the tendering process in detail. 10  
(b) Write a short notes on :- 10
  - (i) Energy efficient motor
  - (ii) Cable Installation.
  
- 2. (a) Explain different drawings in Electrical System. 10  
(b) Discuss the discrimination and coordination in protection. 10
  
- 3. (a) Write a detail note on type of batteries, sizing and selection criterion. 10  
(b) Discuss the terms QAP, WBS and logistic with respect to project planning. 6  
(c) Define the terms :- 4
  - (i) Load factor
  - (ii) Diversity factor.
  
- 4. (a) What are the different types of distribution system and their selection criteria ? 10  
(b) Explain the need of Energy Audit and its different types. 10
  
- 5. (a) Discuss the different types of electrical systems in a "Commercial Mall". 12  
(b) An illumination of 80 lux is required on the working plane in a big hall of 40 m x 15 m. The lamps to be hung 4 m above the work bench. Assuming a suitable space height ratio, a utilisation factor of 0.5, a lamp efficiency of 14 lumens per watt and a candle power depreciation of 20%. Estimate the number, rating and disposition of lamps. 8
  
- 6. (a) Discuss the criteria for selection of Project Management Software . 5  
(b) Write a short note on Financial Feasibility of the project. 5  
(c) What are the various steps involved in cost estimation of Electrical Project ? 10
  
- 7. Write short notes on (any three) :- 20
  - (a) SCADA
  - (b) Security System
  - (c) VPS
  - (d) Elevators.