

EE 345: ELECTRICAL ENGINEERING DRAWING, ESTIMATING AND COSTING (0-0-3)

(Note: There is no university examination for this course. Final assessment will be done through an internal examination at the end of the semester)

Max Mark: 50 (Sessional)

Pass Marks: 18

L – T – P
0 – 0 – 2

Part I: Electrical Engineering Drawing

1. Standard symbols used in Electrical and Electronics Engineering. (Sheet No.1)
2. Insulators used in power transmission and distribution systems. (Sheet No.2)
3. (i) Different types of underground cables and overhead conductors used in power transmission and distribution systems.(only X-sectional view).
(ii) Various transmission and distribution towers. (Sheet No.3)
4. Different parts of Electrical Machines and Transformers. (Sheet No.4)
5. Single line diagram of generating stations, substations and interconnected power systems. (Sheet No.5)
6. Simple house wiring diagram. (Sheet No.6)
7. Different types of Electric Earthing (Sheet No.7)

Part II: Electrical Estimating and Costing

8. Types of wiring systems, wiring materials and other accessories.
9. Estimating and costing of
 - a. electrical installations
 - b. lighting and power circuits of residential building and small industries
 - c. HT and LT overhead lines

References:

1. Electrical Design, Estimating and Costing – K. B. Raina and S. K. Bhattacharya
2. Electrical Wiring, Estimating and Costing – S. L. Uppal
3. Electrical Drawing and Estimation – C. R. Dargan
4. General Electrical Drawing –Surjit Singh
5. Electrical Engineering Drawing – K. L. Narang
6. Electrical Installation, Estimating and Costing – J. B. Gupta