

Eighth Semester B.E. Degree Examination, May/June 08
Industrial Management, Electrical Estimation and
Economics

Time: 3 hrs.

Max. Marks:100

Note : Answer any FIVE full questions.

- 1 a. Trace the development of Industrial management. (04 Marks)
 b. Explain the works of Taylor. Why his principles were rejected? (08 Marks)
 c. Explain the characteristics, advantages and disadvantages of the following types of organization.
 i) Line type ii) Line – staff type (08 Marks)
- 2 a. Explain the following functions of management
 i) Planning ii) Organizing iii) Directing iv) Controlling (12 Marks)
 b. Write briefly the skills of a manager at various levels of an organization. (04 Marks)
 c. Discuss Maslow's hierarchy of needs. (04 Marks)
- 3 a. Discuss the employer and employees relationship. (06 Marks)
 b. Explain the different methods of training provided to improve the skills of operators and technicians. (08 Marks)
 c. What are the causes and effects of industrial disputes? (06 Marks)
- 4 a. Discuss briefly the different methods of plant lay – out. (08 Marks)
 b. Bring out the comparison between PERT and CPM. (06 Marks)
 c. Explain SQC. What are its advantages? (06 Marks)
- 5 a. What is the necessity of earthing? With a neat diagram explain plate earthing. (08 Marks)
 b. An open hall of 15 m × 6 m × 4.5 m height is to be fitted with 10 lamps of 100 Watt each and 4 ceiling fans of 60 Watt each. Assume suitable supply voltage.
 i) Decide the number of sub – circuits ii) Decide the size of PVC cable to be used between meter board and main distribution board. iii) Decide the size of PVC cable to be used for circuit wiring iv) What are the assumptions made? (12 Marks)
- 6 a. Explain how the ratings of cables and fuse wires for wiring a mode installation are determined. (06 Marks)
 b. A 10 HP, 415 volt, 3 – phase, 50 Hz Induction motor is to be installed in a workshop, the plan of which is shown in fig 6 (b). Show the layout of the wiring and estimate the quantity of materials required. The wiring is to be surface conduit. Assume η as 85% at 0.8 pf (lag).



Fig 6 (b)

- 7 a. Explain the causes of depreciation. (06 Marks)
 b. The original cost of an equipment is Rs. 8000. It has a salvage value of Rs. 500 at the end of 8 years. Estimate its book value at the end of 5 years by
 i) Straight line method ii) Sinking fund method, assuming rate of interest as 6%
 ii) Reducing balance method. (10 Marks)
 c. Explain the term Inventory. Write a brief note on direct inventory and indirect inventory. (04 Marks)
- 8 Write short notes on any four of the following
 a. Works of Gilberth; b. Theory of X and y; c. Automation; d. Conduit Wiring;
 e. Break – Even analysis. (20 Marks)