

FACULTY OF ENGINEERING
B.E. 4/4 (ECE) I Sem. (Main) Examination, December 2011
INDUSTRIAL ADMINISTRATION AND FINANCIAL MANAGEMENT

Time: 3 Hours]

[Max. Marks: 75

Note : Answer *all* questions from **Part A**. Answer *any five* questions from **Part B**.

PART - A

(10×2.5=25 Marks)



1. Sketch the Taylor's type of organisation structure.
2. What are advantages of locating an industry in a rural area ?
3. Sketch the symbols used in a flow process chart.
4. Calculate the standard time from the given data actual time = 10.35 mts, P.R.F. = 110 per cent allowance = 120 per cent.
5. State with a simple example how the principles of SQC are used in quality control.
6. Sketch the following charts, stating the control limits
 - a) \bar{R} chart
 - b) \bar{P} chart.
7. State the main objectives of material management.
8. State the necessary conditions where PERT is applied in a Net Work analysis.
9. An electronic instrument was purchased for Rs. 85,000/- the transport and erection charges amounted to Rs. 5,000/-. The estimated life of the product was 5 year calculate the annual rate of depreciation.
10. Mention the salient factors to be considered for preparing a capital budget in any manufacturing industry.

PART - B

(5×10=50 Marks)

11. a) State the principles of management.
- b) What are prime considerations in designing a plant layout ? State the types of layouts.
12. a) Define the term work study. Explain the objectives and advantages.
- b) Calculate by applying Rowan plan, the wages earned by a worker from the given data.
 - 1) Standard time = 10 hr
 - 2) Actual time = 9 hrs.
 - 3) Hourly rate = Rs. 30/-



13. a) Explain the operating characteristics curve used in inspection.

b) Explain the following term used in work simplification programme

 - a) Work sampling
 - b) Performance rating factor.
14. Calculate the E.O.Q. from the following data. Half yearly requirement = 900 units. Cost of purchasing 10 purchased orders = Rs. 240/- Carrying cost per month = Rs. 2/-. How E.B.S. is different from EOQ ?
15. a) What are elements of costs, and state the various types of "on costs".

b) Explain, with the help of a chart, the meaning of break even point. Derive making necessary assumption the expression for calculate the B.E.P.
16. Distinguish between the following :

 - a) Job evaluation and merit rating
 - b) Work simplification and work measurement.
17. Write notes on the following :

 - a) General principles of motion economy
 - b) Factors affecting capital gearing.