

REF NO : Ex/ME/5/T/323/2017(Old)

B.E.MECHANICAL ENGINEERING(PART TIME) THIRD YEAR SECOND SEMESTER  
(OLD)-2017

INDUSTRIAL MANAGEMENT

Time: Three Hours

Full Marks: 100

Answer any Five questions.

1. a) Write F.W. Taylor's Scientific Management theory and justify its importance.  
b) Write down the functions of a manager. 10+10=20
  
2. Write short notes on **any four** : 4X5=20
  - a) Importance of control chart.
  - b) Difference between PERT and CPM.
  - c) Importance of time study.
  - d) Break-down maintenance.
  - e) ISO 9000.
  - f) Delphi Technique.
  
3. a) Explain the factors which are directly related for the selection of facility location.  
b) Describe the different types of layout system with their advantages and disadvantages. 10+10=20

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4. a) Write down the advantages and disadvantages of different types of organizational structure.
- b) Explain the classical theory of management. 10+10=20
5. a) State the role of work study in industrial-management.
- b) Explain Break-even analysis with diagram.
- c) A pump manufacturing company has its capacity to manufacture 700 pumps per year. The variable cost of a pump is Rs 600 and selling price is Rs 800. Fixed overheads are Rs 20000 per year. Find out the break-even points for output and sales and show what will be the profit earned by the company if output is 92% of capacity. 4+6+10=20
6. a) Explain the objectives of inventory control.
- b) Write short notes on the following:
- i) ABC analysis      ii) Flow process chart
- c) A manufacturer wishes to know what the economic quantity should be for a plastic impeller when the following is available:
- The average daily requirement is 180 units and the company has 250 working days a year, so that the yearly requirement is approximately 50000 units a year. The manufacturing cost is Rs 2 per unit. The sum of the annual rate of interest, insurance, taxes and so forth is 20% of the unit cost and the cost of preparation is Rs 70 per lot. 4+8+8=20
7. a) State the role of inspection in Quality control.
- b) Describe the importance of control charts.
- c) Explain the following terms:
- i) Float    ii) Dummy activity    iii) Crashing 5+6+9=20