

**B.Tech. Degree VI Semester Examination in Instrumentation
April 2008**

IN 605 ENGINEERING MANAGEMENT

(New Scheme)

Time : 3 Hours

Maximum Marks : 100

PART A

(Answer any **FIVE** questions. Each question carries 5 marks)

(5 x 5 = 25)

- I
1. What are the different sources of finance for a firm? Explain
 2. What are the different types of layout? Explain
 3. Explain the concept of price elasticity of demand.
 4. What are the advantages of acceptance sampling?
 5. Explain two types of incentive plans.
 6. What are the different activities in marketing?
 7. Give the EOQ formula and explain its variables.

PART B

(Each question carries 15 marks)

- II What are the characteristics of scientific management? How are they useful? (15)
- OR**
- III The direct material cost of making a spring is Rs.100/- per unit. The direct labour cost is Rs.80/- per unit. All other direct cost per unit comes to Rs. 60/- per unit. The fixed overheads for the company is Rs.10,000/- per month. If the spring is the only product of the firm and all direct costs are variable costs find the Break Even Point in Number of Springs, to be produced per annum, if sale price of spring is Rs.300/- per unit. (15)
- IV You are trying to find a location for a cement plant in India. List and explain the criteria you would use to compare and select alternative locations to select the best. (15)
- OR**
- V What is work study? How is it done? What are its uses? (15)
- VI There is congestion on the railway platform Trains arrive at the rate of 30 trains per day. The waiting time for a train at the platform is 36 minutes average and is exponentially distributed.
- i) Determine the mean queue size. (7)
 - 2) The probability that the queue size is more than 9 (8)

OR

- VII Solve the following transportation problem:

	D	1	2	3	a_i
O					
1		2	7	4	5
2		3	3	1	8
3		5	4	7	7
4		1	6	2	14
b_j		7	9	18	34

O - Origin D - Destination a_i - Available quantity at origin i

b_j - Requirement at destination j

Cells have transportation cost in Rs.

(15)

(Turn Over)

- VIII Explain the different functions that come under Personal Management. (15)
- OR**
- IX a) What is a trade union and what are its functions? (8)
- b) What are industrial disputes and how could they be resolved? (7)
- X What are the steps in Product Design? Explain important considerations in Product Design. (15)
- OR**
- XI Explain what is meant by channels for distribution. Take a product of your choice and explain the channel for its distribution. (15)