

EXPERIMENT NO: - 11

Tutorial - 1

Examples

1) A company is to decide on the location of a new plant. It has narrowed down the choice to 3 locations A, B, and C; data in respect of which is furnished below: Use suitable criterion and advise the company on the best choice.

Cost in Rs	Location		
Data	A	B	C
Wages & salaries	20000	20000	20000
Power, water supply expenses	20000	30000	25000
Raw material & other supplies	80000	75000	60000
Total initial investment	200000	300000	250000
Distribution expenses	50000	40000	60000
Miscellaneous expenses	40000	25000	30000
Expected sales per year	225000	250000	225000

Hint: Solution based on the economics of various sites.

2) From the given table choose a best suitable location for a plant. Relative weightage will be given in the table.

Cost in Rs	Location		Values (Relative weightage)
Factors	A	B	
Cost of land, building, construction	500000	300000	4
Power cost	20000	30000	4
Taxes	20000	50000	4
Community attitude	1.5	2	1
Product quality	3	2	6
Flexibility to expansion	1	6	3
Union attitude	2	4	5

Hint: Solution based on Dimensional analysis

3) A company intends to select one of the three locations. All the relevant data for the location are given below:

Cost in Rs. (in Thousands)	Location		
Particulars	A	B	C
Total initial investment	250	325	270
Total Revenue	410	515	360
Cost of raw material	89	100	98
Distribution cost	40	60	30
Utilities Expenses	50	40	25
Wages & salaries	25	30	28

Hint: Solution based on Dimensional analysis