K.E.S.'s SHROFF COLLEGE OF COMMERCE

Kandivali (west), Mumbai 67

T.Y.B.M.S. Subject : Operations Research

Second Internal Class Test

Marks : 20

Duration : 1 Hour

Note: All questions carry equal marks.

1. Baroda lather shop has three manufacturing plants and four sales outlets. Data of daily demand at various sales outlets and supply from various plants along with transportation cost per unit between plants and sales outlets are given in the following table. Determine the Initial Basic Feasible Solution by using (i) North-West Corner Rule (ii) Least Cost Method (iii) Vogel's Approximation Method.

Sales Outlets

Plants	1	2	3	4	Supply
1	10	2	20	11	15
2	12	7	9	20	25
3	4	14	16	18	10
Demand	5	15	15	15	

2. Obtain the IBFS by using all the three methods.

Destinations

Sources	1	2	3	4	Supply
1	2	3	11	7	6
2	1	0	6	1	1
3	5	8	15	9	10
Demand	7	5	3	2	