

SECTION :2

Que.3

(a) What is Sequencing Problem? Explain any one Model of it. (9)

(b) A company has 5 jobs and 5 machines. Assign the 5 jobs to the 5 machines as to maximize total profit. (9)

Machines

Jobs

	A	B	C	D	E
1	12	18	20	8	20
2	20	4	8	1	16
3	21	7	13	10	17
4	2	18	21	16	16
5	9	13	20	15	19

O.R

(a) Explain in details Assignment Problem. (9)

(b) Find the sequence that minimizes the total elapsed time required to complete the following jobs on two machines. (9)

Job	1	2	3	4	5
Machine A	10	2	18	6	20
Machine B	4	12	14	16	18

Also find elapsed time for both the machines.

Que.4

Obtain optimal solution for the following Transportation Problem by using MODI Method. (17)

	A	B	c	D	Supply
1	19	30	50	10	7
2	70	30	40	60	9
3	40	8	70	20	18
Demand	5	8	7	14	34

O.R

(a) What is mean by Transportation Problem? Explain Unbalanced Transportation Problem. (9)

(b) Solve the following T.P. Problem by Vogel's Approximation Method. (8)

Origin	A	B	C	D	Supply
1	12	8	9	11	15
2	6	7	10	7	7
3	5	9	7	6	8
Demand	6	4	11	5	