

UNBALANCED ASSIGNMENT

Ans. 4

Unbalanced assignment problems is an assignment problem where the number of facilities is not equal to the number of job. To make unbalanced assignment problem, a balanced one, a dummy facility (S) or a dummy job (S) (as the case may be) is introduced with zero cost or time.

Then we apply the usual Hungarian algorithm to this resulting balanced assignment problem.

We provide the following example to illustrate the solution of an unbalanced assignment problem.

GIVE EXAMPLE

	Job			
Person	1	2	3	4
A	20	25	22	28
B	15	18	23	17
C	19	17	21	24

Solⁿ - since the no of persons is less than the no of jobs. we introduce a dummy row (D) with zero values. The revised assignment problem is given:

	Job			
Person	1	2	3	4
A	20	25	22	28
B	15	18	23	17
C	19	17	21	24
Dummy \rightarrow D	0	0	0	0