

Step-1

(a) Let us consider the case in which every row and every column of compatibility matrix contains exactly two 1s.

Therefore, if the matrix is of order, $n \times n$, total $2n$ 1s are places in the matrix.

Now, these $2n$ 1s cannot be covered in less than n lines because each line covers exactly two 1s.

Therefore, it takes n lines to cover all the 1s and thus n marriages are possible.

Thus, it is concluded that the complete matching is possible.

Step-2

(b) Let us now consider another matrix with two or more 1s in each row and column as shown below

$$C = \begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & 0 & 1 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 \\ 1 & 1 & 1 & 1 & 1 \end{bmatrix}$$

In the above matrix, all 1s are covered in 4 lines, thus only 4 marriages are possible.

Therefore, complete matching is not possible in this case.