Abstract

P\_k-factorizations of complete bipartite graph have been studied by several researchers. For even value of k, the spectrum problem is completely solved [6, 7]. Here in this paper we will obtain a feasible network flow of P\_2k-factorization of a complete bipartite graph satisfying the conditions of P\_2k-factorization. In this paper we construct the disjoint flow paths in P\_2k-factorization of complete bipartite graph K\_(m,n) (for k=1 and 2). We deduce that P\_2k-factorization of complete bipartite graph is helpful in finding the disjoint flow paths in a complete bipartite graph K\_(m,n) (m=n). The result can be generalized for any value of k with m=n.

References


**Index Terms**

Computer Science  
Applied Mathematics

**Keywords**

Complete bipartite Graph, Factorization of Graph, Network Flow