Abstract

P_2k-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.


Index Terms

Computer Science Applied Mathematics

Keywords

Complete bipartite Graph, Factorization of Graph, Network Flow