Abstract

A permutation labeling of a graph $G$ is a bijective assignment of labels from $\{1, 2, 3, \ldots, p\}$ to the vertices of $G$ such that when each edge of $G$ has assigned a weight defined by the number of permutations of $f(u)$ things taken $f(v)$ at a time. Such a labeling $f$ is called permutation labeling of $G$. A graph which admits permutation labeling is called permutation graphs. In this paper I proved that the shadow graphs of path $P_n$, star $K_{1,n}$ and path union of shadow graphs of cycle $C_n$ are permutation graphs. Further I proved that the split graphs of path $P_n$ and star $K_{1,n}$ are permutation graphs.
Index Terms

Computer Science
Applied Mathematics

Keywords

Permutation labeling  Shadow graph  Split graph  path union.