Abstract

A dominating set $D$ of a graph $G = (V; E)$ is non-split dominating set if $hV n D_i$ is connected. The non-split domination number of $G$ is the minimum cardinality of a non-split dominating set in $G$. Let $D$ be a minimum dominating set in $G$. If a subset $D_0$ of $V n D$ is dominating in $G$, then $D_0$ is called an inverse dominating set with respect to $D$. Furthermore, if $V n D_0$ is connected, then $D_0$ is called an inverse non-split dominating set. The inverse non-split domination number of $G$ is the minimum cardinality of an inverse non-split dominating set in $G$.

In this paper, characterization of non-split dominating sets in the join and corona of two graphs are presented. Furthermore, explicit formulas for determining the non-split and inverse non-split domination numbers of these graphs are also determined.

References

- K. Ameenal Bibi, K. Selvakumar. The inverse split and nonsplit domination in graphs.
Non-split and Inverse Non-split Domination Numbers in the Join and Corona of Graphs


Index Terms

Computer Science
Applied Mathematics

Keywords

non-split domination inverse non-split domination join coronaifx