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 non-split 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 corona ifx