Abstract

A dominating set D of a graph G = (V;E) is non-split dominating set if hV n Di 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.

**Index Terms**

Computer Science Applied Mathematics

**Keywords**

non-split domination inverse non-split domination join corona if x