

THE BLAST DOMINATION IN MYCIELSKI'S GRAPH OF GRAPHS AND ZERO DIVISOR GRAPHS

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(Received: Sep. 26, 2019 Accepted: Oct. 15, 2019 Published: Dec. 31, 2019)

Abstract: In this paper, interesting results regarding the Mycielskian number of the Mycielski's graph of path $\mu(P_n)$, the Mycielski's graph of cycle $\mu(C_n)$, the Mycielski's graph of complete graph $\mu(K_n)$, the Mycielski's graph of complete bi-partite graph $\mu(K_{m,n})$, the Mycielski's graph of wheel graph $\mu(W_n)$, the Mycielski's graph off an graph $\mu(F_{1,n})$, the Mycielski's graph of tadpole graph $\mu(T_{m,n})$, the Mycielski's graph of snake graph $\mu(T_n)$ and the Mycielski's graph of zero divisor graphs $\mu(\Gamma(Z_n))$ under the domination parameters such as blast domination, distance-2 domination, blast distance-2 domination and independent distance-2 domination are investigated. The exact values of these new parameters for some special graphs are attained. The relation with other domination parameters have been discussed.

Keywords and Phrases: Blast domination number, Blast distance-2 domination number, Mycielski's graph.

2010 Mathematics Subject Classification: 05C76, 05C69.

1. Introduction and Preliminaries [6]

The concept of triple connected graphs was introduced by Paulraj Joseph et.al [9]. A graph is said to be triple connected if any three vertices lie on a path in G. Mahadevan et.al introduced the concept of complementary triple connected