

Domination in partitioned graphs with minimum degree two

Let V_1, V_2 be a partition of the vertex set in a graph G . For $i = 1, 2$, let γ_i denote the least number of vertices needed in G to dominate V_i . It is known that if G has order n and minimum degree two, then $\gamma_1 + \gamma_2 \leq 2n/3$. In this paper, we characterize those graphs of order n which are edge-minimal with respect to satisfying the conditions of connected, minimum degree at least two, and $\gamma_1 + \gamma_2 = 2n/3$.