

ON H -CORDIAL GRAPHS

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Abstract

A graph $G = (V, E)$ is called H - Cordial if it is possible to label the edges with the numbers from the set $N = \{+1, -1\}$ in such a way that at each vertex v , the algebraic sum of the labels on the edges incident with v is either $+K$ or $-K$ and the inequalities $|v_f(+K) - v_f(-K)| \leq 1$ and $|e_f(+1) - e_f(-1)| \leq 1$ are also satisfied, where $v_f(i)$ and $e_f(j)$ are respectively the number of vertices labeled with i and the number of edges labeled with j . The graph G is called H -cordial if it admits an H -cordial labeling. In this paper H -cordiality graph is investigated and proved with wheels graph, generalized Petersen Graph and Triangular snakes. Special ladder graph has proposed based on H -cordial graph.