Abstract

A (p, q) graph \( G \) is said to be a square sum graph if there exist a bijection \( f: V(G) \rightarrow \{0,1,2,\ldots,p-1\} \) such that the induced function \( f^*: E(G) \rightarrow \mathbb{N} \) given by \( f^*(u,v) = [f^*(u)]^2 + [f^*(v)]^2 \) for every \( uv \in E(G) \) are all distinct. In this paper the square sum labeling of total graph of path \( P_n \), cycle \( C_n \) and middle graph of path \( P_n \), cycle \( C_n \) are discussed.

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Index Terms

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