A (p, q) connected graph is edge-odd graceful graph if there exists an injective map \( f: E(G) \rightarrow \{1, 3, \ldots, 2q-1\} \) so that induced map \( f+: V(G) \rightarrow \{0, 1, 2, 3, \ldots, (2k-1)\} \) defined by \( f+(x) \equiv \sum f(x, y) \pmod{2k} \), where the vertex \( x \) is incident with other vertex \( y \) and \( k = \max\{p, q\} \) makes all the edges distinct.

**Abstract**

A (p, q) connected graph is edge-odd graceful graph if there exists an injective map \( f: E(G) \rightarrow \{1, 3, \ldots, 2q-1\} \) so that induced map \( f+: V(G) \rightarrow \{0, 1, 2, 3, \ldots, (2k-1)\} \) defined by \( f+(x) \equiv \sum f(x, y) \pmod{2k} \), where the vertex \( x \) is incident with other vertex \( y \) and \( k = \max\{p, q\} \) makes all the edges distinct.

**Reference**


**Index Terms**

Computer Science  
Applied Mathematics

**Key words**

Generalised n-squares  
Graceful Graphs  
Edge-odd graceful labeling

Edge-odd Graceful Graph