ON ODD-GRACEFUL LABELING OF DISJOINT UNION OF GRAPHS

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Abstract. Let \( G = (V, E) \) be a finite, simple and undirected graph having \( v = |V(G)| \) and \( e = |E(G)| \). A graph \( G \) with \( q \) edges is said to be odd-graceful if there is an injection \( f : V(G) \to \{0, 1, 2, \ldots, 2q - 1\} \) such that, when each edge \( xy \) is assigned the label \( |f(x) - f(y)| \), the resulting edge labels are \( \{1, 3, 5, \ldots, 2q - 1\} \).

Motivated by the work of Z. Gao [6], we have defined odd graceful labeling for some other union of graphs. In this paper we formulate odd-graceful labeling for disjoint unions of graphs consisting of generalized combs, ladder, star, bistar, caterpillar and path.

Keywords and Phrases: odd-graceful labeling, comb, caterpillar, bistar, ladder.
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REFERENCES


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