

Conditional Matching Preclusion Number of Certain Graphs

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Abstract

The matching preclusion number of a graph is the minimum number of edges whose deletion in a graph has a neither perfect matching nor an almost perfect matching. For many interconnection networks, the optimal sets are precisely those induced by a single vertex. Recently the conditional matching preclusion number of a graph was introduced to look for sets beyond those induced by a single vertex. It is defined to be the minimum number of edges whose deletion results in a graph with no isolated vertices and has neither a perfect matching nor almost perfect matching. In this paper we find the conditional matching preclusion number for triangular ladder, C_n with parallel chords, Trampoline Graph, diamond Snake Graph and K- Polygonal Snake Graph.
