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A CHARACTERIZATION OF THE BLOCK-TRANSFORMATION GRAPHS G^{101} AND G^{111}

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Abstract

The vertices and blocks of a graph G are its members. The block-transformation graph G^{101} of a graph G is the graph, whose vertex set is the union of vertices and blocks of G, in which two vertices are adjacent whenever the corresponding vertices of G are adjacent or the corresponding blocks of G are nonadjacent or the corresponding members of G are incident. The block-transformation graph G^{111} of a graph G is the graph, whose vertex set is the union of vertices and blocks of G, in which two vertices are adjacent whenever the corresponding vertices of G are adjacent or the corresponding blocks of G are adjacent or the corresponding members of G are incident. In this paper, we give a characterization for the block-transformation graphs G^{101} and G^{111}.

Key Words : *Block-transformation, Characterization, Guest graph, Host graph.*

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