

THE SHARP BOUNDS OF ZAGREB INDICES ON CONNECTED GRAPHS

YU-MING CHU, MUHAMMAD KASHIF SHAFIQ, MUHAMMAD IMRAN,
MUHAMMAD KAMRAN SIDDIQUI, HAFIZ MUHAMMAD AFZAL SIDDIQUI,
SHAKILA BABY AND MURAT CANCAN

Abstract. The analysis of a structure is based on its configuration. The common means available for this purpose is the use of graph products. The rooted product is specially relevant for trees. Chemical application of graph theory predicts different properties like physico-chemical properties, thermodynamics properties, chemical activity, biological activity, etc. Certain graph invariants known as topological indices are used for characterization of these properties. These indices have a promising role in chemical sciences and QSAR/QSPR studies. In this paper the lower and upper bounds of Zagreb indices, multiple Zagreb indices and F-index for rooted product of F-sum on connected graphs are determined.

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