On the degree locating indices of graphs

Nasr Zeyada¹ and Anwar Wardi²

 1 University of Jeddah

²University of Mysore

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Abstract

Graph theory has supported chemist with topological indices which predict different physicochemical properties such as boiling point, entropy, acentric factor etc. of chemical compounds. In this article, we introduce two new topological indices called degree locating indices, based on the degree and location of the vertices, we present exact expressions for some families of standard graphs and we get the exact values of these indices for any graph of diameter two. Finally, we compute these indices for the join of graphs, book graph and firefly graph.

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