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LÓPEZ-BONILLA INDEX FOR GRAPHS

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Abstract: Chemical reactivity or physical attributes are correlated with a chemical structure through a number known as the topological index of that structure. Several topological indices have been defined on graphs using degrees of vertices, for instance first and second Zagreb indices. In this paper, we introduce a new topological index of a graph called López-Bonilla index using tension on edges. Further, we establish some inequalities and compute López-Bonilla index for some standard graphs. Further, a QSPR analysis has been carried to demonstrate that