M-Polynomials and Topological Indices Related to Graph Operations

Kashif Ali, Department of Mathematics, COMSATS University Islamabad, Lahore Campus, Pakistan

M-polynomial of different molecular structures helps to calculate many topological indices which remain invariant under graph automorphism. In this paper, we find the M-polynomials and valency based topological indices related to sum, product, corona and linearity of connected graphs. We also discuss the distance base topological parameters of the line graph of any k-subdivided graph.

Keywords: Graph Operations, Topological Indices, M-Polynomials.