

Abstract

Degree- and distance-based topological invariants are important not only as graph invariants but also for their application in physics, chemistry and pharmacy. The present study is about Schultz invariants of a pentachains, which are classified as linear and bilinear as straight and alternate. It is generally observed that computing the Schultz invariants directly by definitions is extremely difficult. So, we plan to follow divide and conquer rule to introduce the idea of this polynomial. We actually plan to split the vertices into disjoint classes and then plan to write the number of paths in terms of polynomials for these classes, which will ultimately serve as bases for Schultz invariants. Finally we plan to give examples to show how these based polynomials actually work.