

Abstract

The main purpose of this thesis is to study the entropy of weighted graphs by taking edge weights on degree-based Topological Indices (for first and second Zagreb Index, the general Randić Index, Harmonic and Sum-Connectivity Index) and Atomic Bond Connectivity, Sombor indices (Sombor Index and Sombor Reduced Index) as a weight and prove results on it taking some graphs like Connected Graph, Star Graph, Unicyclic Graph, Regular Graph, Complete Graph, Complete Bipartite Graph, Chemical Graph and Tree Graph. We also prove the entropy by taking Dendrimers.