

# Abstract

Let  $G=(V,E)$  be a graph then its F-index is obtained by the summation of the cube of degree of each vertex. In this research work, the extremal graph among the class of tricyclic graph with three cycles are determined by introducing some transformations of F index. In addition, we order different sub-classes for the F-index in the same class of graphs. Mainly, we compute the lower and upper bound in which the F-index of each graph of the same class falls.