

Abstract

The Wiener index of a graph is defined as the sum of distances between all pairs of vertices of the graph. Bounds on Wiener index of connected graph is very useful in many manners. Wiener index of different graphs have been found for example path, cycles etc. With the help of the Wiener index of these graphs, some other graphs were introduced in order to get help to put the bound on Wiener index of connected graphs. In this thesis, we review on bounds on Wiener index of connected graphs in terms of number of vertices and diameter of the graph also provide bound on Wiener index of connected graphs in terms of number of vertices, number of edges and diameter of the graph. By using the same parameters number of vertices, number of edges and diameter, we review the lower and upper bound on Wiener index of connected triangle and quadrangle free graphs.