Summary and Conclusion

In this thesis, the b-chromatic numbers of vertex corona product of path graph and cycle graph with origami graph and bistar graph have been obtained. The b-coloring of corona product of path graph and cycle graph with tadpole graph and barbell graph have been discussed.

The author has proved chromatic number of corona product of cycle graph with some special graphs. Vertex corona products of fan graph families with cycle, path, star and wheel graph have been developed.

The exact value for the b-chromatic number of vertex corona product of star graph with fan graph, wheel graph with fan graph, fan graph with cycle graph, fan graph with path graph, path graph with fan graph and fan graph with double fan graph have been studied.

Some new ideas have been discussed in vehicular ad hoc networks and proposed CLAT algorithms.

Further the results will be extended to compare with other chromatic number of graphs and its complexity.