CHAPTER 6

CONCLUSION AND FUTURE SCOPE

In this thesis, the discussion of three problems from three different fields such as Pure Mathematics, VLSI Design and Bioinformatics have been considered and found some interesting results. Some theoretical results of a particular class of Euler Graph, constructed from Euler Diagram have also been discussed.

In chapter 2, the solution of Gold Bach conjecture problem has been forwarded with the help of Consecutive Even Number Finding Graph (CENFG), which gives a new direction of application of graph theory in Pure Mathematics. Further, there is a scope for solving many long standing problems in Pure Mathematics by applying the theoretical concepts of Graph Theory such as Twin Prime conjecture, Mersenne Prime conjecture and many more.

In chapter 3, a new algorithm has been developed to find the Shortest Superstring of a given DNA spectrum having fixed and variable length of fragments. There are ample of scope for solving many unanswered bioinformatics problems by applying the Graph theoretical concepts. One of the top challenges in bioinformatics is mapping human brain using neural network.
In chapter 4, some theoretical results of a particular class of Euler diagram have been discussed. Further, there is a scope for studying the theoretical concepts of isomorphism of Euler Graph, which is a NP – complete problem.

In chapter 5, a new generalized Polish expression (NGPE) have been proposed for representing a Slicing and Non Slicing floorplan having rectangular as well as L shaped modules. Further, there is a scope for modifying is NGPE for representing a Slicing and Non Slicing floorplan having any shape of modules which is more important in VLSI design technology.