

**Abstract:-**

The basic ideas of graph theory were introduced during 18th century by the Swiss mathematician Leonard Euler. Since then relatively in a short period the major development of graph theory has occurred and inspired to a larger degree and it has become the source of interest to many researchers. To some extent this may be due to the ever growing importance of computer science and its connection with graph theory.

Today, graph theory is one of the most flourishing branches of modern mathematics with wide applications to combinatorial problems and to classical algebraic problems. Graph theory has applications in diverse areas such as social sciences, linguistics, physical sciences, communication engineering etc. Besides this, graph theory plays an important role in several areas computer science such as switching theory, logical design, artificial intelligence, formal languages, computer graphics, compiler writing, information organization and retrieval etc. Because of this diversity in applications it is useful to develop and study the subject in abstract terms of the objects of any particular system in

which one maybe interested.