Abstract

Nathanson was the pioneer in introducing the concepts of Number Theory, particularly, the “Theory of Congruences” in Graph Theory. Thus he paved the way for the emergence of a new class of graphs, namely “Arithmetic Graphs”. Cayley graphs are another class of graphs associated with the elements of a group. If this group is associated with some arithmetic function then the Cayley graph becomes an Arithmetic graph.

Graph product is a fundamental tool with rich applications in both graph theory and theoretical computer science. The extensive literature on products that has evolved over the years presents a wealth of profound and beautiful results.

In this paper, results related to some properties of Cartesian product graphs of Euler totient Cayley graphs with Arithmetic
Some Properties of Cartesian Product Graphs of Cayley Graphs with Arithmetic Graphs

References


Index Terms

Computer Science Applied Mathematics

Keywords

Euler totient Cayley graph, Arithmetic