Abstract

The purpose of this study is to find the acyclic chromatic number for central graph, middle graph, total graph and line graph of Double star graph $K_{1,n,n}$, denoted by $C(K_{1,n,n})$, $M(K_{1,n,n})$, $T(K_{1,n,n})$ and $L(K_{1,n,n})$ respectively. Vernold Vivin (et. al., 2011) [9], have proved that the star chromatic number and equitable chromatic number of these graphs are same. We discuss the relationship between the acyclic and star chromatic number of these graphs.

References

- D. Michalak, 'On middle and total graphs with coarseness number equal 1', Graph Theory, 1018,139-150,1981.

**Index Terms**

Computer Science  
Applied Mathematics

**Keywords**

Central Graph  
Middle Graph  
Total Graph  
Line Graph  
And Acyclic Coloring