CHARACTERIZATION OF A GRAPH VALUED FUNCTION DEFINED ON BLOCKS, LINES AND CUT VERTICES OF A GRAPH

R. SAMPATHKUMAR ¹, NARASIMHAN G ², R. CHANDRASEKHAR ³ AND S. PADMANABHAN ⁴

1,2,4 Assistant Professor of Mathematics, R N S Institute of Technology,
Channasandra, Bengaluru, India. – 61
3 Professor, Department of MCA, PESIT, Bengaluru, India. – 85

ABSTRACT

In this paper, we introduce a new graph valued function called "Total Block Line Cutvertex graph, denoted as TBn (G) of a graph G. We present some characterizations of graphs whose TBn (G) are planar, outerplanar, maximal outerplanar and crossing number one. In addition, we establish the result of Eulerian Total Block Line Cut vertex graphs.

KEYWORDS: Planar And Nonplanar Graphs, Cutvertex, Line Graph, Wheel Graph, Total Blict Graph