# THE DEGREE OF AN EDGE IN CARTESIAN PRODUCT AND COMPOSITION OF TWO FUZZY GRAPHS <br> K. RADHA ${ }^{1} \& N$. KUMARAVEL ${ }^{2}$ <br> ${ }^{1}$ P.G. Department of Mathematics, Periyar E.V.R. College, Tiruchirappalli, Tamil Nadu, India <br> ${ }^{2}$ Department of Mathematics, Selvamm Arts and Science College, Namakkal, Tamil Nadu, India 


#### Abstract

A fuzzy graph can be obtained from two given fuzzy graphs using Cartesian product and composition. In this paper degree of an edge and total degree of an edge are introduced and we find the degree of an edge in fuzzy graphs formed by these operations in terms of the degree of edges in the given fuzzy graphs in some particular cases.


KEYWORDS: Cartesian Product, Composition, Degree of a Vertex, Degree of an Edge

