EDGE DOMINATION IN INTUITIONISTIC FUZZY GRAPHS

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Abstract: In this paper we introduce the concepts of edge domination and total edge domination in product intuitionistic fuzzy graphs. We determine the edge domination number $\gamma'(G)$ and the total edge domination number $\gamma'_t(G)$ for several classes product intuitionistic fuzzy graphs and obtain bounds for the same. We also obtain Nordhaus - Gaddum type results for this parameter.

Keywords and Phrases: Fuzzy graph, intuitionistic fuzzy graphs, product intuitionistic fuzzy graph, edge domination number, total edge domination number and independent edge domination number.

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1. Introduction
In 1736, Euler first introduced the concept of graph theory. In the history of mathematics, the solution given by Euler of the well known Konigsberg bridge problem