Abstract

Let G be an IFG. Then \( D \) is said to be a strong (weak) dominating set if every \( v \) is strongly (weakly) dominated by some vertex in \( D \). We denote the strong (weak) intuitionistic fuzzy dominating set by \( \text{sid-set} \) (\( \text{wid-set} \)). The minimum vertex cardinality over all the \( \text{sid-set} \) (\( \text{wid-set} \)) is called the strong (weak) dominating number of an IFG and is denoted by \( \gamma_s \) (\( \gamma_w \)).

In this paper, we introduce the strong (weak) domination in intuitionistic fuzzy graphs and obtain some bounds in IFG.

References


**Index Terms**

Computer Science | Fuzzy Systems

**Keywords**

Intuitionistic fuzzy graph, strong (weak) domination, strong (weak) domination number, dominating critical