

## PROPERTIES OF FUZZY PERFECT INTRINSIC EDGE-MAGIC GRAPHS

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**Abstract:** In this paper, we have discussed the idea of fuzzy perfect intrinsic edge-magic labelling and perfect intrinsic edge-magic graphs. We have checked fuzzy path, cycle, paw graph, banner graph, star graph & friendship graph are perfect intrinsic edge-magic graphs with intrinsic super constant. The vital and competent condition also discussed for the fuzzy perfect intrinsic edge-magic graphs. Quasi perfect intrinsic edge-magic graphs are also introduced. Some theorems related to stated graphs have been presented.

**Keywords and Phrases:** Fuzzy perfect intrinsic edge-magic labelling, quasi perfect intrinsic edge-magic graph, intrinsic super constant, weak constant.

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### 1. Introduction

Fuzzy set was firstly introduced by [13]. Then various researches added productive concepts to develop fuzzy sets theory like [10] and [3]. In 1987 Bhattacharya