

MAX CONNECTIVITY AND INHERENT VALUE OF A SMART FUZZY GRAPH

J. Jon Arockiaraj and Chaarumathi P. M.

PG and Research Department of Mathematics,
St. Joseph's College of Arts and Science (Autonomous),
Cuddalore - 607001, Tamil Nadu, INDIA

E-mail : jonarockiaraj@gmail.com, pmchaarumathi@gmail.com

(Received: Aug. 08, 2021 Accepted: Oct. 01, 2021 Published: Nov. 30, 2021)

Special Issue

Proceedings of International Virtual Conference on "Mathematical Modelling, Analysis and Computing IC- MMAC- 2021"

Abstract: The internet of things is the building blocks of the latest technology. By adding intelligence into everyday objects, it transforms them into smart objects. The internet of things acts as a podium between these smart objects and the human beings. In this paper, we have introduced the max connectivity and inherent value of quantum smart fuzzy graph. This paper also studies the comparison among quantum edge, max connectivity and inherent value of quantum smart fuzzy graph.

Keywords and Phrases: Max connectivity, inherent value.

2020 Mathematics Subject Classification: 05C78, 54C05.

1. Introduction

The uncertainty and vulnerability in the classic graph was overcome with the idea of fuzzy sets that was introduced by Zadeh in 1965. After which the subject became to gain tremendous impact and applications in engineering and technology. Using Zadeh's concept of fuzzy relation, the definition of fuzzy graph was termed by Kaufmann in 1973. Later Rosenfeld and other scientists notably like Yeh and Bang laid the foundation for fuzzy graph theory. This paved way for more concepts like path, tree, connectedness, bridges, etc. Fuzzy graph theory has various applications