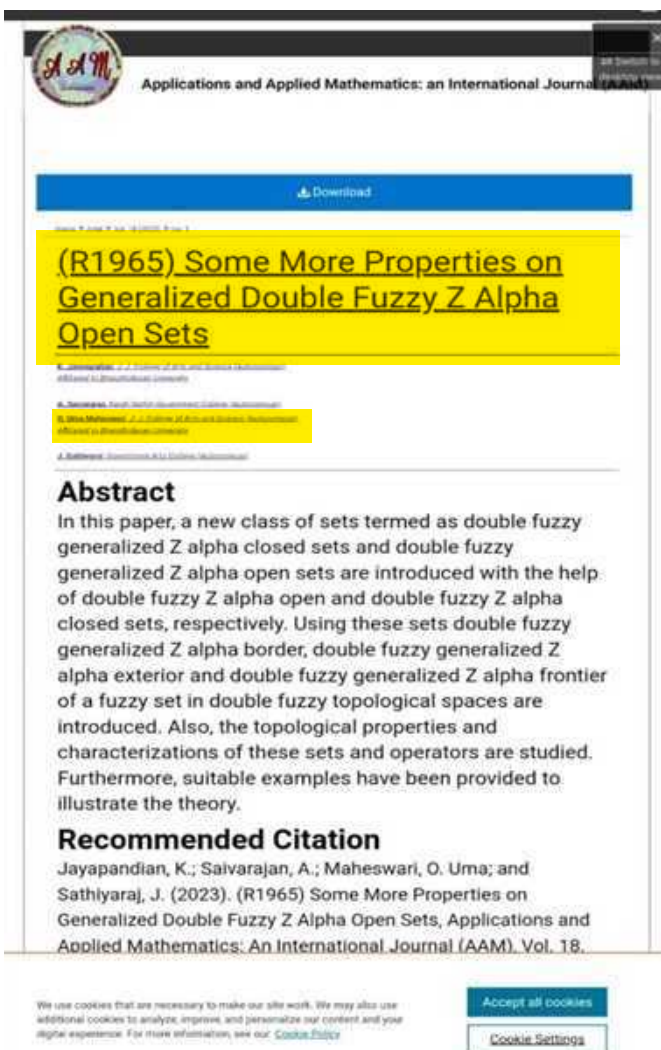


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DEPARTMENT OF MATHEMATICS AND STATISTICS**

3.4.3. Number of Research papers per teacher in the journals notified on UGC website during the last year: (2023-2024)



Applications and Applied Mathematics: An International Journal (AAM)

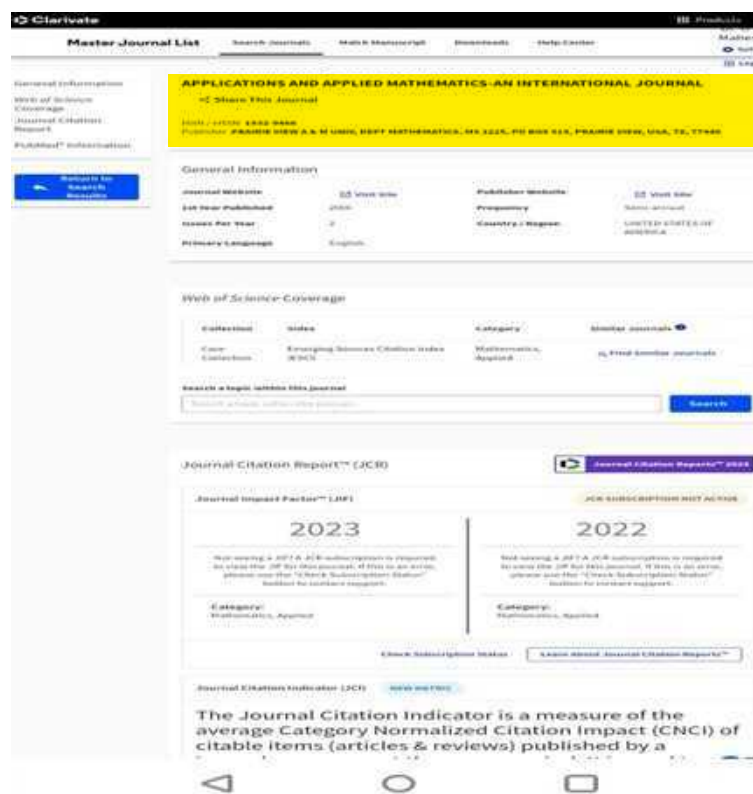
(R1965) Some More Properties on Generalized Double Fuzzy Z Alpha Open Sets

Abstract

In this paper, a new class of sets termed as double fuzzy generalized Z alpha closed sets and double fuzzy generalized Z alpha open sets are introduced with the help of double fuzzy Z alpha open and double fuzzy Z alpha closed sets, respectively. Using these sets double fuzzy generalized Z alpha border, double fuzzy generalized Z alpha exterior and double fuzzy generalized Z alpha frontier of a fuzzy set in double fuzzy topological spaces are introduced. Also, the topological properties and characterizations of these sets and operators are studied. Furthermore, suitable examples have been provided to illustrate the theory.

Recommended Citation

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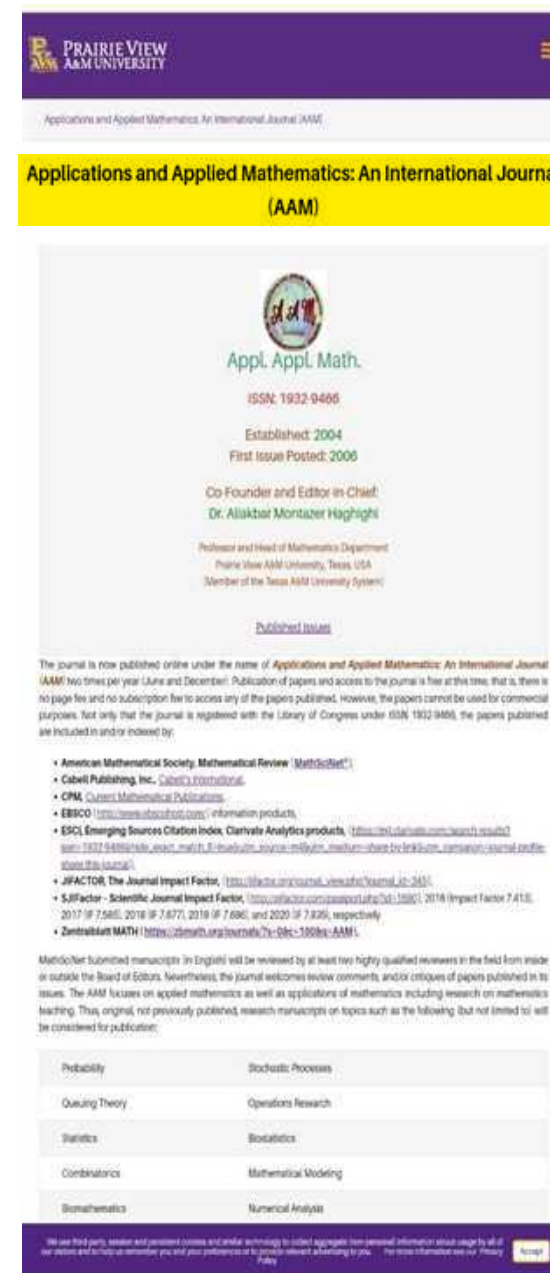
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AN INTRO TO δ_d -FUZZY GRAPHSJ. Jeromi Jovita¹, O. Uma Maheswari, and N. Meenal

ABSTRACT. Graph is a easy way to represent the real life situation. Graph is a combination of Points and Lines. In network analysis, the degree of a point plays a prominent role in Graph Theory. The degree of a point is the number of connections it has with the other points in the point set. Among the degrees of all the points in graph G^* , the minimum value is denoted by $\delta(G^*)$. In this article, a new abstraction of fuzzy graph is initiated by combining the parameters, degree of a point and minimum degree of the graph and termed it is as δ_d -fuzzy graphs. Order and Size on δ_d -fuzzy graphs were studied and Handshaking Lemma were explained with illustration. Idea on δ_d -regular fuzzy graph were interpreted using the theorems. Also operations on graphs such as union, intersection, complement, cartesian product, Tensor Product, Corona are extended for δ_d -fuzzy graphs.

1. INTRODUCTION

A graph is a set of points and lines. The lines between points will form a model of relations using graphical representation. [14] Fuzzy set theory was proposed by Prof. Zadeh which has been efficiently used to model many real world problems, which are uncertain. In a crisp graph, the members of the sets takes a single value of 0 or 1. For this reason, the uncertainties of real world problems

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