South East Asian J. of Mathematics and Mathematical Sciences Vol. 17, No. 2 (2021), pp. 181-188

ISSN (Online): 2582-0850

ISSN (Print): 0972-7752

ON FUZZY GENERALIZED PRE REGULAR WEAKLY CONTINUITY

Firdose Habib and Khaja Moinuddin

Department of Mathematics, Maulana Azad National Urdu University Hyderabad, Urdu University Road, Hyderabad, Telangana - 500032, INDIA

E-mail: firdosehabib_90@gmail.com, kmoinuddin71@gmail.com

(Received: Jul. 03, 2020 Accepted: May 30, 2021 Published: Aug. 30, 2021)

Abstract: In this paper Fuzzy generalized pre regular weakly continuity has been introduced. Also, Fuzzy generalized pre regular weakly-irresolute functions, Fuzzy generalized pre regular weakly open mappings, Fuzzy generalized pre regular weakly closed mappings has been introduced and investigated.

Keywords and Phrases: Fuzzy generalized pre regular weakly continuity, Fuzzy generalized pre regular weakly-irresolute functions, Fuzzy generalized pre regular weakly open mappings, Fuzzy generalized pre regular weakly closed mappings.

2020 Mathematics Subject Classification: 54A40, 03E72.

1. Introduction

The concept of fuzziness has been implemented in almost all branches of mathematics. With the advent of fuzzy theory in 1965 research has taken place at a rapid pace in this field and almost fuzzification of every branch of mathematics took place. Fuzzy topology introduced by C. L Chang [2] in 1968 is the generalization of the classical topology and with its introduction various fuzzy sets were introduced and studied. Fuzzy function, Fuzzy continuous function and fuzzy uniformly continuous functions were introduced and studied by Zhang Guang-Quan in 1989 in the paper [9] titled "Fuzzy continuous function and its properties". In 1992 fuzzy-continuous functions were introduced and studied by Jae Rong Choi et.al [3]. In 2017 Fuzzy weakly e-closed functions were introduced and studied by