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FIXED POINT RESULT FOR A CLASS OF EXTENDED INTERPOLATIVE CIRIC-REICH-RUS $(\alpha, \beta, \gamma F)$ -TYPE CONTRACTIONS ON UNIFORM SPACES

Mithun Paul, Krishnadhan Sarkar* and Kalishankar Tiwary

Department of Mathematics, Raiganj University, West Bengal, INDIA

E-mail: mithunmscmath@gmail.com, tiwarykalishankar@yahoo.com

*Raniganj Girls' College, Raniganj, Paschim Bardhaman, West Bengal, INDIA

E-mail : sarkarkrishnadhan@gmail.com

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Abstract: In this paper we have generalized the extended interpolative Ciric-Reich-Rus type ψF -contraction given in [22] by introducing extended interpolative Ciric-Reich-Rus type $(\alpha, \beta, \gamma F)$ of type-I and type-II contractions. Using these type contractions we have established some unique fixed point results in S-complete Hausdorff uniform spaces. We have discussed about some basic definitions, properties, lemmas and theorems on uniform spaces in the introduction and preliminary sections. Some corollaries and examples are also given on the basis of the results.

Keywords and Phrases: (α, β) -admissible function, S-complete Hausdorff uniform space, E-distance, p-Cauchy sequence, extended interpolative Ciric-Reich-Rus type $(\alpha, \beta, \gamma F)$ -contractions of type-I and type-II.

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1. Introduction

Fixed point theorem is one of the most important and powerful tool in modern Mathematics specially in Functional Analysis. In 1922, Stefan Banach established a contraction, which is well-known as Banach Contraction Principle (BCP) after