

Abstract 94 – Paper ID: 111 **$(\alpha - \psi)$ -interpolative Kannan and Ćirić–Reich–Rus-type cyclic contraction in b -metric spaces**

Loitongbam Melei Singh¹, Yumnam Rohen Singh¹

¹Department of Mathematics, Manipur University, Canchipur–795003, India

Email: meleiloitongbam@gmail.com

Abstract

In this paper, we introduce the concept of $(\alpha - \psi)$ -interpolative Kannan and Ćirić–Reich–Rus-type cyclic contraction. Further, we investigate the existence and uniqueness of fixed points in b -metric space by using $(\alpha - \psi)$ -interpolative Kannan and Ćirić–Reich–Rus-type cyclic contraction. Our results generalize various earlier results in the literature.

Keywords: Fixed point, b -metric space, α -admissible, $(\alpha - \psi)$ -interpolative Kannan cyclic contraction, $(\alpha - \psi)$ -interpolative Ćirić–Reich–Rus-type cyclic contraction