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COINCIDENCE AND COMMON FIXED-POINT THEOREM USING COMPATIBLE MAPPING OF TYPE (P) ON INTUITIONISTIC FUZZY b-METRIC SPACES

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Abstract: In this paper we have defined compatible type (P) mapping in the structure of intuitionistic fuzzy b-metric space and have proved a coincidence point theorem in intuitionistic fuzzy b-metric space.

Keywords and Phrases: Fuzzy b-metric space, Intuitionistic fuzzy b-metric space, Compatible mapping, Compatible type (P) mapping.

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1. Introduction

The thought of b-metric space was introduced by Bakhtin [2] in 1989. The class of b-metric spaces is larger than that of metric spaces. In 2016, Nadaban [7] introduced the concept of fuzzy b-metric space and approved that the study in fuzzy b-metric spaces will obtain a lot of applications of as well as in mathematical engineering than in computer science. With the idea of intuitionistic fuzzy sets, Park [8] in 2004 defined the concept of intuitionistic fuzzy metric spaces with the help of continuous t-norm and continuous t-conorm as a generalization of fuzzy