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COMMON FIXED POINT THEOREMS OF ALMOST SUZUKI TYPE CONTRACTIONS IN BI COMPLEX VALUED $b ext{-}METRIC$ SPACES

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Abstract: We study common fixed point theorems of Suzuki type contractions employing alpha admissible function for two selfmaps in bicomplex valued b-metric space rendered by rational expressions. These results are enhanced through examples. Also, as a consequence, we obtain common fixed point theorems for bi complex valued b-metric space endowed with a partial order.

Keywords and Phrases: Bicomplex valued b-metric spaces, α -admissible function, Suzuki type contractions, common fixed points.

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1. Introduction

The notion of complex valued metric spaces was introduced by Azam [3]. Latter, the generalization of complex valued metric spaces namely complex valued b-metric spaces, complex valued rectangular metric spaces, extended complex valued metric spaces considered by several authors, for example we refer [1, 2, 5, 8, 14, 16, 17, 19, 20]. Recently, the generalized version of complex valued metric spaces namely bicomplex valued metric spaces were introduced by Cho et. al., [6].