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COMMON FIXED POINT THEOREMS IN BICOMPLEX VALUED METRIC SPACES UNDER BOTH RATIONAL TYPE CONTRACTION MAPPINGS SATISFYING E. A. PROPERTY AND INTIMATE MAPPINGS

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Abstract: The main purpose of this paper is to investigate some common fixed point theorems in bicomplex valued metric spaces under both rational type contraction mappings satisfying E. A. property and intimate mappings. Our results generalize some earlier results (Rajput & Singh, 2014; Meena, 2015) and extend some existing theorems (Azam et al., 2011; Rouzkard & Imdad, 2012) regarding common fixed point theorems in complex valued metric spaces. A few examples are provided to justify the results obtained and the course of future prospect of works as carried out is sketched in the paper.

Keywords and Phrases: Bicomplex valued metric space, point of coincidence, E. A. property, common fixed point, intimate mapping.

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