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FIXED POINT THEOREMS FOR A PAIR OF WEAKLY INCREASING SELF MAPS IN PARTIALLY ORDERED PARTIAL b-METRIC SPACES UNDER $\alpha-\psi-\varphi$ CONTRACTION

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Abstract

In this paper we consider the concept of $\alpha - \psi - \varphi$ contraction for a pair of weakly increasing (decreasing) self mappings on a complete partially ordered partial b - metric space. We study the existence of common fixed points for two such weakly increasing (decreasing) self mappings on complete partially ordered partial b - metric spaces controlled by a generalized contractive type condition. Supporting example is also provided. This paper is a sequel to Sastry et.al [26].

Key Words: Common fixed point, $\alpha - \psi - \varphi$ contractive mappings, b - metric, Partial b - metric, Ordered partial b - metric space, Partially ordered partial b - metric space, Weakly increasing and decreasing mappings, Altering distance functions.

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