MULTIVALUED $\mathcal{R}_{\psi,\phi}$-WEAKLY CONTRACTIVE MAPPINGS IN ORDERED CONE METRIC SPACES WITH APPLICATIONS

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Abstract. In this article we define multivalued $\mathcal{R}$-weakly contractive multi-valued mappings in ordered cone metric spaces without assumption of normality on cone, and generalize many results existing in the literature. We provide applications to solutions of integral inclusions and give non-trivial examples to support our main theorem.

Key Words and Phrases: Ordered cone metric space, multi-valued mapping, $\mathcal{R}$-weakly contractive mapping, differential inclusion.

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