ON φ-COINCIDENCE AND COMMON φ- FIXED POINTS IN ORDERED METRIC SPACES

R. A. RASHWAN, I. M. SHIMAA

Abstract:

The aim of this work is to obtain some existence and uniqueness fixed point theorems for mixed g-monotone mapping in any number of variables under general contractive conditions in partially ordered metric spaces by using the condition of weak compatibility. Our results are different, more natural and generalizations of many results on multidimensional fixed points. For illustration of the effectiveness of our generalizations, some examples are equipped in this paper.

Keywords:

φ-coincidence point; Common φ- fixed point; Ordered metric spaces; Mixed g-monotone property; Weakly compatible mappings.

Published In: