

COUPLED FIXED POINTS OF MONOTONE MAPPINGS IN A METRIC SPACE WITH A GRAPH

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Abstract. In this work, we define the concept of mixed G -monotone mappings defined on a metric space endowed with a graph. Then we obtain sufficient conditions for the existence of coupled fixed points for such mappings when a weak contractivity type condition is satisfied.

Key Words and Phrases: Directed graph, coupled fixed point, mixed monotone mapping, multi-valued mapping.

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