Fixed Point Theory, 19(2018), No. 1, 359-368
DOI 10.24193/fpt-ro.2018.1.27
http://www.math.ubbcluj.ro/~nodeacj/sfptcj.html

DISLOCATED QUASI-METRIC AND GENERALIZED CONTRACTIONS

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Abstract. The paper contains some fixed point theorems for generalized contractions in dislocated quasi-metric spaces. The simplest requirement is condition: $p(f(y), f(x)) \leq g(p(y, x))$, for all $x, y \in X$, where p is a dislocated quasi-metric on X (if $p(x, y) = p(y, x) = 0$, then $x = y$; $0 \leq p(x, z) \leq p(x, y) + p(y, z)$) and g is a comparison function of a general type. Our results are far extensions of some known fixed point theorems for dislocated quasi-metric spaces.
Key Words and Phrases: Dislocated quasi-metric, fixed point, generalized contraction, fixed point, cyclic mapping.
2010 Mathematics Subject Classification: 54H25, 47H10, 54E99.

Acknowledgement. The work has been supported by the Polish Ministry of Science and Higher Education.

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Received: January 6, 2016; Accepted: March 12, 2016.