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Pathak, H.K., Shahzad, N.

Fixed point results for generalized quasicontraction mappings in abstract metric spaces

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^a School of Studies in Mathematics, Pt. Ravishankar Shukla University, Raipur (C.G.) 492010, India

^b King Abdul Aziz University, Department of Mathematics, PO Box 80203, 21589 Jeddah, Saudi Arabia

Abstract

In this paper, we introduce the concept of generalized quasicontraction mappings in an abstract metric space. By using this concept, we construct an iterative process which converges to a unique fixed point of these mappings. The result presented in this paper generalizes the Banach contraction principle in the setting of metric space and a recent result of Huang-Zhang for contractions. We also validate our main result by an example. © 2009 Elsevier Ltd. All rights reserved.

Author Keywords

Cone metric space; Generalized quasicontraction mapping

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