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CONVERGENCE THEOREMS FOR TWO INFINITE FAMILIES OF MULTIVALUED NONEXPANSIVE MAPPINGS

R. A. RASHWAN[1] AND S. M. ALTWQI[2]

R. A. Rashwan and S. M. Altwqi
[1,2] Department of Mathematics, Faculty of Science,
Assiut University, Assiut 71516, Egypt

Abstract

In this paper, we introduce an iterative scheme for two families of multivalued nonexpansive mappings $\{T_i\}_{i=1}^{\infty}$ and $\{S_i\}_{i=1}^{\infty}$ in a uniformly convex real Banach space. Strong and weak convergence theorems are proved using the proposed iterative process under certain condition. Our results improve and extend several known results.

Key Words and Phrases : *Common fixed points, Ishikawa iteration Process, Multivalued mappings, Nonexpansive mapping, Banach spaces.*

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