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A BEST PROXIMITY POINT THEOREM FOR WEAKLY ψ-CONTRACTIVE NON-SELF-MAPPINGS

U. KARUPPIAH[1] AND M. GUNASEELAN[2]
[1] Department of Mathematics,
St.Joseph's College(Autonomous)
Tiruchirappalli-620 002.
[2] Department of Mathematics,
Sri Sankara Arts and Science College,
Enathur, Kanchipuram-631 561.

Abstract

Let us consider a map $T : A \to B$ where A and B are two non empty subsets of a metric space X.The aim of this article is to provide sufficient conditions for the existence of a unique point x^* in A,called the best proximity point,which satisfies $d(x^*, Tx^*) = d(A, B) := \inf\{d(a, b) : a \in A, b \in B\}$ under weakly ψ-contractive mappings. These results are generalizations of the results of V. Sankar Raj (2011) [13].

Key Words : *Fixed points, Weakly ψ-contractive non self maps, P-property, Best proximity points.*