Abstract

A best proximity point for a non-selfmapping is that point whose distance from its image is as small as possible. In mathematical language, if X is any space, A and B are two subsets of X and T: A → B is a mapping. We can say that x is best proximity point if \( d(x, Tx) = d(A, B) \) and this best proximity point reduces to fixed point if mapping T is a selfmapping.

The main objective in this paper is to prove the best proximity point theorem for the notion of Geraghty-contractions by using MT-function \( \beta \) which satisfies Mizoguchi-Takahashi’s condition (equation (i)) in the context of metric space and we also provide an example to support our main result.

References


Index Terms

Computer Science
Applied Mathematics

Keywords
Best proximity point, P-property, MT-condition.