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 \( T: A \rightarrow B \) 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

Best Proximity Point for Generalized Geraghty-Contractions with MT-Condition


Index Terms

Computer Science
Applied Mathematics

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