

**EXTENSION OF FIXED POINT THEOREMS TYPE
 T -ZAMFIRESCU MAPPING IN CONE METRIC SPACE**

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Abstract: The objective of this paper is to obtain sufficient conditions for the existence of fixed point of T -Zamfirescu in complete cone metric spaces and we prove fixed point theorem for an extended Kannan and Chatterjea type T -contraction mapping in a cone metric space. Our results generalize recent results existing in the literature of T -Zamfirescu mappings in cone metric space.

Keywords and Phrases: Cone Metric Space, T -Zamfirescu mapping, Cone normed space.

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1. Introduction

In [4], Huang and Zhang introduced the concept of cone metric space as a generalization of metric space, in which they replace the set of real numbers with a real Banach space. After that, many others [1, 2, 5, 6, 7, 12] proved numerous fixed point theorems for contractive type mappings on a cone metric space. Morales and Rojas [10], [9], [11] have extended the concept of T -contraction mappings to cone metric space by proving fixed point theorems for T -Kannan, T -Zamfirescu, T -weakly contraction mappings. The purpose of this paper is to prove fixed point theorem for an extended Kannan and Chatterjea T -Zamfirescu type mapping in a cone metric space. Our results pull out and generalized fixed point theorems of [8].