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SOME FIXED POINT RESULTS IN CONE METRIC SPACES FOR RATIONAL CONTRACTIONS

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Abstract: In this paper, we prove the some fixed point theorem in cone metric spaces for rational expression in normal cone setting. Our results generalized the main result of Dass, Gupta[11].

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1. Introduction

The Banach contraction principle with rational expressions have been expanded and some fixed and common fixed point theorems have been obtained in [1],[2]. Huang and Zhang [3] initiated cone metric space, which is a generalized of metric spaces, by substituting the real number with ordered Banach spaces. They have considered convergence in cone metric spaces, introduction completeness of cone metric spaces, and proved a Banach contraction mapping theorems, and some other fixed point theorems involving contractive type mapping in cone metric spaces using normality condition. Later, various authors have proved some common fixed point theorems with normal and non-normal cone in these spaces [4], [5], [6], [7], [8]. Quite recently Muhammad Arshad et al. [9] have introduction almost Jaggi and gupta contraction in Partially ordered metric space to prove the fixed point theorem. In this paper we prove the some fixed point Result in cone metric spaces