

SOME COMMON FIXED POINT RESULTS IN 2-BANACH SPACES

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Abstract: In this paper, we have proved some common fixed point theorems of a family of self maps without continuity in 2-Banach space. We have used functions on \mathbb{R}_+^5 to \mathbb{R}_+ and also generalize many existing results.

Keywords and Phrases: 2-norm, 2-Banach.

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1. Introduction

In 1965, Gahler ([5], [6]) introduced 2-Banach space and Iseki [7] obtained some results on fixed point theorems in 2-Banach spaces. After the introduction of 2-Banach space many research workers have extended fixed point theorems of metric, Banach spaces etc. in the new setup of 2-Banach spaces. Mishra et al. [10], Khan and Khan [8], Saha et al. [12], Mishra et al. [11], Saluja [13], Saluja and Dhakde [14], Das et al. [1], Shrivastava [15], Das et al, [2] - [3], Liu et al. [9] and etc. have worked on fixed point and common fixed point theorems in this space. In this paper we also have proved some unique common fixed point theorems in 2-Banach spaces.