

ORLICZ DIFFERENCE TRIPLE LACUNARY IDEAL SEQUENCE SPACES OVER n -NORMED SPACES*

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Abstract

In the present article, we introduce and study some Lacunary \mathcal{I} -convergent and Lacunary \mathcal{I} -bounded triple difference sequence spaces defined by Orlicz function over n -normed spaces. We shall investigate some algebraic and topological properties of newly formed sequence spaces. We also make an effort to obtain some inclusion results between these spaces.

MSC: 40A05, 40A30, 46A45

keywords: Triple sequence, Orlicz function, difference operator, sequence algebra, n -norm, Lacunary sequence

1 Introduction and Preliminaries

Let \mathbb{N} , \mathbb{R} and \mathbb{C} denote a set of natural, real and complex numbers respectively. A triple sequence $x = (x_{m,n,k})$ is a function $x : \mathbb{N} \times \mathbb{N} \times \mathbb{N} \rightarrow \mathbb{R}$ (or \mathbb{C}). Initially triple sequence spaces were introduced and studied by Sahiner et

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