Topological properties of some sequences defined over 2-normed spaces

ABSTRACT

The paper investigates some classes of real number sequences over 2-normed spaces defined by means of Orlicz functions, a bounded sequence of strictly positive real numbers, a multiplier and a normal paranormed sequence space. Relevant properties of such classes have been investigated. Moreover, relationships among different such classes of sequences have also been studied under various parameters and conditions. Finally, the spaces are investigated for some other useful properties. The conclusion section provides many interesting facts for further research.

Keyword: Orlicz function; 2-Norm; Paranormed space; Completeness; Solidity