

REMARKS ON WEAK FORM OF NANO DERIVED SETS

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Abstract: This paper aims to introduce the concept of nano α - derived set and study the characteristics of nano α - derived set. Further, we investigate the different forms of nano α - derived set using lower and upper approximation.

Keywords and Phrases: Nano topology, Nano Interior, Nano Closure, Nano Derived sets, Nano α -open sets, Nano α -derived sets.

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1. Introduction

In 1872, Cantor has introduced the notion of the derived set of a set. He also defined closed subset of the real line as subset containing their derived set. The notion of weak form of open set [4, 5], namely α -open set in topological spaces was introduced by Njastad [7] and since then, these sets have been widely explored. Miguel Caldas [6] introduced and studied topological properties of α - derived set using the concept of α - open set. Recall that, "A subset A of a topological space (X, τ) is defined as α -open if $A \subseteq \text{int}(cl(\text{int}(A)))$. The complement of a α -open is defined as α -closed set and a point $x \in X$ is said to be a α -limit point of A if for