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A NOVEL CLASS OF CONTINUITY VIA (Λ,δS)-CLOSED SETS

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Abstract: In this paper, we introduce the (Λ,δS) - continuity via (Λ,δS) - closed sets and the theorems based on them are discussed with counterexamples. Moreover, we entitle the Quasi (Λ,δS) continuity, Perfect (Λ,δS) - continuity, Totally (Λ,δS) - continuity, Strongly (Λ,δS) - continuity, Contra (Λ,δS) - continuity by applying (Λ,δS) - closed sets.

Keywords and Phrases: (Λ,δS)-closed set, (Λ,δS) - continuity, Quasi (Λ,δS) continuity, Perfect (Λ,δS) - continuity, Totally (Λ,δS) - continuity, Strongly (Λ,δS) - continuity, Contra (Λ,δS) - continuity.

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1. Introduction

In topology and its applications, the concept of a closed set is fundamental. Many researchers have defined classes of closed sets (see [1, 2, 5, 10, 11]); through them, new definitions of compactness and continuity have been found, see [10, 13]. From this point of view, we have defined a new class of open sets, namely (Λ,δS) - closed sets. Park. et al. (1997) introduce the notion of δ – semi-open sets, which are stronger than semi-open sets but weaker than δ – open sets. Georgiou (2004) developed the theory on generalization of δ – closed sets which is named as (Λ,δ) – closed sets using Λ – operator in terms of δ. In 2014, Binod Chandra Tripathy introduced the concept of generalized b-closed sets with respect to an ideal in