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UNI-SOFT STRUCTURE APPLIED TO ORDERED AG-GROUPOIDS

ASGHAR KHAN[1], MUHAMMAD IZHAR[2] AND JIAN TANG[3]

Abstract. Molodtsov's soft set theory is a new mathematical model dealing with uncertainty from a parameterization point of view. In soft set theory, the problem of setting the membership function does not arise, which makes the theory easily applied to many different fields. In this paper, we introduce the notions of uni-soft ordered AG-groupoids, uni-soft left (right) ideals in an ordered AG-groupoids and the related properties are discussed. Characterizations of uni-soft ordered AG-groupoids, uni-soft left (right) ideals are studied. The concepts of uni-soft products and uni-soft regular ordered AG-groupoids are investigated and using the notions of uni-soft left and right ideals, the conditions for a regular ordered AG-groupoids are given. In the last section of this paper, we discuss the concept of a concave soft set and introduce the notion of a critical soft points in ordered AG-groupoids.

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[1,2] Department of Mathematics, Abdul Wali Khan University, Mardan, KPK, Pakistan
[3] School of Mathematics and Statistics, Fuyang Normal University, Fuyang, Anhui, P.R. China
E-mail address: [1] azhar4set@yahoo.com, [2] mizharmath@gmail.com, [3] tangj13@lzu.edu.cn