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ON ROUGH BI-SEMI GENERALIZED CONTINUOUS MAPS IN ROUGH SET BITOPOLOGICAL SPACES

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Abstract: The purpose of this paper is to introduce and study the concepts of new class of maps, namely Rough bi-semi generalized continuous maps in Rough bitopological spaces. Also derive their characterizations in terms of Rough bi-semi generalized closed sets, Rough bi-semi-generalized closure and Rough bi-semi-generalized interior and obtain some of their properties.

Keywords and Phrases: Rough bi-sg closed Sets, Rough bi-sg open Sets, Rough bi-continuity, Rough bi-semi continuous function, Rough bi-sg continuous function.

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1. Introduction

In 1970, Levine [8] introduced the concept of generalized closed sets as a generalization of closed sets in topological spaces. While in 1987, P.Bhattacharyya et.al. [1] have introduced the notion of semi generalized closed sets in topological spaces. The concept of semi-generalized mappings was studied by R. Devi et.al. [5] in 1993. The theory of rough sets, proposed by Pawlak [10], is an extension of set theory for the study of intelligent systems characterized by insufficient and incomplete information. The basic operators in rough set theory are approximations. In 1963, J.C.Kelly [7] initiated the study of bitopological spaces. Mean while in 1989, Fukutake [6] introduced semi open sets in bitopological spaces. In 2014, K.