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SKOLEM DIFFERENCE MEAN LABELING IN DUPLICATE GRAPHS OF SOME PATH RELATED GRAPHS

P. Vijaya kumar, K. Thulukkanam* and K. Thirusangu**

PG Department of Mathematics,
Sriram Engineering College, Perumalpattu - 602024, Chennai, INDIA
E-mail: vijaysanthosh2002@gmail.com

*Department of Mathematics,
Dr. Ambedkar Govt. Arts College, Chennai 600039, INDIA
E-mail: thulukkanamk@gmail.com

**Department of Mathematics,
S.I.V.E.T College, Chennai - 600073, INDIA
E-mail: kthirusangu@gmail.com

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Abstract: In this paper, we prove that the extended duplicate graphs of path graph, comb graph and twig graph admit skolem difference mean labeling, skolem odd difference mean labeling and skolem even difference mean labeling.

Keywords and Phrases: Graph labeling, duplicate graph, skolem mean labeling, skolem difference mean labeling, skolem odd difference mean labeling, skolem even difference mean labeling.

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1. Introduction

The concept of graph labeling was introduced by Rosa in 1967. A graph labeling is an assignment of integers to the vertices or edges or both subject to certain condition(s). If the domain of the mapping is the set of vertices (or edges), then the labeling is called a vertex labeling (or an edge labeling). In the intervening years various labeling of graphs have been investigated in over 2000 papers [1]. The concept of duplicate graph was introduced by Sampath kumar and he proved many results on it [5]. Somasundaram and Ponraj introduced the concept of Mean labeling of graphs and proved the existence of the same in some standard graphs