South East Asian J. of Mathematics and Mathematical Sciences Vol. 20, Proceedings (2022), pp. 73-82

ISSN (Online): 2582-0850

ISSN (Print): 0972-7752

DISTANCE ANTIMAGIC LABELING FOR PANCYCLIC GRAPHS

N. P. Shrimali, Y. M. Parmar and M. A. Patel*

Department of Mathematics, Gujarat University, Ahmedabad, Gujarat, INDIA

E-mail: narenp05@gmail.com, ymp.maths@gmail.com

*Department of Mathematics, Government Engineering College, Gandhinagar, Gujarat, INDIA

E-mail : dr.mahendraapatel@gmail.com

(Received: Apr. 08, 2022 Accepted: Jul. 30, 2022 Published: Aug. 30, 2022)

Special Issue Proceedings of National Conference on "Emerging Trends in Discrete Mathematics, NCETDM - 2022"

Abstract: A distance antimagic labeling of a graph G with vertex set V(G) and edge set E(G) is a bijection from vertex set V(G) to $\{1, 2, ..., |V(G)|\}$ such that $\sum_{p \in N(q)} f(p) = w(q)$ for all $q \in V(G)$, where N(q) is the set of all vertices of V(G)

which are adjacent to q and $w(p) \neq w(q)$ for every pair of vertices $p, q \in V(G)$. A graph which admits a distance antimagic labeling is called a distance antimagic graph. In this paper, we addresses distance antimagic labeling of some specific pancyclic graphs.

Keywords and Phrases: Distance antimagic labeling, pancyclic graph.

2020 Mathematics Subject Classification: 05C78.

1. Introduction

Here, we consider all graphs G with vertex set V(G) and edge set E(G) are finite and simple. |V(G)| and |E(G)| denote the number of vertices and number of edges respectively. Gross and Yellen [5] is adopted for the comprehension of