International J. of Math. Sci. & Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 8 No. III (May, 2014), pp. 157-165

A STUDY ON SEMI-ARITHMETIC INTEGER ADDITIVE SET-INDEXERS OF GRAPHS

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Abstract

An integer additive set-indexer (IASI) is defined as an injective function $f : V(G) \to 2^{\mathbb{N}_0}$ such that the induced function $g_f : E(G) \to 2^{\mathbb{N}_0}$ defined by $f^+(uv) = f(u)+f(v)$ is also injective. An IASI f is said to be an arithmetic IASI if every element of G are labeled by non-empty sets of non negative integers, which are in arithmetic progressions. An IASI f is said to be a semi-arithmetic IASI if vertices of G are labeled by non-empty sets of non negative integers, which are in arithmetic progressions, but the set-labels of edges are not in arithmetic progressions. In this paper, we discuss about semi-arithmetic integer additive set-indexer and establish some results on this type of integer additive set-indexers.

Key Words : *Integer additive set-indexers, Uniform integer additive set-indexers, Arithmetic integer additive set-indexers, Semi-arithmetic integer additive set-indexer.*

AMS Subject Classification : 05C78.