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ON SIGNED SEMIGRAPHS

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A semigraph G is a pair (V;X) where V is a nonempty set whose elements are called vertices of G, and X is a set of n-tuples, called edges of G, of distinct vertices,for various $n \geq 2$, satisfying the following conditions:
1. S.G.-1. Any two edges have at most one vertex in common.
2. S.G.-2. Two edges $(u_1, u_2, \ldots, u_n)$ and $(v_1, v_2, \ldots, v_m)$ are considered to be equal if, and only if, (i) m = n and (ii) either $u_i = v_i$ or $u_i = v_{n-i+1}$, for $1 \leq i \leq n$,.

Let G = (V,X) be a semigraph and E = $(v_1, v_2, \ldots.., v_m)$ be an edge of G. Then v_1 and v_n are the end vertices of E and v_i, $2 \leq i \leq n - 1$ are the middle vertices (or m-vertices) of E.

Let S = (V,E) be a semigraph. In S, the edge with odd number of m-vertices is assigned negative sign and the edge with no or even number of m-vertices is assigned positive sign. Then S is called an e-signed semigraph. A semigraph S = (V,E) is called v-signed semigraph if every end vertex of S is assigned either positive or negative sign.

In this paper we find some properties of e-signed and v-signed semigraphs.

Key words : Semigraphs, e-signed semigraphs and v- signed semigraphs

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