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CHARACTERIZATION OF LITACT GRAPHS

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Abstract: The litact graph of a graph $G = (V, E)$, denoted $L_{ct}(G)$, is a graph having vertex set $E(G) \cup C(G)$ in which its two vertices are adjacent if they correspond to either two adjacent edges of G or adjacent cut-vertices of G or one vertex corresponded to an edge e_i of G and other vertex corresponds to a cut-vertex c_j of G such that e_i is incident to c_j, here $C(G)$ is the set of cut-vertices of G. In this paper, we establish structural characterization of litact graphs.

Keywords and Phrases: Lict graph, Litact graph, Maximal clique.

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1. Introduction and Preliminaries

We refer the reader to [12] for graph theoretical terminology. In this paper, we considered only finite, simple, undirected and connected graphs. Sets $V(G)$, $E(G)$ and $C(G)$ are vertex set, edge set and cut-vertex set respectively of G. A vertex v