



Figure 1: G is a tree graph with root node r . M_1 and M_2 are MECs (both obey item-1-of-thm:nes-and-suf-cond-for-tree-graph-to-be-an-MEC,item-2-of-thm:nes-and-suf-cond-for-tree-graph-to-be-an-MEC of thm:nes-and-suf-cond-for-tree-graph-to-be-an-MEC) with skeleton G . M_1 belongs to $G, r, 1$ as there is an edge $a \rightarrow r$ incoming towards r . M_2 belongs to $G, r, 0$ as none of the edges adjacent to r in M_2 is incoming towards r . M_2 also belongs to $G, r, 0, 1$ as it belongs to $G, r, 0$ and one edge adjacent to r in M_2 is undirected.