LIST OF SYMBOLS

\( \gamma_2 \)  2-domination number
\( i_2 \)  2-dominating independence number
\([\mathcal{H}]_2\)  2-section of \( \mathcal{H} \)
\( N[v] \) closed neighborhood of \( v \)
\( K_n \) complete graph of order \( n \)
\( \overline{\mathcal{H}} \) complement of \( \mathcal{H} \)
\( C_n \) cycle of order \( n \)
\( \gamma \) disjoint domination number
\( \bar{\gamma} \) domination number
\( \mathcal{E} \) edge set of the hypergraph
\( \mathcal{H} \) hypergraph
\( \beta_0 \) independence number
\( i \) independent domination number
\( \gamma^{-1} \) inverse domination number
\( i^{-1} \) inverse independent domination number
\( ir \) irredundance number
\( \Delta \) maximum vertex degree
\( \delta \) minimum vertex degree
\( N(v) \) open neighborhood of \( v \)
\( P_n[u, S] \) private neighbor set of \( u \) with respect to \( S \)
\( D^o(\mathcal{H}) \) set of all minimum dominating sets
\( D^m(\mathcal{H}) \) set of all minimal dominating sets
\( \tau \) transversal number
\( \Gamma \) upper domination number
\( IR \) upper irredundance number
\( X \) vertex set of the hypergraph