LIST OF SYMBOLS AND ABBREVIATIONS

V(G) – Vertices of graph G
E(G) – Edges of graph G
deg (u) – Degree of a vertex u
deg (v) – Degree of a vertex v
δ(G) – Minimum degree of a graph G
Δ(G) – Maximum degree of a graph G
C_m – Cycle graph with m vertices
K_m – Complete graph with m vertices
P_m – Path graph with m vertices
S_m – Star graph with m vertices
P_m^2 – Path of Square graph with m vertices
B_{m,n} – Bistar graph
F_m (P_{m+1} + K_1) – Fan graph with m vertices
F_m – Friendship graph with m vertices
W_m – Wheel graph with m vertices
H_m – Helm graph with m vertices
G_m – Gear graph with m vertices
Fℓ_m – Flower graph with m vertices
γ_{wd}(G) – Weak domination number (minimum)
\overline{wd}(G) – Weak domination number (maximum)
\[ \gamma_{\text{SD}}(G) \quad – \quad \text{Strong domination number} \]

\[ \gamma_{\text{PVT}}(G) \quad – \quad \text{Private domination number (minimum)} \]

\[ \Gamma_{\text{PVT}}(G) \quad – \quad \text{Private domination number (maximum)} \]

\[ \binom{n}{i} = \frac{n!}{i!(n-i)!} \quad – \quad \text{Combinations} \]

\[ \text{Sd}(K_{m,j}) \quad – \quad \text{Family of strong dominating set of complete graph with number of elements in the set } j \]

\[ \text{Wd}(K_{m,j}) \quad – \quad \text{Family of weak dominating set of complete graph with number of elements in the set } j \]

\[ \text{Pd}(K_{m,j}) \quad – \quad \text{Family of private dominating set of complete graph with number of elements in the set } j \]

\[ \text{Sd}(C_{m,j}) \quad – \quad \text{Family of strong dominating set of cycle graph with number of elements in the set } j \]

\[ \text{Wd}(C_{m,j}) \quad – \quad \text{Family of weak dominating set of cycle graph with number of elements in the set } j \]

\[ \text{Pd}(C_{m,j}) \quad – \quad \text{Family of private dominating set of cycle graph with number of elements in the set } j \]

\[ \text{Sd}(W_{m,j}) \quad – \quad \text{Family of strong dominating set of wheel graph with number of elements in the set } j \]

\[ \text{Wd}(W_{m,j}) \quad – \quad \text{Family of weak dominating set of wheel graph with number of elements in the set } j \]

\[ \text{Pd}(W_{m,j}) \quad – \quad \text{Family of private dominating set of wheel graph with number of elements in the set } j \]

\[ \text{Sd}(S_{m,j}) \quad – \quad \text{Family of strong dominating set of star graph with number of elements in the set } j \]

\[ \text{Wd}(S_{m,j}) \quad – \quad \text{Family of weak dominating set of star graph with number of elements in the set } j \]
Pd(S_{m,j}) – Family of private dominating set of star graph with number of elements in the set j

SD(K_{m,x}) – Strong domination polynomial of complete graph

WD(K_{m,x}) – Weak domination polynomial of complete graph

PD(K_{m,x}) – Private domination polynomial of complete graph

SD(C_{m,x}) – Strong domination polynomial of cycle graph

WD(C_{m,x}) – Weak domination polynomial of cycle graph

PD(C_{m,x}) – Private domination polynomial of cycle graph

SD(W_{m,x}) – Strong domination polynomial of wheel graph

WD(W_{m,x}) – Weak domination polynomial of wheel graph

PD(W_{m,x}) – Private domination polynomial of wheel graph

SD(S_{m,x}) – Strong domination polynomial of star graph

WD(S_{m,x}) – Weak domination polynomial of star graph

PD(S_{m,x}) – Private domination polynomial of star graph

\lceil x \rceil – Ceiling function of x

\lfloor x \rfloor – Floor (x)