

# ELEMENTARY NOTATIONS AND TERMINOLOGIES

---

Some of the commonly used notations and terminologies used throughout the thesis are as following

$G_n(s)$	Higher order continuous time interval system
$R_k(s)$	Reduced order continuous time interval system
$G_n(z)$	Higher order discrete time interval system
$R_k(z)$	Reduced order discrete time interval system
$n$	Order of the original system
$k$	Order of the reduced order system
SISO	Single-Input- Single- Output
MIMO	Multi-Input- Multi- Output
ISE	Integral Square Error
IAE	Integral Absolute Error
$\lambda$	Eigen values of $G_n(s)$ or poles of $G_n(s)$
$\in$	Belong to