

## Homework

- 1) Using Logarithmic Method obtain an expression for the damping ratio in terms of second order step response parameters.
- 2) Show that the transient period for both 1<sup>st</sup> and 2<sup>nd</sup> order systems is approximately 3 times the time constant to settle within 5% tolerance band and 4 times the time constant to settle within 2% tolerance band.