



# S. N. Patel Institute of Technology & Research Centre, Umrahk

(A Vidyabharti Trust Institution)

## B.E./Electrical Engineering

**Subject Name:** Control System Engineering

**Subject Code:** 3130905

Sr.No.	Experiment
1	To study about MATLAB commands necessary for CST.
2	To determine Poles, Zeros and DC gain of given T.F and plot pole and zero.
3	To plot step and ramp response of given T.F using MATLAB.
4	Using MATLAB find T.F with system in series and Parallel.
5	Block diagram reduction using MATLAB.
6	To determine state space model from T.F and vice versa.
7	To study and check effect of damping ratio in 2nd order system in MATLAB.
8	To sketch root locus for the given T.F using MATLAB.
9	To sketch Bode plot for given T.F.
10	To determine P, PI, PD and PID controller using MATLAB.