

GURU TEGH BAHADUR INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ECE

LIST OF EXPERIMENTS

Paper Code(s): EEC-262	L	P	C
Paper: Network Analysis and Synthesis Lab	-	2	1

1. Introduction to MATLAB and its basic commands.
2. Plot unit step, unit impulse, unit ramp, exponential, parabolic functions and sinusoidal signals
3. Study the transient response of series RLC circuit for different types of waveforms using MATLAB
4. Study the time response of a simulated linear system and verify the unit step and square wave response of first order and second order, type 0,1 system
5. Using MATLAB determine current in various resistors connected in network using mesh current and node voltage analysis.
6. To verify Reciprocity Theorem for the given two port network.
7. To determine Z parameters of the given two port network.
8. To determine hybrid parameters of the given two port network.
9. To design Cascade Connection and determine ABCD parameters of the given two port network.
10. Study the frequency response of different filter circuits.
11. Any one of the following
 - a. Filter design in MATLAB Simulink.
 - b. To find two port network parameters using MATALB Simulink.
 - c. Analysis of continuous LTI system.
 - d. Any simple hardware project of your choice.