ELECTRIC CIRCUIT THEORY LABORATORY EE-391 Credit: 2 Contact: 3

1. Transient response of R-L and R-C network: simulation with PSPICE /Hardware

2. Transient response of R-L-C series and parallel circuit: Simulation with PSPICE/ Hardware

3. Determination of Impedance (Z) and Admittance (Y) parameter of two port network: Simulation / Hardware.

4. Frequency response of LP and HP filters: Simulation / Hardware.

5. Frequency response of BP and BR filters: Simulation /Hardware.

6. Generation of Periodic, Exponential, Sinusoidal, Damped Sinusoidal, Step, Impulse, Ramp signal using MATLAB in both discrete and analog form.

7. Determination of Laplace transform and Inverse Laplace transform using MATLAB.

8. Amplitude and Phase spectrum analysis of different signals using MATLAB.

9. Verification of Network theorem using SPICE