SIMULATION LAB
List of Experiments

EEE-4\4 I Sem

1. Pspice simulation of transient response of RLC circuits
    a) Response to pulse input
    b) Response to step input
    c) Response to sinusoidal input
2. Analysis of three phase circuit representing the generator transmission line and load. Plot three phase currents & neutral current using PSPICE.
3. PSPICE simulation of single-phase full converter using RL & E loads and single phase AC voltage controller using RL & E loads.
4. PSPICE simulation of Resonant pulse commutation circuit and Buck chopper
5. PSPICE simulation of single phase inverter with PWM control
6. Plotting of Bode plots, root locus and Nyquist plots for the transfer functions of system up to 5^{th} order using MATLAB.
7. Transfer function analysis of any given system upto 3^{rd} order using SIMULINK.
8. Power flow solution and Transient stability evaluation of Power System
9. PSPICE simulation of d.c. circuit for determining Thevenin's equivalent.
10. Transfer function analysis of d.c. Circuit using PSPICE.
11. Modelling of transformer and simulation of loss transmission line in PSPICE.
12. Step response of an RLC circuit by parametric analysis using PSPICE.
13. PSPICE simulation of Op-Amp based Integrator & Differentiator circuits.
    Short circuit studies.
14. Dynamic stability analysis of Power Systems.
15. Transfer function analysis of a given circuit using MATLAB
    Switching Transients using EMTP