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Department of Electrical Engineering
Simulation Lab

List of Software & Hardware

Sr. No.	Description	Make	Qty.
1	Simulink Software	ADCC Infocad Limited	10
2	Control System Toolbox		10
3	Sim Power System		10
4	Simcape		10
5	Matlab Renewal Charges	ADCC Infocad Limited	10
6	Computer Set I5	Sun Digitals	10

Simulation – I

List of Experiments

Sr.No	Title of Experiments
1	Introduction to basic block sets of simulation platform
2	Simulation of single phase bridge rectifier without filter
3	Simulation of single phase bridge rectifier with filter
4	Simulation three basic types of loads exist in circuits
5	Algorithm on matrix operations
6	Algorithms to get the response of standard test signals
7	Simulation to verify different network theorems with dependent and independent sources
8	Simulation of differential equations
9	Simulation / Algorithms to draw the pole zero plot of electrical network
10	Simulation of transmission line model network

Simulation – I

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1	Introduction to basic block sets of simulation platform
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Simulation – II

List of Experiments

Sr.No	Title of Experiments
1	Algorithm for Basic operation on signal
2	Algorithm for Linear and Circular Convolution
3	Algorithm for step, impulse and frequency Response in Digital system
4	Algorithm for FFT for DFT Computation
5	Simulation of 1- phase full wave Rectifier with R-L Load
6	Simulation of 1- phase full wave Controlled Rectifier with R-L Load
7	Simulation of OC & SC Test of 3-phase IM
8	Simulation of Fault Analysis

Simulation – III

List of Experiments

Sr.No	Title of Experiments
1	To study the performance of single phase fully controlled converter with R load
2	To study the harmonics & the performance of single phase fully controlled converter with R-L load
3	Three phase fully controlled bridge rectifier & its harmonic analysis
4	To study the performance of single phase fully controlled Inverter
5	Modeling of 3 phase inverter & analysis of harmonics using MATLAB/Simulink
6	Three phase inverter with LC filter
7	Five level cascaded multilevel H bridge inverter
8	Motoring & regenerative action for DC load



