



STANLEY
COLLEGE OF ENGINEERING & TECHNOLOGY FOR WOMEN
(Approved by AICTE, New Delhi | Affiliated to Osmania University ,Hyderabad)
Address : Chapel Road, Abids ,Hyderabad

EE 484

ELECTRICAL SIMULATION LAB

Simulation experiments should be conducted in the following areas using MATLAB

/Simulink with DSP Tool Box, Control System Tool Box & Power System Tool Box

/Pspice/PSCAD /MiPower /SABER / PowerTrans etc.

1. Verification of Network theorems (i) Thevinin's theorem (ii) Superposition theorem
(iii) Maximum power transfer theorem
2. Transient responses of Series RLC, RL and RC circuits with Sine and Step inputs.
3. Series and Parallel resonance. .
4. Bode plot, Root-Locus plot and Nyquist plot.
5. Transfer function analysis (i) Time response for Step input (ii) Frequency response for Sinusoidal input.
6. Design of Lag, Lead and Lag-Lead compensators;
7. Load flow studies.
8. Fault analysis
9. Transient stability studies.
10. Economic power scheduling

11. Load frequency control
12. Chopper fed D.C motor drives.
13. VSI ICSI fed Induction motor drives.

NOTE :- At least ten experiments should be completed in the semester.

SCETM