#### DEPARTMENT OF ELECTRICAL ENGINEERING ASSAM ENGINEERING COLLEGE JALUKBARI, GUWAHATI – 781 013

## POWER SYSTEM SIMULATION LAB-1(PG) CODE: EE202114

- 1 Evaluate the performance of the medium transmission line.
- 2 Economic dispatch using lambda-iteration method
- 3 Pick-up test for differential relay
- 4 Under/over voltage protection
- 5 Power flow analysis by Newton-Raphson method

# POWER SYSTEM SIMULATION LAB-2(PG) CODE: EE202214

- 1 Power flow analysis by the Newton-Raphson method
- 2 Transformer protection using a differential relay for inzone trip faults.
- 3 Contingency analysis: Generator shift factors and line outage distribution factors
- 4 Transformer out zone or non-trip faults.
- 5 Unbalanced Voltage Protection

### DEPARTMENT OF ELECTRICAL ENGINEERING ASSAM ENGINEERING COLLEGE JALUKBARI, GUWAHATI – 781 013

#### **RUBRICS FOR PSS LAB ASSESSMENT**

Category	Sub-Category	0-30%	31-60%	61-100%
	Attendance and Preparedness (12%)	The student is present but not prepared for the lab	The student is present but not well prepared	The student is present and fully prepared
CONTINUOUS AND COMPREHENSIV E EVALUATION	Ability to do programming and perform Laboratory Experiments (18%)	Not able to complete the assigned work	Complete the work partially	Complete the work fully
	Program/Experimental details (30%)	Missing several important details	Missing some important details	Details are well covered
RESULT & ANALYSIS	Results: data, figures, graphs, tables, etc (20%)	Results contain errors.	Results are well presented but have some errors	Results are well presented without any corrections.
VIVA	Answers related to Programming/experim ents (20%)	Could not answer anything	Could not answer properly.	Concluded and answered all the questions