



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous Institute Affiliated to University of Mumbai)

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
EXL603b	Power Electronics – I Lab	--	--	2	--	--	1	1
		Examination Scheme						
		ISE		ESE		Total		
		40(50%weightage)		Practical	Oral			
		--	10	30				

Pre-requisite Course Codes	
After successful completion of the course, student will be able to	
Course Outcomes	CO1 Make use of simulation tool to analyze power electronic circuits and comment on its performance
	CO2 Analyze different power semiconductor switches with their characteristics
	CO3 Evaluate different performance parameters of rectifiers and choppers
	CO4 Evaluate different performance parameters of inverters and cycloconverters

Exp. No.	Experiment Details	Ref.	Marks
1	Analysis of V-I Characteristics of SCR.	4	5
2	Analysis of Half Wave Controlled Rectifier using SCR.	1	5
3	Analysis of V-I Characteristics of TRIAC.	7	5
4	Analysis of Light Dimmer using DIAC and TRIAC.	7	5
5	Analysis of different performance parameters of semi-converter using PSIM	2	5
6	Analysis of different performance parameters of full converter using PSIM	2	5
7	Evaluation of different performance parameters of Buck Converter using PMLK	2	5
8	Evaluation of different performance parameters of Boost Converter using PMLK	2	5
Total Marks			40

References:

As recommended by faculty.