# **BASIC ELECTRICAL I LAB (ES191)**

(Room Number: 422)

### General information about the Laboratory:

This lab is used for ODD Semester all students of EE  $1^{st}$  year. Its approximate area is 1190 sq. ft. and location is fourth floor (Room no -422). Generally, we conduct the lab with the strength of 30 students per session.

# **Electrical Circuit Theory Lab**

### CO's

ES191.1	Demonstrate the characteristics of carbon, tungsten & florescent lamps.						
ES191.2	Verify the different electrical parameters obtained using network theorems.						
ES191.3	Experiment on R-L-C series & parallel circuits						

### **CO-PO MAPPING:-**

SUBJECT	COs	PROGRAM OUTCOMES(POs)											
CODE		PO	PO	PO	PO	PO	PO	PO	PO	PO	PO1	PO11	PO1
		1	2	3	4	5	6	7	8	9	0		2
ES191	ES191.1	3	2	2	2	2	2	1	-	2	2	2	3
	ES191.2	3	2	2	2	2	2	1	-	2	2	2	3
	ES191.3	3	2	2	2	2	2	1	-	2	2	2	3
	AVERAG E	3	2	2	2	2	2	1	-	2	2	2	3

### **CO-PSO MAPPING:-**

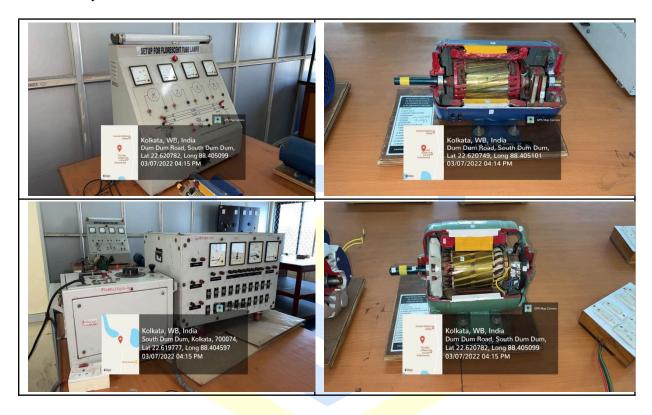
SUBJECT CODE	COs	PSO1	PSO2	
ES191	ES191.1	3	-	Iooh
	ES191.2	2	2	
	ES191.3	2	1	
	AVERAGE	2.33	1	

# Name of the Experiment Performed:

- 1. Characteristics of Fluorescent lamps
- 2. Characteristics of Tungsten and Carbon filament lamps
- 3. (a) Verification of Thevenin's theorem. (b) Verification of Norton's theorems.
- 4. Verification of Maximum power theorem.
- 5. Verification of Superposition theorem

- 6. Study of R-L-C Series circuit
- 7. Study of R-L-C parallel circuit

# **Laboratory Pictures**



# SurTech