Course Number and Name

BEE 1L1 & Basic Electrical and Electronics Engineering Practices Laboratory

Credits and Contact Hours

1 & 45

Course Coordinator's Name

Mr.K.Sakthivel

Text Books and References

Text Books:
Lab Manual

Course Description

To enhance the student with knowledge on electrical and electronic equipment's.

Prerequisites	Co-requisites
Nil	Basic Electrical and Electronics Engineering

required, elective, or selected elective (as per Table 5-1)

Required

Course Outcomes (COs)

CO1: Students will able to handle basic electrical equipment
CO2: Students will able to do staircase wiring.
CO3: Students will able to understand domestic wiring procedures practically.
CO4: Student will able to assemble electronic systems.
CO5: Students will understand all the fundamental concepts involving electrical engineering
CO6: Students will understand all the fundamental concepts involving electronics engineering

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	a	b	c	d	e	f	g	h	i	j	k	l
CO1	M	H	M			L		L	L	M	H	
CO2		H	M			L		L	L		H	
CO3		H	M			L		L			H	
CO4	M	H	M			L		L	L	M	H	
CO5	M	H	M			L		L		M	H	
CO6		H				L		L	H		H	

List of Topics Covered

I LIST OF EXPERIMENTS FOR ELECTRICAL ENGINEERING LAB

1. Fluorescent lamp wiring
2. Stair case wiring
3. Measurement of electrical quantities-voltage current, power & power factor in RLC circuit
4. Residential house wiring using fuse, switch, indicator, lamp and energy meter
5. Measurement of energy using single phase energy meter
6. Measurement of resistance to earth of electrical equipment

II LIST OF EXPERIMENTS FOR ELECTRONICS ENGINEERING LAB

1. Study of electronic components and equipment.
a. Resistor colour coding using digital multi-meter.

b. Assembling electronic components on bread board.
2. Measurement of ac signal parameters using cathode ray oscilloscope and function generator.
3. Soldering and desoldering practice.
4. Verification of logic gates (OR, AND, OR, NOT, NAND, EX-OR).
5. Implementation of half adder circuit using logic gates.