



Kadi Sarva Vishwavidyalaya
Faculty of Engineering & Technology
First Year Bachelor of Engineering (Electrical Engineering)
 (With effect from: Academic Year 2017-18)

Subject Code: CC105-N	Subject Title: Workshop
Pre-requisite	

Course Objective:

- The objective of this course is to familiarize the students with commonly used components,
- Accessories and measuring equipment in Electrical installations.
- The course also provides hands on experience in setting up of simple wiring circuits.
- Assemble and test components on breadboard.
- Solder one simple circuit on a general purpose PCB.

Teaching scheme				Total Credit	Evaluation Scheme					Total Marks
L	T	P	Total		Theory		IE Marks	CIA Marks	Pract. Marks	
Hrs	Hrs	Hrs	Hrs		Hrs	Marks				
00	00	02	02	01	00	00	00	40	60	100

Outline of the Course:

Sr. No	Title of the Unit	Minimum Hours
1	Introduction of wires & cables.	-
2	To study & Identify different types of safety devices	-
3	House wiring & tube light wiring	-
4	Staircase wiring & Godown wiring	-
5	To study & use of common testing Instruments.	-
6	To study about how to use soldering iron.	-
7	To calculate electric energy usage at Residential area.	-
8	To use rheostat as a potential divider	-
9	To study of various types of Earthing schemes.	-
10	To study different types of illumination devices & their application.	-

Total Hours (Theory): 00

Total Hours (Lab): 32

Total Hours: 32



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Detailed Syllabus

Sr. No	Topic
1	Introduction of wires & cables: -General structure & classification of cables, -Classification of wires & their use
2	To study & Identify different types of safety devices : -Fuses -MCB,ELCB. -Working & difference of MCB & ELCB
3	House wiring& tubelight wiring: -To control lamps by two separate switches. -Using tube light wiring measure the power consumption in it.
4	Staircase wiring & Godown wiring: -To control one lamp by two switches in staircase wiring -To control two or more switches in godown wiring.
5	To study & use of common testing instruments: - Test lamp - Megger - Clipon meter - Line tester -Multimeter
6	To study about how to use soldering iron Use of different tools in solder any circuit
7	To calculate electric energy usage at residential area.
8	To use rheostat as a potential divider
9	To study of various types of Earthing schemes
10	To study different types of illumination devices & their application.

Learning Outcome

On successful completion of the course

- Familiarity with supply arrangements and their limitations, knowledge of standard voltages and their tolerances, safety aspects of electrical systems and importance of
- Protective measures in wiring systems.
- Knowledge about the types of wires, cables and other accessories used in wiring.
- Soldering use in different circuits.



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Suggested List of Experiments

1	Introduction of wires & cables.
2	To study & Identify different types of safety devices
3	House wiring & tube light wiring
4	Staircase wiring & Godown wiring
5.	To study & use of common testing instruments.
6.	To study about how to use soldering iron.
7.	To calculate electric energy usage at residential area.
8.	To use rheostat as a potential divider
9.	To study of various Earthing schemes.
10.	To verify the truth table of various types of logic gates.
11	Mini project based on BEEE syllabus
12	To study different types of switches & its uses.
13	To study different types of illumination devices & their application.