# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi - 590018, Karnataka India


## JSS ACADEMY OF TECHNICAL EDUCATION
## Kengeri-Uttarahalli Road, Bengaluru-60.

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERINg

## Faculty in charge: Dr. Ravikumar K.P

## DONE BY

## NAME

## (USN)

## CSE C (C3)

**Subject: Basic Electronics & Communication Engineering**

**Subject code:21ELN24**

**Date:-**

# JSS MAHAVIDYAPEETHA

## JSS Academy of Technical Education

## Bengaluru-560 060

# *Laboratory Certificate*

**Name of the Laboratory ……...**

**This is to certify that Smt./Sri …….**

**has satisfactorily completed the course of Experiments Prescribed by VTU, Belgavi, for the degree course in the Laboratory of the College in year 20.....- 20.....**

**……..** **……..**

**Head of the Department** **Sign. of Teacher In charge**

**Date……...20**

**Name of the Candidate:**

**USN:**

**Examination Centre**

**Date of Practical Examination:**

# List of experiments

| Sl. No | Expt name | Page nos | Marks awarded |
|---|---|---|---|
| 1 | +5V power supply unit using Bridge rectifier, capacitor filter, and IC 7805. | | |
| 2 | To switch on/off an LED using a diode in forward / reverse bias using a battery cell. | | |
| 3 | Transistor switches circuit to operate a relay that switched off/on an LED. | | |
| 4 | IC 741 Integrator circuit / comparator circuit | | |
| 5 | To operate a small loudspeaker by generating oscillations using IC 555. | | |
| 6 | Half / full-wave rectifier using diodes | | |
| 7 | Voltage multipliers | | |
| 8 | Op-amp circuits – inverting, non-inverting amplifiers, summers, differentiators | | |
| 9 | Flip-flops – all types | | |
| 10 | Shift registers and counters | | |
| 11 | Oscillators. | | |

## Course Outcomes of Basic Electronics

| COs | Basic Electronics | Bloom's Level |
|---|---|---|
| C114.1 | Construct electronic circuits such as power supply, amplifiers and oscillators using active and passive components. | L3 |
| C114.2 | Develop logic circuits and digital systems associated with sensors and actuators. | L3 |
| C114.3 | Make use of the embedded system concept, characteristics and technological advances in embedded applications. | L3 |
| C114.4 | Apply the fundamentals of Communication Engineering concepts to explain wired and wireless network systems. | L3 |

## CO PO Mapping:

| POs COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C114.1** | 3 | 3 | 2 | - | 2 | - | - | - | - | - | - | |
| **C114.2** | 3 | 3 | 2 | - | 2 | - | - | - | - | - | - | |
| **C114.3** | 2 | 2 | 2 | - | - | - | - | - | - | 2 | - | 2 |
| **C114.4** | 2 | 2 | 2 | - | - | - | - | - | - | 2 | - | 2 |
| **C114** | **2.5** | **2.5** | **2** | | **2** | | | | **-** | **2** | | **2** |

Expt.No.

AIM: -