

**DEPARTMENT OF ELECTRICAL ENGINEERING
ELECTRONICS LABORATORY**

List of Experiments – BASIC ELECTRONICS EXPERIMENTS

EE2094D ELECTRONICS LAB - I

- 1. STUDY OF CRO AND MEASUREMENTS USING CRO**
- 2. DIODE CHARACTERISTICS**
- 3. CLIPPING AND CLAMPING CIRCUITS**
- 4. RECTIFIERS AND FILTERS**
- 5. CHARACTERISTICS OF BJT IN CE AND CB CONFIGURATIONS**
- 6. CHARACTERISTICS OF JFET**
- 7. COMMON EMITTER AMPLIFIER**
- 8. EMITTER FOLLOWER**
- 9. FET AMPLIFIER**
- 10. VOLTAGE REGULATORS**
- 11. CLASS AB POWER AMPLIFIER**

Technical staff: Mr. Somanath. K. A

Mrs. Aswathy. P (ADHOC)

Mr. Karthikeyan. R (ADHOC)

Faculty I/C: Mr.K.S. Suresh Kumar

Dr. M. Sanjay

Status Updated:October 2022

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List of Experiments – DIGITAL ELECTRONICS & OP-AMP BASED

EE3093D ELECTRONICS LAB - II

1. OPAMP circuits-design and setup of inverter-scale changer-adder –non inverting amplifier-integrator and differentiator.
2. OPAMP comparator- design and setup of Schmitt trigger-window comparator. Phase shift & Weins bridge oscillator with amplitude stabilization using OPAMPs.
3. Wave form generaton-square, triangular and saw tooth wave form generation using OPAMPs.
4. Precision rectification-absolute value and averaging circuit using OPAMPs.
5. Fourth order LP&BP filter using OPAMPs.
6. Using CD4046(PLL), study the dynamics and setup
(a)frequency multiplier (b)FSKMOD/DEMODO using PLL.
7. Setup analog to digital converter
(a) successive approximation method (b) Dual slope method.
8. Using UPDOWN COUNTER and a DAC ICs generate triangular wave form
(a) Using Cd4047 IC design and set up gated /ungated astable and monostable Multivibrator.
(d) Using Cd 4093 Schmitt NAND IC design and set up astable and monostable.
9. Design of half adder and half sub tractor circuits with NAND gates using
Mode control
(a) Design and realization of ripple counter using JKflip-flop
(b)Cascading of ripple counters.

**10. Design and realization of John& ring counter using (a) JK flip-flop
(b) Shift register.**

11. Synchronous UP/DOWN counter design and realization.

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