

## **Department: Electronics and Communication Engineering**

### **KEC551-INTEGRATED CIRCUITS LAB**

#### **LIST OF EXPERIMENT**

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1. Design the following using Op-Amp:
  - a) A unity gain amplifier.
  - b) An inverting amplifier with a gain of “A”.
  - c) A non-inverting amplifier with a gain of “A”
2. Study and design Log and antilog amplifiers.
3. Voltage to current and current to voltage convertors.
4. Second order filters using operational amplifier for:
  - a) Low pass filter of cutoff frequency 1 KHz.
  - b) High pass filter of frequency 12 KHz.
5. Realization of Band pass filter with unit gain of pass band from 1 KHz to 12 KHz.
6. Study and design voltage comparator and zero crossing detectors.
7. Function generator using operational amplifier (sine, triangular & square wave).
8. Design and construct astable multivibrator using IC 555 and
  - a) Plot the output waveform
  - b) Measure the frequency of oscillation
9. Design and construct a monostable multivibrator using IC 555 and
  - a) Plot the output waveform
  - b) Measure the time delay
10. Study the operation of analog to digital converters.
11. Study the operation of digital to analog converters.
12. Implement voltage controlled oscillator using IC566 and plot the waveform.

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**LIST OF EQUIPMENT**

Subject Code of the Lab: KEC551

Name of the Lab: INTEGRATED CIRCUITS LAB

S. No.	Name of Equipment
1	POWER SUPPLY
2	FUNCTION GENERATOR
3	DSO
4	LCR METER
5	CRO
6	Opamp IC-551
7	IC TESTER
8	Bread Board