

## Analog and Digital Electronic Circuits Lab

This lab is used to develop the applications of Digital and Analog circuits. This provides the student to analyze the characteristics of Amplifiers and able to verify the different logic operations. The student will be able to understand the concepts of combinational and sequential circuits.





**Major Equipment:**

S.No.	Name of the Equipment	Qty.	Cost in Rs.
1	Cathode Ray Oscilloscope (CRO)	15	225000
2	Function Generators (FG)	15	150000
3	Regulated Power Supply (RPS)	15	150000
4	Digital Trainer Kits	10	75600
5	DMM	20	6000
6	Trainer Kits	21	50000
7	Analog&Digital IC tester	01	56000
<b>Total</b>			<b>7,37,000</b>

**List of Experiments (As per curriculum):**

S.No.	Name of the Experiment
1.	Common Emitter (CE) Amplifier.
2.	Common Source (CS) FET Amplifier.
3.	Function Generator using Op Amp.
4.	Two stage RC coupled CS FET Amplifier.
5.	Class-A, B & C Power Amplifiers.
6.	Voltage /Current series Feedback Amplifier.
7.	RC phase shift Oscillator using Transistor.
8.	Realization of Logic Gates using discrete components.
9.	Realization of Logic Gates using Universal Logic Gates.
10.	Realization of Adder and Subtractor Using Universal Logic Gates.
11.	Realization of Flip-Flops using Universal Logic Gates.
12.	Realization of Counters.
13.	Realization of Shift Registers.
14.	Realization of Finite State Machine (FSM).

**List of Experiments (Beyond the Syllabus):**

S.No.	Name of the Experiment
1	Differential amplifier
2	Implementation of Mini project based on above experiments

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**Lab Incharge** : Mr. V.V.Ramakrishna, Assoc. Professor.  
**Lab Co-Incharge** : Dr. B. Y. V. N. R. Swamy, Assoc. Professor.  
**Lab Technician** : P.N.S Vittal, Foreman, N.Rajeswari, Lab Technician