

## Pulse and Switching Circuits Lab

This lab is specially designed and developed for the students to observe the characteristics of various electronic circuits that use linear and non-linear components. This lab is well provided with equipment like Cathode Ray Oscilloscopes (CRO), Digital Oscilloscopes, Function Generators, IC Tester and digital multi-meters. This lab gives practical observation and response of electronic circuits that uses different devices. This gives a good foundation to students to get exposure on the functional characteristics and response of electronic devices. At the end of the lab course the student will be able to handle any electronic circuit and apply its application in designing digital 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	Linear Wave Shaping Circuits-Low Pass
2	Linear Wave Shaping Circuits- High Pass
3	Non Linear Wave shaping Circuits - Clippers
4	Non Linear Wave shaping Circuits – Clampers
5	Clamping Circuit Theorem
6	Switching behavior of Transistor
7	BistableMultivibrator
8	MonostableMultivibrator
9	AstableMultivibrator
10	Schmitt Trigger
11	Bootstrap Time Base Generator
12	Miller Time Base Generator
13	UJT Relaxation Oscillator
14	Sampling gates

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

S.No.	Name of the Experiment
1	Bootstrap sweep circuit
2	Sampling gates

**Lab Mentor** : Dr.Y.S.V.Raman,Professor.  
**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,LabTechnician

