

<b>ECP-100-A</b>	<b>BASIC ELECTRONICS LAB</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
		<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>

**Note:** At least ten experiments are to be performed during the semester. At least eight experiments should be performed from the list of experiments. Two experiments may either be performed from the given list of experiments or may be designed by the concern faculty in consultation with H.O.D as per the scope of syllabus.

**List of Experiments:**

1. To get familiar with the working knowledge of the following instruments:
  - i. Cathode ray oscilloscope (CRO)
  - ii. Multimeter (Analog and Digital)
  - iii. Function generator
2. To measure an unknown frequency from Lissajous figures using CRO
3. Plot the forward and reverse V-I characteristics of P-N junction diode and determine static and dynamic resistance.
4. To plot the characteristic of Zener diode and hence determine the dynamic resistance from the characteristic..
5. To plot the input and output characteristics of BJT in common-emitter configuration.
6. To Design Wein Bridge oscillator circuit and calculation of oscillation-frequency and its Verification from the observed output.
7. To Design and test 5V/12 V DC regulated power supply and find its line-regulation and load-Regulation.
8. Verification of truth tables of logic gates (OR, AND, NOT, NAND, NOR)
9. Design and realize Inverting and Non-Inverting Amplifier using Op-AMP(IC-741).
10. Design and realize Adder and subtractor circuits using Op-AMP(IC-741).
11. Design and realize Integrator Circuit using Op-AMP(IC-741)
12. Design and realize Differentiator circuit using Op-AMP(IC-741).