

**Name of Lab: Advanced Instrumentation Lab**  
**Floor Area: 66 Sq. m.**

S.No.	Items	Specifications	Make	Qty.
1.	Thermocouple Demonstration set-up.	Using K- type Transducer. D.C instrumentation Amplifier: For amplification of millivolt signal of thermocouple output, Gain and null adjustment facility on panel, Input/ Output termination of panel. 3½ digital panel meter for measuring of temperature/Milivolt, 220 volt $\pm$ 10%,50 Hz mains operated, Builtin Regulated power supply.	Vijayanta	01
2.	Thermocouple Demonstration set-up.	Using J-type Transducer, SS Sheath, Heat mounted screw terminals, D.C. Instrumentation Amplifier: For amplification of millivolt signal of thermocouple output, Gain and null adjustment facility on panel, Input/ Output termination of panel, 3 ½ digital panel meter for measuring of temperature/Milivolt, 220 volt $\pm$ 10%,50 Hz mains operated, Builtin Regulated power supply.	Vijayanta	01
3.	R.T.D. Demonstration set-up.	RTD,D.C Amplifier: For amplification of signal Gain and null adjustment facility on panel, Input/ Output termination of panel 3 ½ digital panel meter for measuring of temperature/Milivolt, Variable Potentiometer for Calibration, 220 volt $\pm$ 10%,50 Hz mains operated, Builtin Regulated power supply.	Vijayanta	01
4.	Characteristics of Stain Gauge.	Capacity 2 Kg. 4 strain gauges are bounded on beam & stand with weights, Digital Strain Indicator 3 ½ digit display.	Vijayanta	01
5.	Study of Linear Variable Differential Transformer (LVDT)	LVDT $\pm$ 10mm Calibration jig fitted with dial gauge low noise fixed frequency oscillator r 3 ½ digit LED Digital display 220 volt $\pm$ 10%,50 Hz mains operated, Builtin Regulated power supply.	Vijayanta	01
6.	Instrumentation Tutor for Load Cell.	Capacity 5 Kg. Weight, Indicator 3 ½ digit display.	Vijayanta	01
7.	Instrumentation Tutor for Pressure Measurement.	Pressure Transducer of 10Kg.cm square with pump, 3 ½ digits Pressure Indicator display. Builtin Regulated power supply.	Vijayanta	01

8.	Study of Acceleration Measurement Trainer.	Acceleration transducer strain gauge based signal conditioner excitation source amplifier , Digital volt meter (3 ½ digit 230 volt ± 10%,50 Hz mains operated, Builtin Regulated power supply.),	Vijayanta	01
9.	Study of Angular Displacement Trainer.	<u>Consisting of:</u> Capacitor type transducer for Angle measurement. Digital Panel Meter, 3 <sup>1</sup> / <sub>2</sub> Digit LED. Experiments: Measurement of angle using Capacitor type transducer. 220 volt ± 10%,50 Hz mains operated, Builtin Regulated power supply.	Vijayanta	01
10.	Study of Speed Measurement Trainer.	Electromagnetic pick up, A small permanent DC motor. A variable D.C Power Supply to Change the speed of the motor. A 4 digit LED Display to measure the RPM of the motor.A12 V DC power supply is provided for electromagnetic transducer. All necessary electronics circuits and wave shaper multiplier counting> An analog output is also provided to measure the RPM with a digital multimeter, 230 volt ± 10%,50 Hz mains operated, Builtin Regulated power supply	Vijayanta	01
11.	Study of Speed Measurement Trainer.	Photo Electric pick up, ADC motor fitted with slotted disc to interrupt the light falling on photo sensor, 4 digit counter display to measure the rpm of motor, An analog output is also provided to measure the rpm with a multimeter, 220 volt ± 10%,50 Hz mains operated, Builtin Regulated power supply.	Vijayanta	01
12.	Thermistor Demonstration set-up.	NTC type D.C instrumentation Amplifier: Gain and null adjustment facility on panel, Input/ Output termination of panel. 3½ digital panel metert, 220 volt ± 10%,50 Hz mains operated, Builtin Regulated power supply.	Vijayanta	01