INSTRUMENTATION AND CONTROL SYSTEMS LABORATORY

Instrumentation is one of the parts of the quality control process. To manufacture a part to the exact dimension and to test the quality of the products, the instruments should be calibrated against a known higher standard.

It is therefore essential to calibrate the instruments regularly for high accuracy and repeatability of the measurements.

In this lab, the students learn about calibration of various instruments namely thermocouples, transducers etc.

The facilities available in the laboratory

- Calibration of pressure Gauge
- Calibration of Transducer for temperature Measurement
- Study & Calibration of LVDT Transducer for displacement Measurement\
- Strain Measuring System
- Calibration of Thermocouples for temperature Measurement
- Calibration of Capacitance Transducer for Angular Displacement
- Study & Calibration of photo & Magnetic speed Pickups for measurement of speed
- Calibration of Resistance temperature detector for temperature measurement
- Rota meter Test Rig Vibration study & use of Seismic pick up for the measurement of vibration
- Study of Mcleod Gauge for low pressure
- Calibration of Capacitive Transducer for angular displacement
- Measurement and control of pressure of a process using SCADA System
- Measurement and control of level in a tank using capacitive transducer with SCADA
- Measurement and control of temperature of a process using RTD with SCADA

S.No	Name of major equipments	Photo/Image
1.	Calibration of Transducer for temperature Measurement	

S.No	Name of major equipments	Photo/Image
2.	Calibration of Thermocouples for temperature Measurement	

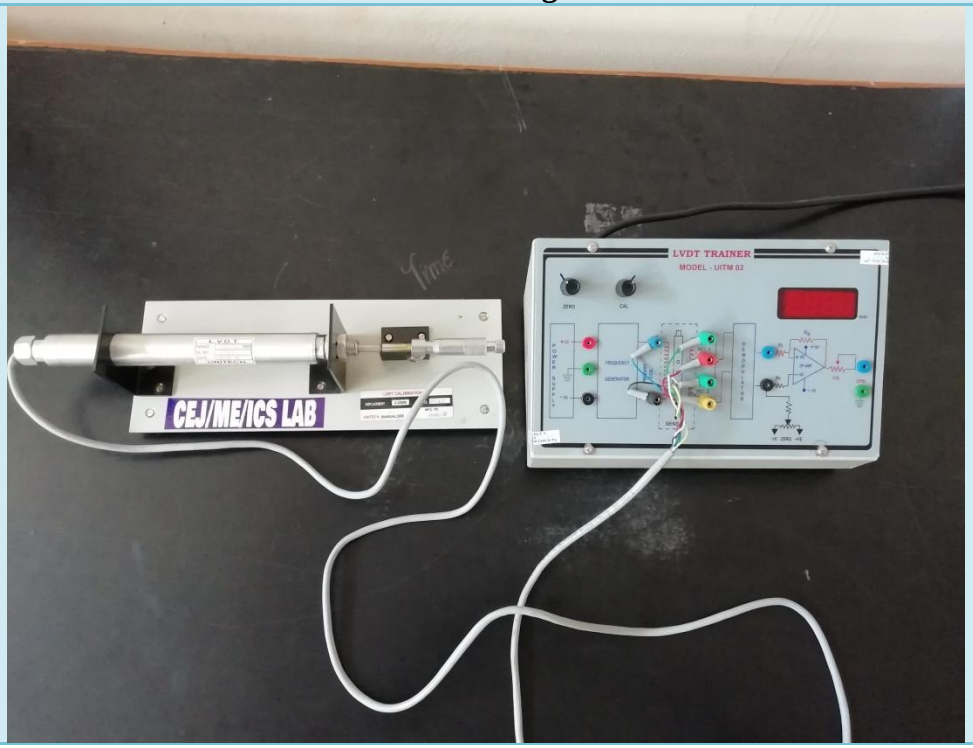
S.No	Name of major equipments	Photo/Image
3.	Calibration of Resistance temperature detector for temperature measurement	

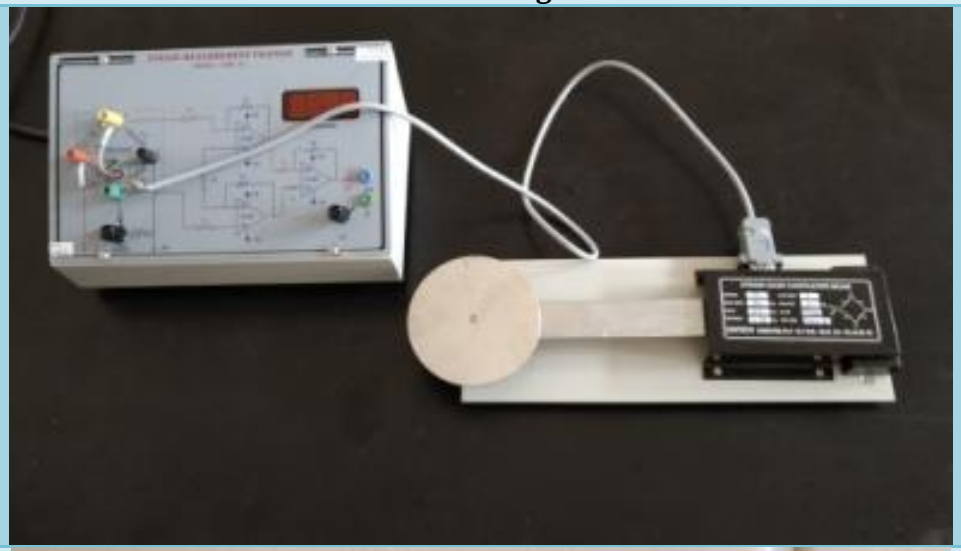
S.No	Name of major equipments	Photo/Image
4.	Rota meter Test Rig	

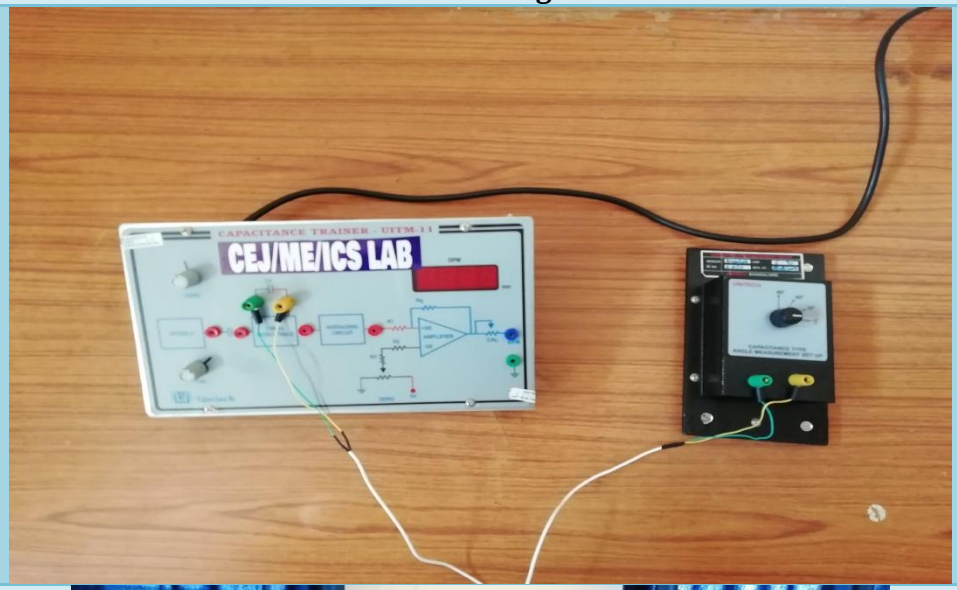
S.No	Name of major equipments	Photo/Image
5.	Vibration study & use of Seismic pick up for the measurement of vibration	

S.No	Name of major equipments	Photo/Image
6.	Study and calibration of photo and magnetic speed pickups for the measurement of speed	

S.No	Name of major equipments	Photo/Image
7.	Calibration of pressure Gauge	

S.No	Name of major equipments	Photo/Image
8.	Study & Calibration of LVDT Transducer for displacement Measurement	

S.No	Name of major equipments	Photo/Image
9.	Strain Measuring System	
10.	Study of Mcleod Gauge for low pressure	

S.No	Name of major equipments	Photo/Image
11.	Capacitive Transducer	
12.	Measurement and control of pressure of a process using SCADA System	

S.No	Name of major equipments	Photo/Image
13.	Measurement and control of level in a tank using capacitive transducer with SCADA	

S.No	Name of major equipments	Photo/Image
14.	Measurement and control of temperature of a process using RTD with SCADA