

# Maharaja Ranjit Singh Punjab Technical University, Bathinda

**Purchase of Equipments for Electrical Measurements Lab at PIT  
GTB Garh (Moga)**

**Name of Work:**

<b>Name of Agency</b>		Qty.	Unit
Sr. No.	Description of Item		
1	Study of principle of operation of various types of electromechanical measuring instruments. (set of 5 portable Meters)	2	No.
2	a) To measure high value of DC current by a Low Range DC Ammeter and Shunt. b) To measure high value of DC voltage by a Low Range DC Voltmeter and Multiplier	2	No.
3	a) To measure high value of AC Current by a Low Range AC Ammeter and Current Transformer. b) To measure high value of AC Voltage by Low Range Voltmeter and Potential Transformer Measurement of resistance using Wheatstone Bridge.	2	No.
4	To measure active and reactive power in 3 phase balanced load by one wattmeter method.	2	No.
5	To measure the active power in three phase balanced and unbalanced load by two wattmeter method and observe the effect of power factor variation on wattmeter reading.	2	No.
6	To calibrate and use the Induction Energy Meter.	2	No.
7	Measurement of resistance using Kelvin's Bridge.	2	No.
8	Anderson Bridge with inbuilt Digital Null Detector, Sinewave Oscillator etc	2	No.
9	Schering Bridge with inbuilt with Digital Null Detector, Sinewave Oscillator etc	2	No.
10	Plotting of Hysteresis loop for a magnetic material using flux meter.	2	No.
11	Measurement of frequency using Wein's Bridge.	2	No.
12	To study the connections and use of Current and potential transformers and to find out ratio error.	2	No.
13	Determination of frequency and phase angle using CRO.	2	No.
14	Measurement of unknown voltage using potentiometer.	2	No.
15	LCR Q Meter (Bridge Type) Instruments Required for above Lab	2	No.
16	CRO 20MHz, Dual Channel, 2 Trace LCR Meter Hand Held	1	No.
		1	No.

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