

GOVT. COLLEGE OF ENGINEERING AND RESEARCH, AWASARI

Awasari(Khurd) Tal: Ambegaon, Dist.Pune-412 405

Tel. No.02133-225900

E-Mail – gcoeara@gmail.com

FAX No. 02133-230583

Website : www.gcoeara.ac.in

No. GCOEARA/Store/2015-16/ 362

Date:

02 FEB 2016

To,
HOD- Computer Engineering for display on College Website

Subject : Quotation for supply of Equipments (for Instrumentation & Control Engineering)

Please send your quotation for the following items on the terms and conditions listed below, mentioning our reference letter number, date and due date of quotation on your sealed envelop, on or before **09.02.2016** at 11.00 A.M.

Sr.No.	Specification	Qty.	Unit
1	Analog Ammeter	10	No.
2	Analog Voltmeter	10	No.
3	Temperature Measurement setup using RTD (PT 100)	1	No.
4	Temperature Measurement setup using T/C (J/K/R/S)	1	No.
5	Pressure Transducer Module	1	No.
6	XY Recorder	1	No.
7	Open & Close Loop Control System with PID for DC motor	1	No.
8	IC Tester	1	No.
9	Open & Close Loop Control System	1	No.
10	Liquid level measurement setup	1	No.
11	Dead Weight Tester	1	No.
12	Function Generator	2	No.
13	Function Generator	2	No.
14	Arbitrary waveform generator (Programable function generator)	1	No.
15	Energy Meter 1- phase	2	No.
16	Universal calibrator	1	No.
17	Shift Resister	2	No.
18	Universal counter	2	No.
19	Digital electronics kit	5	No.
20	RF signal generator	1	No.
21	Conductivity meter	2	No.
22	LVDT	1	No.
23	LCR-Q meter	1	No.
	Detail scope of supply will be as per enclosed sheet	1	No.

Terms & Conditons

- 1 Taxes – Inclusive / if extra clearly mention the percentage.
- 2 Delivery period –
- 3 Payment Terms –
- 4 Quotation Validity –
- 5 Warranty -
- 6 Guaranty-
- 7 Delivery Charges – Free / if extra mention clearly.
- 8 The part supply and its bill will strictly not be entertained.
- 9 If you fail to supply the stores within the specified period, the order will be treated at cancelled without any information.
- 10 The material will be accepted subject at approval(after inspection of the material),If rejected it will be returned to you at your cost.
- 11 The material to be supplied should be strictly according to the specification only.
- 12 Octroj is not applicable since Institute is located in Gram Panchayat area.
- 13 Please attach copy of your shop registration certificate alongwith your quotation, without which your quotation will not be accepted.

S.V. Joshi

(Prof. S.V. Joshi)

I/c Principal

Govt.College of Engineering & Research Awasari
Awasari(khurd)

Department of Instrumentation and Control

List of Equipments

Sr. No.	Name of the Equipment to be procured	Detailed Specification	Required Quantity
1	<i>Analog Ammeter</i>	Scale and movement to be specified separately, 6 times over scale display, 110 mm x 110 mm x 107 mm, Carbon loaded, anti static glass reinforced polyester Integration of various ammeters Scale and movement to be specified separately 6 times over scale display	10
2	<i>Analog Voltmeter</i>	10-16V DC With display	10
3	Temperature Measurement Setup Using RTD (PT 100)	Temperature setup consist of PT 100 Probe, Oven, separate RTD signal conditioning unit with temperature indicator	1
4	Temperature Measurement Setup Using T/C (J/K/R/S)	Temperature setup consist of T/C (J/K/R/S) Probe, Oven, separate cold junction compensation circuit unit with temperature indicator	1
5	Pressure transducer module	Bourden gauge, Bellows, Diaphragms Pressure vessel with pressure release facility	1
6	<i>XY Recorder</i>	recorders are fast, high-performance X-Y recorders , available in either 1- or 2-pen models.	1
7	<i>Open & Close loop Control System with PID for DC motor</i>	Low voltage DC motor : MOSFET/IGBT driver Motor : 12 V DC 1500 rpm of more than 15 watts Loading : Mechanical arrangement Feed back : Techometer using sensors Meters/indicators : Set speed, Running speed, Motor current P,I,D levels Protection : High voltage (RCC snubber), free wheeling power diode and Heat sink protection, short circuit Protection	1
8	<i>IC Tester</i>	To Test Microprocessors, like 8055 etc. Micro controllers : 8031,8055 etc All logic & CC MIS ICs : like 7400 series & CD 4000 ser Peripheral ICS : like 8255, 8155 etc Eproms : 27 series (Blank heck only) EEproms : 28 series like 2816, 52B, 33etc C MOS RAMS : like 6116, 1220 etc. Continous mode to Test IC continuously, one mode Test, step mode to Test Step by Step	1

9	<i>Open & Close loop Control System</i>	DC motor control : Thyristor controlled, speed range of 200 - 1000rpm. Motor capacity : 1/2 Hp, 180 - 230V Ac 1500rpm. Loading : Mechanical Loading arrangement Feedback : Tacho Generator coupling Meters : Voltmeter for Armature voltage Ammeter for Armature current calibrated meter to indicate rpm directly Protection : Overall current protection	1
10	Liquid Level Measurement Setup	Setup consist of Capacitive Level Probe with separate Signal conditioning unit, Water Tank with Inlet and outlet provision	1
11	<i>Dead Weight Tester</i>	Accuracy ±0.015% of reading ±0.008% on request z Base Unit Size & Weight 361 x 382 x 245 mm 12 kg Approximately z Weight Box Size & Weight 12 x 12 x 12 inch Depends on Model [28 to 40 kg] Materials of Construction	1
12	Function generator	Range: 0.3 Hz - 3 MHz , Waveforms: Sine, Square, Triangle, Ramp, Pulse and TTL outputs, 20 Vpp output and DC Offset 40 MHz frequency counter, 20X4 character LCD, 50 Ω Output Impedance, Different types of modulations 40 dB (fixed) & 20 dB variable attenuation	2
13	Function generator	Frequency Range : 0.1 Hz to 1 MHz Operating Modes: Sine, Square, Triangle and DC , 30Vpp Signal Output, LCD for Frequency & Amplitude Display, 50 MHz Frequency Counter TTL/CMOS Trigger output	2

14	Arbitrary Waveform Generator (Programmable Function Generator)	Bandwidth: 10 mHz to 25 MHz Sample Rate : 200Ms or 1GS/s, Record Lenth 128/16K, Vertical resolution 12 Bit, Amplitude Range 20mV to 10 Vpp, Modulation AM, FM, PM, FSK, Burst, Sweep, Interface: USB/GPIB/LAN, Display : Colour, Operating Temperature Range : 5 to 40 Degree c, Power Requirement : 230V +/- 10 % AC, 50 Hz +/- 3 %	1
15	Energy Meter 1-Phase	1-Phase	2
16	<i>Universal Calibrator</i>	Auto-Step Output Function n value sent automatically when n/m function selection is selected (two options: approximately 2.5 seconds/step or approximately 5 seconds/step) Sweep Functions Sweep time (two options: approximately 16 seconds or approximately 32 seconds) Memory Function 50 value sets (generated and measured values are stored as value sets with the same address (up to 50 value sets can be stored)) Measuring Unit Maximum Input Voltage terminal: 300 V AC Current terminal: 120 mA DC Current Terminal Input Protection Fuses: 125 mA/250 V Measuring Unit Ground Voltage Maximum 300 V AC Measurement Display Updating Rate Approximately once per second Serial Interface Enabled when communication cable (RS232) is connected; sold separately as optional accessory Display Segmented LCD (Approx. 76 mm × 48 mm) Backlight LED backlight; auto-off after one minute (from when LIGHT key is turned on) Power Supply Four AA alkaline batteries, or special AC adapter (sold separately)	1
17	Shift Resister	Study of barrel shifter with built in power supply & cable connector set	2
18	Universal Counter	Freq. range-10Hz to 3.4GHz Keyboard- 6 Keys Display-8 Digit 7 Segment LED	2
19	Digital Electronics Kit	Digital Electronics Trainer With 8 no. 20 pins zip socket & 2 no. 40 pin zip socket with built in power supply & cable	5
20	<i>RF Signal Generator</i>	Frequency Range : 3 - 300 MHz Amplitude control : coarse and fine O/P impedance : 50 ohm/600 ohm switchable O/P power : More than 500 MN across 50 Ohm Input : For simplifide & Frequency modulation	1

21	Conductivity meter	conductivity meter with electrode & sample	2
22	LVDT	Displacement Measurement Setup Small transducer body length to stroke ratio Temperature error less than 35ppm/°C Welded stainless steel construction, sealed to IP66 Absolute measurement Infinite resolution	1
23	LCR-Q meter	Series or parallel Equivalent max. Voltage -0.285v rms Display-4 Digit ,Seven segment 12.5mm high,bright LED connection to 4 terminal internal test jig	1