UNIVERSITY OF CALICUT
CALICUT UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY

No:180106/CUIET-A-ASST-1/2015/Admn Date:08.10.2015

TENDER NOTICE

Sealed Competitive tenders are invited for the supply of Lab items as per the list attached to the ECE Department of CUIET.

Tender forms can be downloaded from the University website www.universityofcalicut.info .

Cost of tender form :- 0.2% of the cost of tender rounded to the nearest multiple of 100,subject to a minimum of Rs. 400/- and maximum Rs.1500/- + VAT as applicable.

EMD :- 1% of the quoted rate subject to a minimum of Rs.1,500/- drawn in favor of Finance Officer , University of Calicut.

The rates quoted should be inclusive of all taxes,installation charges,service guaranty of a minimum of one year and transportation etc.

The quotations should reach the undersigned on or before 26.10.2015

Dr. Rahmathunza I.
Principal

Principal
Calicut University
Institute of Engineering & Technology
Thenhipalam. P.O., Malappuram-673 636

5.ECE Department

Sl.No	Name of item	Specification	Quantity
1	Digital Storage Oscilloscope	*70MHz Bandwidths *1GSa/s Real Time Sample Rate *Trigger Mode: Edge ,Pulse Width , Video, Slop, Overtime, Alternative Trigger etc. *Provides software for PC Real-time Analysis *Five math functions +,-,*,/,and FFT functions. *32 Automatic Measurements and Track Measurement via Cursor Automatically *Large (7")Color Display, WVGA(800x480).	5
2	Cathode Ray Oscilloscope (20MHz Dual Trace Oscilloscope)	*DC-20MHz Bandwidth *1m V/div Sensitivity on Both Channels *CH1,CH2(Independent Channels) *Alternate, CHOP,INVT,ADD and SUBTRACT *X-Y Operation *40ns/div to 0.2s/div Time Base *140mm Rectangular CRT with internal Graticule *Triggering to 40 MHz *8x10 cm Display *TV Triggering frame(V)&Line(H) *Line Trigger *Component Tester	10
3	Function Generators	*generating waveforms: Sine, Square, Triangular, Pulse, Saw tooth *Frequency Range:1Hz to 10 MHz. *Accuracy ±1% of the range. *Output level upto 20V p-p(continuously variable voltage with and without dc offset) *Rise &Fall Time 100ns at 1MHz(typically) *Sine Wave Distortion<3% *AC Mains Power 230V±10%,50Hz.	4
4	Digital Trainer	*INPUT:230V AC+10% *DC OUTPUT:A)+5V/500mA B)0-+25V/500mA *Bread board having 1680 tie points is mounted on front panel. *12 logic input with LED indicator using SPDT switch. *12 nos. Logic output with LED indicator. *1Hz mono shot clock puls with pulser switch.	6

		*TTL clock pulser having output frequencies of 10 Hz,100Hz,1KHz&10KHz selectable by switch *Three seven segment display connected with sockets for each segment.	
5	IC Tester	Digital IC Tester *Key-pad and LCD display *User friendly menu operated functions. *Auto find to find unknown ICs. *Fail/Pass Loop test. *Display the function of "good" IC after test, on LCD DISPLAY *Tests Digital IC's such as 74 series, 40/45 Series,8085,8086,Z80,8255,8279,8253, 8259,8251,8155,6264,62256,8288,8284 *Tests Op-amp,555,Transistor Arrays, Analog switches, Opto couplers and Others *Tests 7-Segment display of common cathode& common anode type. *Auto search facility of all Digital ICs *40 pin DIP ZIF sockets.	2
6	DC Voltmeter	(0-20v),MC	5
7	DC Ammeter	(0-20 mA),MC	5
8	Computer	Motherboard-Asus, HDD -Seagate 500GB, RAM- 4GB Processor-Intel i5, DVD Writer-Samsung,AOC 18"Wide Screen, Keyboard/Mouse-Logitech, Case+SMPS-Cooler Master	2
9	Microcontroller kit with addon cards(EE)	Keyboard and compatible interface cards 8051 Trainer kit WITH LCD DISPLAY and IBM Keyboard (8BIT MICROCONTROLLER,8031/51/89C51/ 52 SYSTEM CONFIGURED FOR 89C51/52 16bit timer /counter,minimum 48 I/O lines(8255 PPI chip),minimum 16 KB EPROM and RAM, Serial interface facility)with interface cards compatible with kit :i)ADC ii)DAC iii)Stepper motor with card iv)LCD Display interface v)Traffic light control vi)Logic Control vii)Timer counter 8253 viii)Seven segment display ix) Keyboard&display interface	2
10	DAC Interface	Compatible to microprocessor and microcontroller.	2
11	ADC Interface	Compatible to microprocessor and	2

		microcontroller.	
12	LCD Interface	Compatible to microprocessor and microcontroller.	2
13	Stepper Motor	Single-chip motor driver for sinusoidal microstep control of stepping motors Power on in indication led 3A mps-34 Volts(Supply voltages:12-34 DC) Full step, half step, eight step and sixteenth step(selection with dipswitches) torque(100%,75%,50%,20%) Work current(0-3A selection with SW1/SW2/SW3) Step frequency up to 100khz	1
14	Matrix Keyboard Interface	40 pin keyboard and display IC Simultaneous keyboard and display operation. 6 character Display 8 character keyboard FIFO Right or Left entry 6Byte Display RAM.	3
15	Variable Power Supply	*Input Requirement:230V±10%,50Hz *Output voltage Range:0 to 30V,Constant Voltage *Output Current: 0 to 2A,Constant Current *Maximum Power:100watt *Load Regulation:0.1%(from no load to full load) *Line Regulation:0.1%(For input 230V AC±10%) *Ripple:1%V rms max(with/without load) *Output Stability:0.1%(after warm up of20 min) *Digital meter: DC Voltage &Current *Accuracy:For voltage:0.5%,For current:0.5% *Protection :Overload,Short circuit and current limiting. *Operating temperature:0 to 50 degree Celsius.	15
16	Fixed Power supply (15V dual power supply)	*Input Requirement:230V±10%,50Hz *Output voltage Range:15V,Constant Voltage *Output Current:0 to 2A,Constant Current *Maximum power:100Watt *Load Regulation:0.1%(from no load to full load) *Line Regulation:0.1%(For input 230V AC±10%) *Ripple:1%V rms max(with/without load) *Output Stability:0.1%(after warm up of 20 min) *Digital meter: DC Voltage &Current *Accuracy: For Voltage:0.5%,For Current:0.5% *Protection: Overload, Short circuit and Current limiting. *Operating Temperature:0 to 50 degree Celsius.	10

17	Spartan-6E FPGA KIT	16 No.s DIP Switch (Digital Input) 16 Nos.point LEDs(Logic Output) 2 Nos.of push Buttons Two UART(RS 232) 12-Bit SPI ADC(2 Channel) 12-Bit SPI DAC Temperature Sensor LM35 5V SPDT Relay Buzzer(Alarm) Reset Button |Power –on indication JTAG(Program/Debug)	3
18	Fixed Power Supply (12V dual power supply)	*Input Requirement:230V±10%,50Hz *Output voltage Range:12V,Constant Voltage *Output Current:0 to 2A,Constant Current *Maximum power:100Watt *Load Regulation:0.1%(from no load to full load) *Line Regulation:0.1%(For input 230V AC±10%) *Ripple:1%V rms max(with/without load) *Output Stability:0.1%(after warm up of 20 min) *Digital meter:DC Voltage&Current *Accuracy:For Voltage:0.5%,For Current:0.5% *Protection:Overload,Short circuit and Current limiting. *Operating Temperature:0 to 50 degree Celsius.	6