

MODEL POLYTECHNIC COLLEGE PAINAVU, IDUKKI

Tender Notification

I. Tender No. A/MPTC/MHRD-Pur/2012-13/PP1(a)

Last Date & Time of receiving Tender - 20/12/2012 11AM.

Date and Time of Opening Tender - 20/12/2012 12AM.

Item: - Digital IC Trainer kit.

Specification:-

On board power Supply, On board clock, pulse generator (TTL, CMOS),

16 bit data Switches, Bicolour LED display, Bread board, Clock Frequency adjustment.

Quantity required: - 30 nos.

Cost of Tender - 950/-

II. Tender No. A/MPTC/MHRD-Pur/2012-13/PP1(b)

Last Date & Time of receiving Tender - 20/12/2012 11AM.

Date and Time of Opening Tender - 20/12/2012 12AM.

Item: - (1). Digital IC Trainer kit.

Specification:-

On board power Supply, On board clock, pulse generator (TTL, CMOS),

16 bit data Switches, Bicolour LED display, Bread board, Clock Frequency adjustment.

Quantity required: - 10 nos.

Item :- (2). Universal IC Tester

Specification:-

Tests a wide range of Digital IC's Such as 74 Series, 40/45 Series, It can test the following items, Peripherals 8255, 8279, 8253,8259, 8251, 8155, Microprocessor 8058,8086,Z80.

Tests a wide range of Analog IC's such as ADC, DAC, Opamp, 555, Transistor Arrays, Analog Switches, Waveform Generator Line Drivers, Voltages Followers and Others.

Display: 16x2 Backlight LCD Display

Supply input Voltage: 230V AC.

Cost of Tender - 710/-

III. Tender No. A/MPTC/MHRD-Pur/2012-13/PP1(c)

Last Date & Time of receiving Tender - 20/12/2012 11AM.

Date and Time of Opening Tender - 20/12/2012 12AM.

Item: - (1). Function generator 3MHz.

Specification:-

Specification:-	
0.3Hz to 3MHz Frequency Output in 8 Ranges	
Versatile Waveforms: Sine, Square, Triangle,	
Ramp, Pulse and DC outputs	
Standard AM, Balance AM, FM, ASK, FSK	
PWM Modulation and Sweep Mode	
Internal / External Modulation	
60dB Attenuation	
20 Vp-p Output Level	
Low Distortion for Sine Waveform 1% typically	
4 Digits Display	
Dedicated Auxillary Function Generator upto	
20KHz	
Variable Symmetry for Generating Sawtoothand Pulse Waveforms	
Output Waveform	Sine, Triangle, Square, Ramp, Pulse, AM Balance, AM Standard, FM, ASK, FSK,PWM Sweep and DC

Output Level	20Vp-p in Open Circuit, 10Vp-p in 50W Load
Output Attenuator	20, 40dB \pm 1dB and 20dB continuously variable.
Output Impedance	50W \pm 5%.
DC Offset	\pm 10V (DC \pm AC peak) into Open Circuit.
	\pm 5V (DC \pm AC peak) into 50W Load.
Square Rise & Fall Time	<50ns.
Symmetry / Duty Cycle	15% to 85% variable.
Triangle wave Non-Linearity	\pm 0.5% (typically at 1KHz).
Sinewave Distortion	<1% (Typically).
Amplitude Flatness	\pm 2%.
Sweep Type	Linear.
Sweep Range	25:01:00
Sweep Rate	20msec to 4sec variable.
Power Requirement	230V \pm 10V, 50Hz AC Supply.
Dimensions	270 (W) x 88 (H) x 310 (D) w/o packing / 325 (W) x 153 (H) x 380 (D) with packing.
Weight	3 Kg. (w/o packing) / 4 Kg. (with packing)
Accessories	Instruction Manual - 1 No.
	BNC Alligator Clip - 1 No.
	Mains Cord - 1 No.

Cost of Tender - 930/-

IV. Tender No. A/MPTC/MHRD-Pur/2012-13/PP1(d)

Last Date & Time of receiving Tender - 20/12/2012 11AM.

Date and Time of Opening Tender - 20/12/2012 12AM.

Item: - (1). 30 MHz dual trace oscilloscope

Specification:-

Specification:-	
Vertical Deflection(Y)	
Deflection coefficient (CH1 & CH2)	5mV/div to 20V/div in 12 calibrated steps in 1-2-5 sequence.x5 magnification increases the sensitivity to 1mV/div
Accuracy	x1:±3%,x5:±3%
Variable	1/2.5 times uncalibrated continuously variable control extended to the deflection coefficient approx to 15V/div.
Bandwidth	x1:DC to 30 MHz (-3dB),DC coupled.:10 Hz to 30 MHz (-3dB) ac coupled. X5: DC to 5 MHz(DC coupled) 10Hz to 5 MHz(ac coupled).
Rise Time	17.5ns.
Display modes	CH1,CH2,DUAL(CH1,CH2 ALT/CHOP),Algebraic ADD and SUBTRACT,CH2 INVT & X-Y(CH1 as X,CH2 as Y)
Input impedance	1M ohm/25pF Approx.
Maximum input voltage	400V(Dc+peak ac)
Internal trigger signal	CH1,CH2 or alternate,CAT II.
TRIGGER SIGNAL OUTPUT	
Output voltage	min 100mV for 1 div of CH1/CH2 trigger signal
TIME BASE Sweep speed	20 calibrated steps, 1micros /div to 0.2s/div in 1,2 and 5 sequence.
Accuracy	3%
Sweep Magnifier	x10 magnification increases the fastest sweep upto 10ns/div
Accuracy	±8%
Variable	Uncalibrated continuously variable control between steps,extended slowest sweep speed to .5s/div
Trigger system Sweep mode	AUTO,NORM,SINGLE
Source	CH1,CH2,ALT,LINE,EXT
Slope	positive or negative
Coupling	AC/DC coupling
Trigger sensitivity internal	Auto:0.3 div-20Hz to 20mHz,Normal:0.3 div-10Hz to 20MHz,Lock:2.0 div-50 Hz to 10MHz,Alt≥0.3div-50HZ to 20MHZ
External	Auto:0.3Vp-p-20HZ to 20MHz,Normal 0.3Vp-p-10 Hz to 20MHz,Lock:0.3V to 50HZ to 10MHz,Typical :40MHz
HORIZONTAL DEFLECTION	
Deflection coefficient	same as CH1

Bandwidth	DC-2.5 MHz(-3dB)
Input impedance	1M ohms//25pF approx.
Phase difference	$\leq 3^\circ$ (DC-60KHz)
Component Tester:Component Tester allows V-I characteristics of a Device Under Test(D.U.T)	
Test voltage	7.5V r.m.s(approx)
Test current	20mA max(approx)
Test frequency	50Hz or 60Hz(MAINS)
Continuity tester	Beeper sounds<75 ohm
Auto ranging frequency counter	
Frequency range	10Hz to 50 MHz
Gate10	1sec for<100KHz,0.5sec for>100KHz
Resolution	0.01Hz(10to 99.99Hz),0.1Hz(100 to 999.9Hz),1Hz(1to 9.999KHz),10Hz(10 to 99.99KHz),100Hz(100 to 999.9KHz),1KHz(1 to 9.999MHz),10KHz(10 to 50MHz)
Sensitivity	100mV r.m.s
Accuracy	0.1% \pm 1 digit

Cost of Tender - 500/-

Tender Cost must be accompanied along with the tender in the form of DD in favor of principal, model polytechnic college , painavu.