

**MODEL POLYTECHNIC COLLEGE KARUNAGAPPALLY**  
**Ph: 0476-2623597**

**TENDER NOTICE**

<i>Superscription.-Tender No :- P/549(19)/2014-15 for Purchasing of Power Supply</i>	
<i>Due date and time for receipt of tender.</i>	29.04.2014 3 PM
<i>Date and time for opening of tender.</i>	30.04.2014 3 PM
<i>Date up to which the rates are to be firm.</i>	6 Months
<i>Price of tender form.</i>	Rs.2300 + 5% VAT
<i>Price of duplicate copy-</i>	50% of cost of the original copy.
<i>Address of officer from whom tender forms are to be obtained and to whom tenders are to be sent:</i>	The Principal, Model Polytechnic, Karunagappally, Edakkulangara PO, Kerala, PIN-690562

Name of office: Model Polytechnic,  
Karunagappally, Edakkulangara PO,  
Kerala, PIN-690562

(Name and designation of  
purchasing officer)

Station and date: Karunagappally, 28.03.2014

**SCHEDULE OF MATERIALS**

Sl. No	Specification	Quantity	Unit	Rate	Total	Remarks
1	2	3	4	5	6	7
1	<b>Power Supply 0-30V/2A</b>  <b>Line Regulation</b> : ±0.01% ±2mV <b>Load Regulation</b> : ±0.01% ±2mV <b>Output Ripple</b> : ≤1mV rms <b>Operating Temp.</b> : 0 to 50°C <b>Protection</b> : OL/SC (CC type) <b>3 Digit DPM</b> : V & I <b>Meter Accuracy</b> : ±3 counts <b>Single Turn Pots</b> : Coarse & fine to set V & I  Options for selecting output current without loading	55	Nos	5500	302500/-	

2	<p><b>Power Supply : Variable Power Supply 0-12V/2A</b>  Adjustability : <math>\pm 10\%</math> of rated voltage.  Regulation: Line : <math>\pm 0.05\%</math>  Load : <math>\pm 0.05\%</math>  Ripple &amp; Noise : <math>\leq 1\text{mV rms.}</math>  Protection : Overload &amp; short circuit.  Stability <math>0.3\%</math>  Transient Recovery : <math>100\mu\text{sec}</math></p>	50	Nos	5500	275000/-	
3	<p><b>Power Supply <math>\pm 15\text{V}/2\text{A}</math> Dual Output fixed power supply.</b>  <b>Input Voltage</b> : 230V AC, <math>\pm 10\%</math>, 50Hz, 1 Phase  Regulation Line: <math>\pm 0.05\%</math>  Load: <math>\pm 0.05\%</math>  <b>Stability</b> : <math>0.3\%</math>.  Ripple &amp; Noise: <math>\leq 1\text{mV rms.}</math>  Protection: Overload &amp; short circuit.  Fold back protection</p>	45	Nos	7000	315000/-	
4	<p><b>Fixed Power Supply(5V,2A)</b>  Adjustability : <math>\pm 10\%</math> of rated voltage.  Regulation: Line : <math>\pm 0.05\%</math>  <math>+1.5\text{mV}</math>  Load : <math>\pm 0.05\% + 1.5\text{mV}</math>  Ripple &amp; Noise : <math>\leq 1\text{mV rms.}</math>  Protection : Overload &amp; short circuit.  Stability : <math>0.03\% + 15\text{mV}</math>  Fold back protection</p>	30	Nos	2200	66000/-	

5	Switched Mode Power Supply 12 V DC 5A	4	Nos	12000	48000/-																	
<table border="1"> <tr> <td data-bbox="354 352 521 436">Input Voltage (V)</td> <td data-bbox="521 352 824 436">180VAC~264VAC</td> </tr> <tr> <td data-bbox="354 447 521 531">Input Current (A)</td> <td data-bbox="521 447 824 531">0.57A Max</td> </tr> <tr> <td data-bbox="354 541 521 625">Frequency (Hz)</td> <td data-bbox="521 541 824 625">50Hz~60Hz</td> </tr> <tr> <td data-bbox="354 636 521 720">Efficiency</td> <td data-bbox="521 636 824 720">82% Typ(230VAC Full Load)</td> </tr> <tr> <td data-bbox="354 730 521 814">Inrush current (A)</td> <td data-bbox="521 730 824 814">Cold star &lt;40A/230VAC</td> </tr> <tr> <td data-bbox="354 825 521 909">Leakage current(mA)</td> <td data-bbox="521 825 824 909">&lt;3mA/240VAC</td> </tr> </table>		Input Voltage (V)	180VAC~264VAC	Input Current (A)	0.57A Max	Frequency (Hz)	50Hz~60Hz	Efficiency	82% Typ(230VAC Full Load)	Inrush current (A)	Cold star <40A/230VAC	Leakage current(mA)	<3mA/240VAC									
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<table border="1"> <tr> <td data-bbox="354 961 521 1056">Output Voltage (V)</td> <td data-bbox="521 961 824 1056">+24VDC</td> </tr> <tr> <td data-bbox="354 1066 521 1150">Voltage Regulation</td> <td data-bbox="521 1066 824 1150">+3,-2%</td> </tr> <tr> <td data-bbox="354 1161 521 1245">Output Current (A)</td> <td data-bbox="521 1161 824 1245">5A</td> </tr> <tr> <td data-bbox="354 1255 521 1339">Current Range (A)</td> <td data-bbox="521 1255 824 1339">0 ~ 5A</td> </tr> <tr> <td data-bbox="354 1350 521 1434">Rated Power(W)</td> <td data-bbox="521 1350 824 1434">60W</td> </tr> <tr> <td data-bbox="354 1444 521 1539">Start time, hold-up time(ms)</td> <td data-bbox="521 1444 824 1539">Ton≤1000ms, Td≥20ms @230Vac Full Load</td> </tr> <tr> <td data-bbox="354 1549 521 1633">Rise time(ms)</td> <td data-bbox="521 1549 824 1633">Typ:20ms @230Vac Full Load</td> </tr> <tr> <td data-bbox="354 1644 521 1728">Ripple/Noise(mVp-p)</td> <td data-bbox="521 1644 824 1728">120mVp-p</td> </tr> </table>		Output Voltage (V)	+24VDC	Voltage Regulation	+3,-2%	Output Current (A)	5A	Current Range (A)	0 ~ 5A	Rated Power(W)	60W	Start time, hold-up time(ms)	Ton≤1000ms, Td≥20ms @230Vac Full Load	Rise time(ms)	Typ:20ms @230Vac Full Load	Ripple/Noise(mVp-p)	120mVp-p					
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6	<p><b>Power Supply - Variable Power Supply 0-5V/2A</b>  Adjustability : <math>\pm 10\%</math> of rated voltage.  Regulation: Line : <math>\pm 0.05\% + 1.5\text{mV}</math>  Load : <math>\pm 0.05\% + 1.5\text{mV}</math>  Ripple &amp; Noise : <math>\leq 1\text{mV rms.}</math>  Stability : <math>0.03\% + 15\text{mV}</math>  Protection : Overload &amp; short circuit</p>	25	Nos	7500	187500/-	
7	<p><b>Power Supply Linear Power Supply (Dual) 60 V</b>  DC regulated Dual variable Power  Supply with analog meter  Protection: Against Over Load &amp; short CKT 0 - 60V/2A  Line : <math>\pm 0.01\% \pm 2\text{mV}</math> for <math>\pm 10\%</math> change in line output.  Load : <math>\pm 0.01\% \pm 2\text{mV}</math> for load change from zero to full load.  Ripple &amp; Noise : <math>\leq 1\text{mV rms}</math>  <b>Transient Response :</b>  100<math>\mu\text{secs}</math> to within 10mV of set output voltage for load change from 10% to 90%.</p>	25	Nos	9500	237500/-	
8	<p><b>Servo controlled voltage stabilizer 5KVA</b>  Particulars Single Phase Capacities 5 KVA Input Voltage Range 160 to 260 V Normal : 340 V to 460 V Output Voltage 220 V Regulation + / - 1% Efficiency &gt;96% Input Frequency 50 Hz + / - 3Hz</p>	5	Nos	13000	65000/-	

<b>TOTAL</b>	1496500/-	
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Warranty : 1 Year

Whether samples essential: Demonstration needed

Period within which goods should be delivered: 21 Days

Rates should be quoted for delivery for Model Polytechnic Collage Karunagappally, Kollam  
at Departmental Stores

Other special conditions:

**MODEL POLYTECHNIC COLLEGE KARUNAGAPPALLY**  
**Ph: 0476-2623597**  
**TENDER NOTICE**

<b>Superscription.-Tender No :- P/546(16)/2014-15 for Purchasing of Analog CRO</b>	
<b>Due date and time for receipt of tender.</b>	<b>29.04.2014 3 PM</b>
<b>Date and time for opening of tender.</b>	<b>30.04.2014 3 PM</b>
<b>Date up to which the rates are to be firm.</b>	<b>6 Months</b>
<b>Price of tender form.</b>	<b>Rs.1700 + 5% VAT</b>
<b>Price of duplicate copy-</b>	<b>50% of cost of the original copy.</b>
<b>Address of officer from whom tender forms are to be obtained and to whom tenders are to be sent:</b>	<b>The Principal, Model Polytechnic, Karunagappally, Edakkulangara PO, Kerala, PIN-690562</b>

Name of office: Model Polytechnic,  
Karunagappally, Edakkulangara PO,  
Kerala,PIN-690562

(Name and designation of  
purchasing officer)

Station and date: Karunagappally, 28.03.2014

**SCHEDULE OF MATERIALS**

Sl. No	Specification	Quantity	Unit	Rate	Total	Remarks
1	2	3	4	5	6	7
1	20 MHz dual trace oscilloscope	5	Nos	22000	110000/-	
	Vertical Deflection(Y)					
	Deflection coefficient (CH1 & CH2)					
	Accuracy					
	Bandwidth					
	Variable					

	<b>Display Modes</b>	CH1, CH2, CH1 & CH2 Alternate or Chop mode & X-Y, CH1-Y, CH2-X, Algebraic ADD and SUBTRACT with CH2-INVT				
	<b>Calibrator :</b>	Provides 0.2V ±1%, 1KHz(approx)squarewave output for probe compensation				
	<b>Sweep Speed :</b>	18calibratedsteps.0.5µS/div to 0.2S/div in 1, 2 & 5 sequence				
	Input imbedence	1M ohms//25pF approx.				
	Phase difference	≤3°(DC-60KHz)				
	<b>COMPONENT TESTER WITH COMPARATOR</b>					
	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)				
	Frequency range	10Hz to 50 MHz				
	Gate10	1sec for<100KHz,0.5sec for>100KHz				
2	30 MHz dual trace oscilloscope Specification : <b>Deflection coefficient</b> (CH1 & CH2) - 1mV/div.5mV/div to 20V/div in 12 calibrated steps in 1-2-5 sequence.x5 magnification increases the sensitivity to 1mV/div , <b>Accuracy</b> :-x1:±3%,x5:±%, <b>TRIGGER SIGNAL OUTPUT</b> - Output voltage - min 100mV for 1 div of CH1/CH2 trigger signal, <b>Bandwidth</b> : DC - 30MHz (-3dB), dc coupled. 10Hz -30MHz (-3dB), ac coupled. 20MHz (-3dB) in x5 MAG. <b>Rise-Time</b> : 11.6 ns or less, 17.5ns in x5 MAG. <b>Display Modes</b> : CH1, CH2, CH1 & CH2 Alternate or Chop mode, Algebraic addition CH1 + CH2, Algebraic subtraction CH1 - CH2, CH2 Invert & X-Y. <b>Input Impedance</b> : 1 M ohms & 25 pF (approx). <b>Maximum Input Voltage</b> : 400 Volts (dc + peak ac). <b>Internal Trigger</b> : CH1 or CH2 signal.		50	Nos	20000	1000000/-

<p><b>Variable</b> : Uncalibrated continuously variable control between steps, extends fastest sweep speed to 40 ns/div (approx). (Uncal LED indication).  <b>Hold-off Time</b> : 4:1 variable control</p> <p><b>COMPONENT TESTER WITH COMPARATOR</b></p> <p><b>Test Voltage</b> : 8.6V r.m.s.  <b>Test Current</b> : 28mA.  <b>Test Frequency</b> : 50Hz or 60Hz  <b>Power Requirement</b> : 230V AC ±10%, 47-65Hz, 40VA. <b>Sweep</b>  <b>Speed</b> : 18 calibrated steps. 0.5 µs/div to 0.2 s/div in 1, 2 &amp; 5 sequence.</p>					
<b>TOTAL</b>				1110000/-	

Whether samples essential: Demonstration needed

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