

**Notice Inviting E-Tender**

E-Tender No	: 14/2017-18
Superscription	: Purchase of Equipments for Power Electronics and Instrumentation Lab in Government Engineering College, Bartonhill.
Last Date & Time of Receipt of E- Tenders (online – www.etenders.kerala.gov.in)	: 17/11/2017 , 6 pm
Date & Time of opening of E-Tender	: 20/11/2017 , 9 am
Date up to which the rates are to be firm	180 Days from the date of opening tender
Cost of E-Tender	Rs1062/- (Tender fee Rs.900+Rs.162/- GST @18%) (Online remittance)
EMD Required	Rs.4721/- (Online remittance)
Address of the Officer to whom communications are to be sent	THE PRINCIPAL GOVT.ENGINEERING COLLEGE, BARTON HILL , THIRUVANANTHAPURAM KERALA Ph-04712780121(Purchase Section) Ph-04712780120 ( Purchase P2 Section) Email- purchase.gecbh@gmail.com
List of Items to be Supplied	Detailed specification enclosed below or visit www.etenders.kerala.gov.in http://www.gecbh.ac.in http://www.dtekerala.gov.in

## **General Terms and Conditions**

Note: The dates furnished above are subject to revision

- i. This tender document is not transferable. Tender Documents shall be available only on E-Tender Website and will not be available for sales elsewhere.
- ii. GECBH reserves the right to amend or cancel the tender in part or in full without prior notice at any point of time.
- iii. If GECBH deems it appropriate to revise any part of this NIT or to issue additional data to clarify an interpretation of provisions of this NIT, it may issue supplements to this NIT. Any such supplement shall be deemed to be incorporated by this reference to this NIT.
- iv. GECBH reserves the right to reject the bid of parties who have failed to provide adequate after sales support for the products supplied against various orders.
- v. Supplier shall provide access to their Website so that GECBH can verify whether the warranty and coverage / scope/ product brochure details are updated in the website as per the order/bid offered.
- vi. LD will be charged for delayed supply. Furthermore, if the delay exceeds 4 weeks after the scheduled date of supply, such suppliers will not be considered for the subsequent tenders.
- vii. The Special Instructions to the Contractors/Bidders for the e-submission of the bids are given under "Help to Contractors" in website <http://etenders.kerala.gov.in/nicgep/app>

Specific Terms & conditions for E Tender.

1	<b>Hard copies of the tender documents shall be submitted before the date of opening of tenders. The bid will be rejected, if the bidders fails to produce hard copy of the agreement before the date of opening of tenders</b>
2	The price quoted should be inclusive of all taxes, freight charges, transportation, loading, unloading charges, installation etc. The rates are to be firm for 180 Days from the date of opening E- tender
3	5% security deposit along with agreement should be furnished within a month/fortnight from the date of receipt of supply order.
4	Delivery @ Concerned Department at Government Engineering College, Bartonhill, Thiruvananthapuram <b>with prior intimation of delivery to Department HOD/Purchase Section</b>
5	Payment –Only after the satisfactory supply and installation/commissioning
6	A preliminary Agreement as per NIT shall be prepared in Kerala Stamp Paper worth Rs.200/- and produced along with Tender documents
7	All amount payable is through Online remittance only
8	Date of Opening- If the opening date is declared as a holiday the tenders will be opened on the next working day.
09	Tender documents are to be up loaded through E- tendering system. Tender cost and EMD should be remitted through net banking(Electronics Transfer only)
10	<b>Warranty of 1 year or more for all items</b> . Warranty/Guaranty- On site warranty/Guarantee shall be specifically mentioned in the Bid offered.

Sd/-  
Dr.Rajasree.M.S  
Principal

Specifications

Sl.No.	Item	Specification	No.of units
1	THERMOCOUPLE MODULE	<ul style="list-style-type: none"> <li>*J' type Thermocouple as a temperature sensor</li> <li>* One AD590 sensor for cold junction compensation</li> <li>* Signal conditioner for 'J' type thermocouple output: 0-5V</li> <li>*Built in Instrumentation power supply</li> <li>*3½ digit digital indicator to display the temperature.</li> <li>* Water bath as heat source</li> <li>* Offset variable provision</li> <li>* Thermometer provided to monitor the temperature</li> </ul>	3
2	RTD MODULE	<ul style="list-style-type: none"> <li>*PT100 type RTD as a Temperature sensor</li> <li>* Signal conditioner for RTD output 0-5V</li> <li>* Built-in Instrumentation power supply</li> <li>* A 3½ Digit Digital Indicator to display the temperature</li> <li>* Water bath as heat source.</li> <li>* Thermometer provided to monitor the actual temperature</li> </ul>	3
3	LIGHT MEASUREMENT TRAINER MODULE PHOTOCELL CONVERTER	<ul style="list-style-type: none"> <li>*Measure light intensity as voltage</li> <li>* 3.5 digit display</li> <li>* Built in power supply</li> <li>* Signal conditioner for LDR</li> <li>* Output voltage 0 to 5V</li> </ul>	3
4	DISPLACEMENT MEASUREMENT TRAINER USING LVDT	<ul style="list-style-type: none"> <li>*LVDT sensor with Micrometer (Range: 0-25mm)</li> <li>* Signal Conditioner for LVDT</li> <li>* Displacement calibrated Range for +10mm</li> <li>* Output voltage: 0-5V</li> <li>* Built in Instrumentation Power Supply</li> </ul>	6
5	PRESSURE MEASUREMENT TRAINER MODULE	<ul style="list-style-type: none"> <li>*One metal pressure tank fitted with strain gauge type pressure cell</li> <li>* A needle valve fitted in a pressure tank to release the pressure.</li> <li>* Bourdon type pressure gauge provided in the tank to indicate pressure.</li> <li>* One manually operated foot pump to generate a pressure of the tank.</li> <li>* Signal conditioner for pressure cell (output 0-5V)</li> <li>* Offset and gain variable provision.</li> </ul>	6
		<ul style="list-style-type: none"> <li>* Input : 24V/50Hz AC</li> <li>* Output: 5V/1A DC</li> </ul>	

6	SWITCHED MODE POWER SUPPLIES	* PWM generation by TL494 IC * PWM Isolation by 6N137IC * IRF 250 MOSFET as a power switch * Provision for pulse width variation facility * Provision for feedback variation facility * Power inductor transformer	6
---	------------------------------	---	---