



## ISLAMIC UNIVERSITY OF SCIENCE & TECHNOLOGY AWANTIPORA, KASHMIR

### TENDER NOTICE

For and on behalf of Vice Chancellor Islamic University of Science and Technology (IUST), Awantipora, sealed tenders affixed with revenue stamp of Rs. 5/- in two bid system are invited from the reputed manufacturers/authorized dealers for supply, installation and testing of various laboratory/scientific equipments as mentioned in the Annexure–A of this tender for the Department of Electrical Engineering. The detailed tender document can be obtained from the office of **Procurement & Stores** or can be downloaded from the University website: [www.islamicuniversity.edu.in](http://www.islamicuniversity.edu.in) against DD of **Rs. 500/-** (non refundable) favouring Islamic University of Science and Technology, Awantipora Pulwama (J&K) as cost of the tender document and to be submitted by or before 16-02-2018 (02.00 pm). Terms and Conditions apply.

Member secretary  
(Central Purchase Committee)

No.IUST/Reg/P&S/Tender/18/74

Dated: - 29-01-2018

## GENERAL TERMS & CONDITIONS

**The Bidders are expected to go through all instructions, terms & condition as specified in the bidding document. Failure to furnish complete required information or submission of a bid with incomplete information may result in rejection of the bid.**

1. The tender duly completed and signed shall be submitted in a two sealed envelopes. Envelope A (Technical Bid) and Envelope B (Financial Bid).
2. The Technical Bid (Envelope- A) would be opened first and the tenders found eligible will go for opening of Financial Bid (Envelope-B) on the same day or the day as decided by the CPC. The Financial Bid (Envelope-B) of in-eligible bidders will not be opened.
3. The supply, transportation etc. of the items will be sole responsibility and at the risk of the firm till the acceptance by the University.
4. All the items and other accessories supplies made under this tender notice will be inspected by a Committee specially constituted for the purpose and in case the Committee is of the opinion that the supplies are not of the required specifications, the supplies shall be rejected and responsibility of lifting back the supplies will devolve on the supplier. Besides, in such event, the EMD shall stand forfeited and the extra cost incurred in arranging the supply from the alternative sources shall also be recovered from the defaulting supplier apart from initiating the proceedings for blacklisting.
5. The University reserves the right to reject or accept any Proposal without assigning any reason or cancel or withdraw the tender. The University reserves the right to relax any condition enumerated or arising out of this tender, without assigning any reason/s thereof. If the supply of the required items are not affected before the specified period, the University shall have the authority to cancel the order or to take any action deemed fit in the circumstances.
6. The EMD may be forfeited:
  - (a) If a Bidder withdraws its bid during the period of bid validity.
  - (b) If at any stage it is proven that the information given by the bidder is incorrect.
  - (c) In case of a successful Bidder, if the Bidder fails:
    - to execute the supply within the stipulated time.
    - if the items are not as per the specifications.
7. The University may, for any reason, whether suo-moto or in response to a clarification requested by a prospective bidder, modify the bidding documents by an amendment, any time prior to the last date for submission of bids.
8. Tenders received after due date, improperly sealed, or with incomplete marking or with overwriting/corrections are liable to be rejected.
9. During evaluation of bids, the University may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.

I/We hereby declare that the information furnished in the tender is true and correct and also I/We have gone through the terms and conditions stipulated in the Tender Document and confirm to abide by the same. In case the information provided is found incorrect at any stage, the University may take appropriate action as warranted.

Name and sign of the authorized person of the firm along with seal

Place:

Date:

## **TENDER DOCUMENT**

### **(Envelope- A (Technical Bid) It should contain the following:**

- a. Authorization /dealership/manufacturer certificate.
- b. GST Registration.
- c. Technical specification/ literature for the goods/equipment **Annexure-B**.
- d. Bidders Profile **Annexure-C**.
- e. Warranty Certificate **Annexure-E**.
- f. Bid security @ 2% in the shape of FDR of any nationalised Bank drawn in favour of “Islamic University of Science and Technology”, payable at Awantipora, Pulwama (J&K) and tender document fee Rs. 500/- (non refundable) in the form of DD, in favour of Islamic University of Science &Technology.
- g. Certificate of service support after sale wherever necessary.
- h. Proof of legal status.

### **(Envelope-B (Financial Bid) It should contain the following:**

- a. Bid prices shall be in Indian Rupees (**Annexure-D**).
- b. The rates shall be quoted FOR IUST Stores, Awantipora including transportation, installation/commissioning/fixing excluding GST.
- c. Bid price should be without over writing; however minor over writing should be clearly signed by the bidder. In case of any discrepancy between price quoted in figures and words, the price quoted in words shall be accepted.
- d. The rates should be covered with transparent tape.

### **Validity of Bids**

- a. Bids shall remain valid at least for 90 days from the date of opening.

### **Evolution of Bids**

- a. IUST shall evaluate and compare the bids which are found substantially Responsive. i.e which are
  - (i) Properly signed.
  - (ii) Conform to terms and conditions and technical specifications.
  - (iii) Accompanied with Bid security and all other documents.
  - (iv) Bids shall be evaluated separately for each item.

### **Award of contract**

- a. Contract shall be awarded to the bidder whose bid is commercially, technically responsive and offered at lowest evaluated price.
- b. Successful bidder shall be informed about the award of the contract where in terms and conditions of supply shall be incorporated.

### **Payment**

- a. 100% payment shall be made against delivery of items, successful verification/inspection of items by the University Verification Committee.

### Warranty

All items shall carry comprehensive standard warranty of one year (Annexure-E).

### Settlement of disputes

a. Settlement of any dispute will be made under the jurisdiction of Srinagar court only.

### Submission of Bids

(a) The tender duly completed and signed shall be submitted in sealed envelopes. The two envelopes Envelope A (Technical Bid) and Envelope B (Financial Bid) should be kept in separate one envelope. The sealed cover upper-scribed “**Tender for supply of Lab Equipments for the Department of Electrical Engineering**” shall be addressed to the **Member Secretary Central Purchase Committee** Islamic University of Science and Technology, Awantipora Pulwama and shall be submitted on or before 16-02-2018 02.00 pm.

### Bid opening

- (a) The Technical Bid (Envelope- A) would be opened first and the tenders found eligible will go for opening of Financial Bid (Envelope-B) on the same day or the day as decided by the CPC. The Financial Bid (Envelope-B) of in-eligible bidders will not be opened.
- (b) Interested bidders can attend the bid opening occasion.

**Annexure-A**  
**Schedule of Requirements**

<i>S. No</i>	<i>Name of the item</i>	<i>specifications</i>	<i>Quantity</i>	<i>Delivery Period</i>
01	Auto compute LCR-Q Meter	<ul style="list-style-type: none"> <li>• Microprocessor based Fully Automatic L, C, R &amp; Q Measurement Auto ranging with Direct Digital Readout</li> <li>• Terminal Measurement Technique No Tuning or Balancing</li> <li>• Equivalent Measurement Absolute Value and Nominal Value Sorting with Percentage Tolerance Single / Multiple Parameters Check during Component Sorting</li> <li>• Remote Programmable through GPIB / RS232 Interface</li> </ul>	2	<b>45 Days</b>
02	Single and three phase resistive load	<ul style="list-style-type: none"> <li>• Suitable for Single and Three Phase Operation</li> <li>• Star/Delta Switch for easy conversion</li> <li>• Suitable for both static &amp; rotating machines</li> <li>• Five selectable load values on each bank</li> <li>• Suitable for balanced and unbalanced load Conditions</li> <li>• MCBs are used to switch values and provide protection at the same time</li> <li>• Provided with cooling fan for heat suppression</li> <li>• Designed by considering all the safety standards</li> <li>• Equipped with Supply Indication Lamps</li> <li>• Provide with trolley for flexible movement</li> <li>• 2 Year Warranty</li> </ul>	1	
03	Single and three phase capacitive load	<ul style="list-style-type: none"> <li>• Suitable for balanced and unbalanced load Conditions</li> <li>• MCBs are used to switch loads and provide protection at the same</li> <li>• Provide with trolley for flexible movement</li> <li>• Equipped with Supply Indication Lamps</li> <li>• Mains Supply : 230V AC <math>\pm 10\%</math>, 50Hz (Single Phase), 415V AC <math>\pm 10\%</math>, 50Hz (Three Phase), Current : 4.6A each phase (in Star connection), 13A each phase (in</li> </ul>	1	

		Delta connection, Star/Delta Switch : 415V, 32A, MCB : 16A (Four Pole) 1 No. 10A (One Pole) 30 Nos.	
04	Single and three phase inductive load	<ul style="list-style-type: none"> <li>• Single Phase Operation</li> <li>• Voltage : 240V AC <math>\pm 10\%</math>, 50Hz</li> <li>• Current : 15A</li> <li>• Power : 3.5KVAR</li> <li>• Loading steps : 30</li> <li>• MCBs</li> <li>• Current rating : 10A (SP)</li> <li>• No. of MCBs : 30 Nos.</li> <li>• Three Phase Star Operation</li> <li>• Voltage : 415V AC <math>\pm 10\%</math>, 50Hz</li> <li>• Suitable for both static &amp; rotating machines</li> <li>• Star/ Delta switch provides easy switching</li> <li>• MCBs are used to switch values and provide protection at the same</li> <li>• Heavy duty wheel for easy movement</li> <li>• Suitable for balanced and unbalanced loading conditions</li> <li>• Designed by considering all the safety precautions</li> <li>• 2 Year Warranty</li> <li>• Current : 5A (per Phase) Power : 3.5KVAR, Loading steps : 5 (per Phase) MCBs (acts as a switch) : 10A (SP) Three Phase Delta Operation Voltage : 415V AC <math>\pm 10\%</math>, 50Hz Current : 15A (per Phase), Power : 10KVAR, Loading steps : 5 (per Phase), MCBs : 10A (SP) Star/Delta Switch : 415V, 25A, MCB : 16A (TPN)</li> </ul>	1
05	1 phase autotransformer,	<ul style="list-style-type: none"> <li>• Frequency= 50Hz</li> <li>• Rating= 5kVA,</li> <li>• Efficiency<math>\geq 96\%</math></li> <li>• With Class A type insulation and fuse protection on output.</li> </ul>	5
06	Resonance Kit	<ul style="list-style-type: none"> <li>• A kit to demonstrate series and parallel resonance with built in good quality measuring instruments on panel</li> </ul>	2
07	Single Phase analogVAR meter	<ul style="list-style-type: none"> <li>• 50Hz ,240<math>\pm 10\%</math> 100VAR maximum value</li> </ul>	5

08	Single Phase analog Power Factor meter	<ul style="list-style-type: none"> <li>• 0.5 lag Unity-0.5 Lead or 0.3 Lag Unity-0.3 Lead at Single Voltage 110V/220V/440V &amp; single Current 1A/10A</li> <li>• 50Hz ,240±10% V</li> <li>• Accuracy= ± 1.0% of full scale value</li> </ul>	5	
09	Soldering/Desoldering Station	<ul style="list-style-type: none"> <li>• Accurate and advanced temperature Control with micro controller technology</li> <li>• User-friendly operation</li> <li>• Set / Read of temperature</li> <li>• Increase and Decrease of keys to set temperature once set the read</li> <li>• Burn proof silicon cable with thermal resistance up to 600 degree centigrade</li> <li>• Technical Specifications :</li> <li>• Soldering, Power consumption : 60 W, Input voltage : 170 to 270 V, Temperature range : 180 to 270 V, Temp stability : ± 10°C, Temp accuracy : ± 1°C of tolerance at idling, Tip to ground potential : Under 2mv, Tip to ground resistance : Under 20hms, Desoldering : 70 Watts, Input : 170 to 270 V AC, Temperature range : 180 to 480°C, Pump : Diaphragm type, Vacuum : 600 mm/Hg</li> </ul>	3	
10	Multi-Function Meter	<ul style="list-style-type: none"> <li>• Accuracy Class 1.0, 0.5, 0.5S, 0.2 as per IEC 62052-11/ IEC 62053-22</li> <li>• Monitors all electrical parameters : per phase, voltage, current, demand, W, VA, VAR</li> <li>• Monitors all Instantaneous, integrated and demand parameters</li> <li>• Neutral Current, Frequency, Power Factor, % Load, %unbalance (V&amp;I), Phase angle , THD</li> <li>• Demand Calculation method – Sliding &amp; Fixed block, Import/Export monitoring</li> <li>• Color coded analog load bar indicators for percentage of load through LED segments</li> <li>• CT Reversal : Auto correction of energy integration in Star (WYE) mode</li> <li>• User programmable</li> <li>• Delta/STAR/2Ph/1ph</li> <li>• PT/ CT primary &amp; Secondary</li> <li>• Turbo Key for one touch operation &amp; Setup</li> </ul>	3	

11	Solderless Plug-in BreadBoard,	<ul style="list-style-type: none"> <li>• With 400 tie-points</li> </ul>	50	
12	Wire Cutter and Stripper	<ul style="list-style-type: none"> <li>• Good Quality and Make</li> </ul>	5 each	
13	Potentiometers	<ul style="list-style-type: none"> <li>• (1k, 5k, 10k, 20k)</li> </ul>	50 each	
14	Colour coded carbon resistors,	<ul style="list-style-type: none"> <li>• 1/4Watt (all standard values)</li> </ul>	200 each	
15	Connecting wires of Standard gauges	<ul style="list-style-type: none"> <li>• jumper wires(male to male)</li> <li>• Jumper wires (male to female)</li> <li>• Jumper wires (female to female)</li> </ul>	100 each	
16	Wire sleeves of Standard Gauges		10 metres of each	

**POWER SYSTEM LAB**

<b>S. No.</b>	<b>Product Description</b>	<b>Quantity</b>	<b>Delivery Period</b>
01	<p>Characteristics of Percentage biased of Static/Electro Magnetic differential Relay            Make: Alstom., 7054B/7053A.            % biased of Static/Electro Magnetic differential Relay.            Differential relay consists of operating coil and restraining coil in Electro Magnetic Relay.            The differential relay is adjustable 20%, 30% and 40%.            Consists of a Panel Closed type with front Hylam sheet.            Panel size 2ft ht x 4 ft wd x 200mm depth.            MCB for Switching on with Indications and BTI – 30 terminals for Connections.            3 Phase Auto Transformer 8 amps – 1no.            3 ph Transformer 400/200 volts Star/ Star – 3KV<sub>a</sub>.            10/5 amps Standard CT --- 3nos.            5/5 amps Standard CT --- 3nos.            12 to 24 VDC, 5Amps Power supply – 1no.            Metering: 2AAC-1no, 5AAC – 3nos, 10AAC-3nos.            500VAC-2nos.            Load Bank , Balanced load upto 2.5KW and 0.5KW in Unbalanced.            4 pole Contactor 16 amps with Push to ON and push to OFF contacts to create faults.</p>	1	45 Days
	<p>Characteristics of Static Relay UV/OV            7052B/7053B, Make : L&amp;T Ltd.,            Microprocessor based Static UV/OV Relay.            Consists of a Panel Closed type with front Hylam</p>		



02	<p>sheet.</p> <p>Panel size 2ft ht x 4 ft wd x 200mm depth.</p> <p>MCB for Switching on with Indications and BTI – 30 terminals for Connections.</p> <p>1 Phase Auto Transformer 6 amps – 1no.</p> <p>Transformer 230/320 volts 50 ma – 1no.</p> <p>Metering : 400 VAC Digital meter .</p> <p>Stopwatch to measure IDMT Panel mounting.</p> <p>4 pole Contactor 16 amps with Push to ON and push to OFF contacts to create fault Voltage.</p>	2	
03	<p>Performance and Testing of Generator Protection System.</p> <p>Performance and Testing of Transformer Protection System.</p> <p>Consists of a Panel Closed type with front Hylam sheet.</p> <p>Panel size 2ft ht x 4 ft wd x 200mm depth.</p> <p>MCB for Switching on with Indications and BTI – 30 terminals for Connections.</p> <p>2 over Current Earth Fault Relay (Static type/Electro Mechanical type).</p> <p>Standard CT 5/5 amps – 3nos.</p> <p>3 phase Load bank Balanced .</p> <p>Rheostat 100 ohms, 5 amps – 1no.</p> <p>Metering : 5AAC-3nos, 2AAC, 500VAC.</p> <p>Load Bank 3 phase suitable for the above protection system.</p>	1	
04	<p>Performance and Testing of Transmission line Model 220KV/ 400Km Model.</p> <p>To Determine Efficiency and Regulation of 3 phase Transmission model .</p> <p>Fault analysis (LL,LG, LLG) of Transmission lines.</p> <p>Determination of ABCD Parameters of short, medium and long lines.</p> <p>Consists of a Panel Closed type with front Hylam sheet.</p> <p>Panel size 2ft ht x 7 ft wd x 200mm depth.</p> <p>MCB for Switching on with Indications and BTI – 30 terminals for Connections.</p> <p>3 phase Auto Transformer 12 amps closed type – 1no.</p> <p>Inductor value : 0.006mH per km</p> <p>Capacitor value : 0.025 micro farad per Km</p> <p>Metering : Digital 500VAC-2nos, 10AAC-2nos, Analog Wattmeters 500volts, 10A – 4nos.</p> <p>LPF Wattmeter is required to conduct ABCD</p>	1	

	Parameters. Load Bank 3 phase suitable for the above Transmission line model.		
05	Working phenomenon of Distribution system configured as Radial and ring main distribution. Mains Supply : 230V $\pm$ 10%V AC, 50Hz Two Inbuilt Isolated DC Output Supply Rated Voltage : 0 - 220V $\pm$ 10% (Variable) Rated Current : 1A Transformer Rating : 0.2kVA Primary Voltage : 230V Secondary Voltage : 200V Variat Input : 230V Output : 0-270V Current : 2A Digital meter used 3½ digit DC Voltmeter (3 Nos.) : 300V DC Ammeter (3 Nos.) : 0-2A MCB : 2A. Fuse Protection at output.	2	
06	To check the dielectric strength of transformer oil. Should be provided with transformer oil of 5 litres. Input Voltage: 240 Volts, 50 Hz, single phase AC supply. Output Voltage: Continuously variable voltage. H.T. Source: Heavy duty epoxy resin cast, dry, maintenance free transformer with midpoint ground. Voltage rise: Motorized at 2 kV per second ( $\pm$ 20%). . Trip: Automatic cut-off in the event of oil breakdown.	2	
07	Test set-up to demonstrate calculations of string efficiency of an overhead transmission line. Mains Supply: 415V/230V $\pm$ 10%V AC, 50Hz, with built- in measuring instruments of good quality and build. Should not require any external measuring instruments to be connected.	2	

**Bidder's Profile to be placed in Envelope A (Annexure-C)**

Name of the firm:- \_\_\_\_\_

Tender for supply of \_\_\_\_\_

Tender No. & Date: - \_\_\_\_\_

Technical specification/ literature attached:- Yes/No

GST certificate attached:- Yes/ No

Registration/ Authorization Dealership/  
Manufacturer certificate attached:- Yes/ No

Revenue stamp affixed. Yes/ No

Rates covered with transparent tape:- Yes/ No

Bid document fee deposited:- Yes/ No

Bid Security enclosed:- Yes/ No.

Bid price in Indian Rupees:- Yes/ No

Bid without correction/overwriting:- Yes/No

Seal and Signature of the Bidder



### **Annexure-D (Price Bid)**

<b>S. No</b>	<b>Name of The item/Equipment as per the tender</b>	<b>Price per unit FOR IUST campus Awantipora (Excluding GST*)</b>	<b>Quantity</b>	<b>Total Price</b>

\* GST shall be paid as applicable at the time of supply of the items.

## **Annexure-E**

### **WARRANTY CERTIFICATE**

We warrant that everything to be supplied by us hereunder shall be brand new, free from all defects and faults in material workmanship and manufacture and shall be of the highest grade and quality and consistent with the established and generally accepted standards for material of the type ordered, shall be in full conformity with the specifications/drawings of samples if any and shall operate properly. We shall be fully responsible for its efficient operation.

In case of any latent defect or inconsistency due to poor manufacturing/repair and overhaul of the Machinery/Equipment or defective supply not conforming to the specifications if observed at the time of final inspection and thereafter within warranty period ----- months of the date of acceptance, we undertake the guarantee to repair/supply free of cost of defective items up to the final destination and the inland expenses borne by the indenter will be at our cost.

This warranty shall survive inspection and payment for and acceptance of the equipment/machinery shall expire (except in respect of complaints of which the contractor has been notified prior to such date) ----- months in case equipment/machinery after their successful acceptance by the purchaser.

SEAL of manufacturer/supplier.

Dated \_\_\_\_\_

Signature-----

Name and Address of Manufacturer/Supplier