

INDIAN INSTITUTE OF ENGINEERING SCIENCE & TECHNOLOGY, Shibpur
P.O. Botanic Garden, Howrah – 711 103, INDIA.
(Tel: 91-33-2668 4561 Extn 600)

TENDER NOTICE INVITING QUOTATIONS
Advt. No DE/D (AA)/16/70 dated 08/12.2016

Sealed quotations are invited from reputed vendors for supply and installation of high quality Test and Measurement Equipment/Power supply etc. for CST Dept. Details are available at www.iiests.ac.in.
Last date: 20-12-2016.

Dean (Administrative Affairs)
IIEST, Shibpur.

INDIAN INSTITUTE OF ENGINEERING SCIENCE & TECHNOLOGY
(Formerly Bengal Engineering and Science University, Howrah)
P.O. Botanic Garden, Howrah – 711 103, INDIA.
(Tel: 91-33-2668 4561 Extn. 600)

TENDER NOTICE INVITING QUOTATIONS
For
Supply & Installation of Various Equipment for CST Department
Advt. No DE/D (AA)/16/70 dated 08/12.2016

You are invited to submit your most competitive quotations for supply and installation of high quality Test and Measurement Equipment/Power supply etc. for CST Department, Indian Institute of Engineering Science and Technology, Shibpur. Howrah.

List of Equipments/Simulation tools

Sl No	Item	Quantity
1	Function generator	10
2	Oscilloscope	5
3	PLC	1
4	Digital IC tester	1
5	Multimeter	6
6	Logic Probe & Pulser	5
7	EPROM Programmer	2
8	Multi Output DC Regulated Power Supply	6
9	Insulation Tester	1

Note:-

1. Specify Make and Model No. of quoted items.
2. In a bid, for any item, a single product from a particular OEM has to be quoted. That is, not more than one product can be quoted against any particular item.
3. Quantities are approximate. It may be lesser or more.
4. All the items require 3-year comprehensive on-site warranty. If any item (or part of it) is not covered under the warranty or related clause, it must be clearly indicated in the bid/offer/ quotation.
5. Details specifications of relevant items are given in annexure.
6. Submission of quotations closes at 3-00 pm, 20-12-2016.

Computer Science and Technology Department
INDIAN INSTITUTE OF ENGINEERING SCIENCE & TECHNOLOGY, Shibpur
Terms, Conditions and Important Instructions for Vendors Quoting against
Advt. No DE/D(AA)/16/70 dated 08/12.2016

1. The original tender document with technical specifications is available at www.iiests.ac.in.
2. Submission of quotations closes at 3-00 pm, 20-12-2016. The tender opening schedule is 20-12-2016 at 3.45 PM.
3. Quotations, addressed to the Head, Computer Science and Technology, IEST, are to be submitted in sealed cover, noting Advt. No. on the top of the envelope along with vendor's name, address, phone no. etc. in the office of the CST Department.
4. Quotations are to be submitted in original after accepting the terms and conditions.
5. Vendor's Bank account no, with IFSC code, Photo copy of PAN Card & certificate of VAT are to be attached with the quotations.

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7. In a bid, for any item, a single product from a particular OEM has to be quoted. That is, not more than one product can be quoted against any particular item.
8. Vendor should ensure compliance against each technical specification along with proper evidence.
9. Equipment and other items, to be supplied, should be as per the specification and approved by the appropriate authority.
10. The quoted price shall include additional charges, if any, for all comprehensive warranty extended up to the period mentioned.
11. Price should be quoted item-wise in Indian currency and inclusive of all taxes, duties and levies as applicable. Type and amount of these taxes, duties and levies are to be mentioned clearly.
12. Equipment/items are to be delivered within 21 days from the date of issue of the purchase order.
13. The supplier is responsible for any breakage, damage or defect in equipment/items, detected subsequently, prior to final commissioning.
14. Bills and challans in duplicate should be presented for payment within 15 days of supply of equipment or completion of work. All bills are to be accompanied by copy of orders and receipt or challan. Order number no. with date, VAT no. and PAN no. are to be mentioned on both Challan and Bills.
15. Payment will be made by a/c payee cheque or by Account transfer after submission of proper bills and challans. No cash payment will be made under any circumstances. No advance payment can be made.
16. All payments are subjected to statutory deductions as and when applicable.
17. Documents to be submitted with the quotations (put tick marks, in the list of items, against the items quoted).
 - A. Terms and conditions (given below), in original, duly signed by the authorized personnel, on behalf of the vendor, as a token of acceptance of terms and conditions of the Tender.
 - B. Copy of the latest Income Tax, Sales Tax, Professional Tax clearance certificate along with VAT No & Trade License.
 - C. Price quoted in a sealed envelope in separate page(s) and duly signed.

D. Valid authorization certificates of distributorship from Principal Manufacturer whenever applicable.

18. Terms and Conditions

- a. All the Equipment/Items shall carry a guarantee for a minimum period mentioned in the tender document from the date of successful installation (if any item or parts of it is not covered under the warranty or related clause then it must be clearly indicated in the bid /offer/quotation).
- b. Supply of Equipment includes installation, erection, commissioning, demonstration & training whenever applicable.
- c. Indian Institute Of Engineering, Science and Technology, Shibpur, Howrah, reserves the right to reduce or enhance the quantity of item(s) to be procured as mentioned in the tender document. One or more item(s) may be canceled too.
- d. Indian Institute of Engineering, Science and Technology, Shibpur, Howrah, reserves the right to accept/reject all or any of the tender items without assigning any reason whatsoever.

I/we accept the above terms and conditions.

Signature of the Appropriate authority of the Vendor with Seal

Specifications of Measurement Equipments/Power supply/Etc.

1. Function generator

Features	Arbitrary function generator, Dual channel. micro-Hz to 20MHz frequency range (sine wave). 1 micro-Hz resolution. AM/FM/PM/FSK/ASK/etc. Modulation. Frequency counter mHz to 200MHz. Very high waveform quality at all frequency & levels. TFT-LCD display. Weight less than 3 Kg. USB host/device interface, waveform editing. USB cable, User manual hard copy.
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2. Oscilloscope

Features	60MHz or more – Bandwidth. 1mV/div Sensitivity on Both Channels. CH1 & CH2 Independent Channels. 10ns/div to 0.2s/div Time Base. ALT MAG. Trace - Max. 4 Traces. Rise Time 6ns or less. Accuracy ±3%. Input Impedance : 1M ohms & 25pF approx. Power requirement : 220V AC ±10%, 50Hz ±5%, 40VA (max.). Display TFT LCD; Modes : CH1, CH2, DUAL (CH1, CH2 ALT/CHOP), Algebraic ADD and SUBTRACT, CH2 INVT & X-Y (CH1 as X, CH 2 as Y) (Sample rate should be fast). Direct print function; Help function on front panel. Standard Accessories : Instruction Manual hard copy, 2 High impedance switch probe with x1 or x10 attenuation, main cord, USB cable. User manual hard copy.
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3. PLC

Features	Slim or All-In-One style. CPU units are equipped with 10, 16, 20, 24, or 40 I/Os. Maximum of 264 I/Os can be configured on a single MicroSmart CPU. Expansion modules: AC/DC inputs, relay/transistor outputs, RTD/Thermocouple and Analog I/Os, and AS-interface Master communication module. Standard RS232 port, optional plug-in RS485/RS232 port for data link or modem communications. Optional plug-in HMI module for monitoring, memory cartridge. Built in Modbus-CRC, PID and Ramp functions. 4 built-in high speed counters, interrupt and catch inputs. Data link for up to 32 MicroSmart or other IDEC PLCs cULus, CE, TUV and Lloyds approved. Easy programming. Web server module for faster, easier ethernet connectivity.
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	User manual hard copy.
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4. Digital IC tester

Features	<p>Can test more than 1500 Ics. Tests wide range of Digital IC's such as 74 Series, 40/45 Series. 24 pin DIP ZIF sockets. Auto Search facility for listed IC's. 16 keys and 16 x 1 line LCD display. User manual hard copy.</p>
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5. Multimeter

Features	<p>Digital 5 and 1/2 digit TFT-LCD. Voltage measurement (at least): AC/DC up to 400v $\pm 1.0\%$. microA - 10A Current range Resistance: 400/4k/40k/400k/4m $\Omega \pm 1.0\%$, 40m $\Omega \pm 2.0\%$. Cap: 4n/40n/400n/4 M F $\pm 4.0\%$. Frequency: 40hz To 100khz $\pm 2.0\%$. Period measurement. Temperature: $-40^{\circ}\text{c} \sim 750^{\circ}\text{c} \pm 1.0\%$. Diode Test, Continuity Test, Data Hold. Power: Battery 6f22 (9v) X 1. USB interface, Low Battery Indication. Power cord, Two test leads, Two alligator clips, USB cable. User manual hard copy.</p>
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6. Logic Probe & Pulser

Features	<p>Frequency Response 50MHz. Detectable Pulse Width 10ns. Logic Threshold TTL Hi > 2.3V, Lo 0.75V; CMOS Hi > 70% Vcc $\pm 10\%$, Lo < 30% Vcc $\pm 10\%$. Operating Supply Voltage 4-18V. Signal input impedance 1 MΩ.</p>
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7. EPROM Programmer

Features	<p>Support 5V device, USB for power source. Effectively protection for programmer and devices. USB load testing (0 to 10 levels). 40-pin self-lock sockets. Working support for WINDOWS/XP. Kit in handy enclosure, User manual hard copy.</p>
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8. Multi Output DC Regulated Power Supply

Features	<p>Input Voltage: 230V $\pm 10\%$ AC 50 Hz. Outputs: 0 - 30V DC/ 2A, 0 - ± 15V DC/ 1A, 0 - 5V DC/ 5A. Effective/Standard Load Regulation. Separate Digital meter to monitor each of the outputs. Protection against short circuit and over load; User manual hard copy.</p>
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9. Insulation Tester

Features	Hand held Digital Insulation Tester. Test Voltage: 250 V - 800 V. Insulation Resistance: 200M Ω – 2000M Ω . Relative Humidity: <70% RH. Short Circuit Current: less than 2 mA. Weight of Device less than 800 gram; User manual hard copy.
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