



Department of Physics

Indian Institute of Engineering Science & Technology, Shibpur
(Formerly Bengal Engineering & Science University, Shibpur)
P.O: Botanic Garden, Howrah - 711103, West Bengal, India
Website:<http://www.iiests.ac.in>

Ref.: Tender Advt. No. 02/IIEST/PHY/Web.Not./Lab.Equip/2022-23, dated 16.02.2023

Notice Inviting Quotation

Sealed quotations are invited for supply of the following items/equipment or to carry out works listed below as per mentioned specifications. The relevant bidding document can be downloaded from the website. The document can be also obtained from the Department of Physics (Contact: Head, Department of Physics) between 11.00 a.m. and 5.00 p.m. on all working days. The quotation should include all kinds of taxes/duties and delivery, Installation charges etc (GST 18% should be quoted separately) of the items and to be sent to the Office of the Head, Department of Physics, IIEST, Shibpur, Howrah-711103 or dropped into the Tender Box kept in the Department. Last date of submission of sealed quotation is 7 working days from the date of publication in the Website of the Institute and tenders will be opened on the next working day at 12 noon.

Enclosed:

Section- I: Specification of the Items.

Section- II: General Conditions and Important Instructions for Bidders.

Dipesh Majumdar

Acting Head
Department of Physics
IIEST, Shibpur
Head
Department of Physics
IIEST, Shibpur
Howrah-711103

SECTION I: TECHNICAL SPECIFICATIONS: -

Item 1: IC TESTER (DIGITAL) Quantity:1no.

IT consists of latest MICROPROCESSOR based DIGITAL IC TESTER. It functionally tests a variety of digital ICs including Microprocessors, Peripheral ICs, EPROMs, RAMs, TTL ICs and 74, 40 & 45 series of CMOSICs.

SPECIFICATIONS

- No. Personality cards/reference IC/IC data required. Buzzer to indicate bad IC.
- Automatic testing of ICs at 4.75V & 5.25 to locate marginally bad ICs
- CON mode to test IC continuously.
- Continuous mode for testing ICs until ABORTed.Number of time the test was successful is displayed.
- STEP mode to locate faulty pin through discrete LEDs for ICs up to 20 pins.
- Auto search to find the number of unknown good digital IC with facility to locate its functional equivalents for ICs up to 20pins.
- Memory test for EPROM indicates non blank location address with data content. For RAMs bad location address is displayed.
- Separate field for display of mode of operation (ONE/CON/STP).
- Current draw is displayed in a separate field for good ICs.
- Backspace, clear and double-digit entry keys for editing IC number.
- Remembers IC Numbers for repeated testing of same IC.
- SELFTTEST facility during power ON and through keyboard.
- Potential free 20 pin and 40 pin ZIF (zero insertion force) sockets.
- Protection against wrong insertion of IC under test.

Item 2: IC TESTER (Linear) Quantity:1no.

It is the Microprocessor controlled LINEAR IC FUNCTIONAL TESTER. It functionally test a variety of linear ICs including commonly used Operational amplifiers, Comparators, Transistor arrays, Optocouplers, Analog switches, Multiplexer, Voltage followers, Timers, A to D converters, D to A converters, cross point switches and other selected special function analog ICs.

SPECIFICATION:

- Package: LINEAR ICs and Analog & Digital combined ICs of 6, 8, 10, 14,16,18,20 pins dual in line. (also, round pack if inserted after bending leads to suit DIP).
- Range: Operational Amplifiers, Comparators, Transistor arrays, Opto Couplers, Analog switches, Multiplexers, Voltage followers, Timers, A to D converters, D to A converters and other selected special function analog ICs.
- Method: Output test with simulated inputs and at nominal loads. It performs only functional test and not parameter test.
- Socket:20 pin DIP ZIF.
- Keyboard: 24 feather touch keys.
- Display:16-character LCD dot matrix display.
- Voltage:230 Volts +- 10% 50 Hz AC.



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Item 3: Digital Multimeter (Quantity: 15 nos.)

3-1/2 Digits, Backlit LCD, Peak Hold, AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Inductance, Frequency, Temperature, Diode, Transistor and Continuity Test. With Overload Protection.


Specification:

- Peak Hold facility
- Display: 3-1/2 Digital 1999 Counts Backlit LCD
- Low Battery and Overload Indication
- Confirms to IEC1010 Standards
- Auto Power Off
- DC Voltage : 0 – 200mV/2V/20V/200V/1000V
- Accuracy : $\pm 0.5\%$
- AC Voltage : 0 – 200mV/2V/20V/200V/750V
- Accuracy : $\pm 0.8\%$
- DC Current : 0 – 2mA/20mA/200mA/20A.
- Accuracy : $\pm 0.8\%$
- AC Current : 0 – 2mA/20mA/200mA/20A.
- Accuracy : $\pm 1.0\%$
- Resistance : 0 – 200/2k/20k/200k/2M/20M/2000M.Ohms
- Accuracy : $\pm 0.8\%$
- Capacitance : 0 – 20nF/200nF/2uF/20uF/200uF
- Accuracy : $\pm 2.5\%$
- Frequency : 0 – 2k/20k/200k/2M/10MHz
- Accuracy : $\pm 1.0\%$
- Inductance : 0 – 2m/20m/200m/2/20H
- Accuracy : $\pm 2.5\%$
- Temperature : $-40^{\circ}\text{C} \sim +1000^{\circ}\text{C}$
- Accuracy : $\pm 1.0\%$
- Diode Test, Transistor Test and Audible Continuity test facility.

Item 4: E/M Experiment (Quantity: 1 set)

Specifications:

Cathode ray tube distance between plates 1.4 cm.
Length of plates 3.23 cm
Distance between screen 14.5 cm
Focusing voltage : Variable 0-300V DC.
Adjustment voltage : Variable 0-60V DC.
Deflection voltage : Variable 0-50V DC.
Scale (0 – 30) cm each side with mm division
CRT Connection Octal Socket
LCD : 16 \times 2 characters
Deflection magnetometer : 0 to 90°
AC Main : 230V 50Hz


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Item 05: Power Supply (Quantity: 10 nos.))

+ 5 volt, 12 volt & -12 volt @1 Amp I.C. Regulated Power Supply: Microtech Industries made DC Regulated power supply which have high regulation for Load & Line Voltage variation. The supply is protected against short circuit and over load and it contains:

- +5 Volt fixed output @ 1 Amp.
- +12 volt & -12 volt fixed output @ 1 Amp with common Ground.

SECTION II: TERMS & CONDITIONS


1. The last date of receipt of quotation is valid for **07 working days** from the date of publication of this notice. Quotations received later will not be entertained under any circumstances.
2. Potential suppliers must submit the quotations in Sealed Cover envelope to the office of the Department of Physics, IEST, Shibpur in the following address:

HEAD

Department of Physics

IEST Shibpur, Howrah - 711103

3. Item name& tender code must be mentioned on top of the sealed envelope otherwise the quotation will not be accepted.
4. The quoted price must be inclusive of all Taxes in INR, duties and levies mentioning clearly any Freight and Insurance charges. Inclusion of Tax/Levy at later stage will not be accepted. If GST is chargeable then quoted price must be inclusive of GST in @INR 18%.
5. Price should be CIF, IEST, Shibpur basic. (Clearing charges and Custom Duty will not be paid extra, it should be included with base price.
6. Vendor should have proven track record of working in Govt. / Non-Govt Organization.
7. Commercial Papers should be duly signed & must be attached.
8. Photo Copy of Manufacturer Authorization for this specific tender must be provided. OEM certification, including FCC, UL, Epeat Gold, required.
9. All the equipment and accessories will carry a warranty for a period of 12 months from the date of commissioning. Warranty for all the items supplied will be on an 'all comprehensive' basis, i.e., including repairs, replacements, maintenance, etc. Calibration / Test Certificate must accompany along with the equipment. The supply of equipment shall include installation, erection, commissioning, and demonstration. Indian Institute of Engineering Science and Technology, Shibpur, Howrah reserves the right to accept/ reject all or any of the bidders without assigning any reason whatsoever.
10. The validity of the quotation must be for a period of 6 months without any modifications in its terms and conditions.
11. IEST, Shibpur, reserves the right to accept / reject all or any of the tenders without assigning any reason whatsoever.


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12. No advance payment will be made before the delivery of the item.
13. Custom Duty Exemption Certificate will be provided by the IEST (If applicable).
14. Bidder must be mention make and model no. of the offered items and include catalog with the quotation.
15. Documents to be submitted with the Quotations:
 - General Conditions (Section I) and Important Instruction (Client list) in original duly signed by the Proprietor/ Partner/ Director or any authorized person of the company as a token of acceptance of Terms and Conditions of Tender.
 - The signed photo copy of latest Income Tax, Sales Tax, Professional Tax, GST clearance certificates, PAN and valid Trade License must be submitted.

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