

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

No. F5 (404) ST/MNIT/MECH/2011

Phone : 0141-2713312,2713352

Fax No. : 0141-2529029

To,

M/s

.....

.....

NOTICE INVITING QUOTATIONS

1. Quotations are invited for the supply of Equipments required for Mechanical Engineering Department of this Institute as per list attached by **11.01.2012 at 02:00 PM**. The quotations will be opened at **03:00 PM on 11.01.2012**. The covers containing the quotations must be marked **"QUOTATION FOR MECHANICAL ENGINEERING (Centre for Energy and Environment) DUE ON 11.01.2012 AT 02:00 PM."**

(TWO BID SYSTEM WILL BE FOLLOWED ALL THE BIDDERS ARE REQUIRED TO SUBMIT TECHNICAL AND FINANCIAL BIDS IN SEPARATE ENVELOPS FOR EACH DEPARTMENT. EMD SHOULD BE SUBMITTED WITH THE TECHNICAL BIDS)

2. **THE RATES QUOTED SHOULD BE F.O.R. JAIPUR** inclusive of all charges e.g. packing, forwarding local taxes, railway freight, transit insurance, for outside firms and free delivery at Institute stores in the case of local firms. The rates may also be quoted separately "ex-godown/F.O.R. dispatching station. In case of Ex-Godown rates, please mention your packing and forwarding charges. Where there is no mention regarding delivery period in the quotations or where the items are offered ex-stock, the firms will be required to supply goods within one-month time.
3. Quotations should preferably be given only for those articles, which are available ex-stock. Other items should be quoted separately giving the delivery period. Rates of imported goods be quoted excluding custom duty as this institution is exempted from payment of custom duty. The rates of indigenous equipments may be quoted without Excise Duty as this institute is exempted from payment of Excise Duty.
4. As far as possible, quotations should be given for goods of India manufacture and foreign goods, which are readily available. Foreign goods quoted and proposed to be supplied should be covered by normal import quota of the dealer. This institute is exempted from payment of custom duty.
5. Detailed specifications and "make" of each item should be clearly given supported by the illustrated pamphlets wherever possible. Quotations without specifying the make and other particulars may be rejected. The payment will be made after the goods have been received, opened, checked and found to be in order up to our entire satisfaction. The accessories included in the equipment should also be clearly mentioned.
6. Losses or damage in transit will be in to the account of the supplier in case of rates **F.O.R. JAIPUR**. The supplier may, if he so desires, get the goods insured and include such charges in the tendered rate.

7. The payment for the ordered items would be made after the articles have been received and found in order. Normally payment shall be made through a crossed cheque within 30 days of the receipt of goods.
8. Your rates should be valid at least for three months from the last date of receipt of quotations.
9. All legal proceedings, if necessity arises to institute may be any of the parties (Institute or Contractor/Supplier) shall have to be lodged in the courts situated at Jaipur and not elsewhere.
10. The undersigned is not bound to accept the lowest tender and may reject any tender or any part of the tender giving justification for such an action.
11. The rates must be quoted item-wise by giving Serial No. of our enquiry letter.
12. The quotations should preferably be sent duly typed.
13. (a) The Penalty Clause is as under :-

Should the tenderer fail to deliver the goods within the period specified in the tender form the Institute may, at its discretion, allow an extension in time subject to recovery from the tenderer as agreed liquidated damages, and not by way of penalty, a sum equal to the percentage of the value of stores which the tenderer has failed to supply for period of delay as stated below: -

- | | | |
|-------|---|--|
| (i) | Delay up to one month | 1% |
| (ii) | Delay exceeding one month but not exceeding two month | 2% |
| (iii) | Delay exceeding two month but not exceeding three month | 5% |
| (iv) | Delay exceeding three month | 5% for each month and part there of subject to maximum 10% |

(b) In case of failure to supply the goods within the prescribed time and in accordance with the specifications given in the Quotations, the institute shall be free to cancel the order and make purchases from the next higher tenderer or from the open market as the case may be. In that case the loss sustained by the institute shall be recovered from the defaulting supplier. The institute will be at liberty to recover the loss from the permanent earnest money/or any other pending claims of the supplier without prejudice to its general right to affect recovery from the supplier.

- 14 EARNEST MONEY: A Demand Draft for Rs. @ 2% of the quoted cost only in the name of the Registrar, M.N.I.T. may please be sent along with your tender as Earnest Money **without which no tender shall be considered. Cheques are not accepted as earnest money amount.** No interest is paid by us on the amount of earnest money.
- 15 Successful bidder will have to furnish. Performance security @ 10% of the equipment cost, valid for one year two month in the form of Bank's Guarantee from Nationalize Bank.

Note Equipments & Software Specification are as per list attached.

ASSISTANT REGISTRAR
Stores & Purchases

.No.	Item with Specifications
1	<p>IAQ-VAC measuring instrument: (to measure and store -Relative humidity, air temperature, Globe temperature and Air velocity using different probes) Globe temperature - 0 to + 1 20 ° C, Accuracy- ±0.5 ° C (0 to + 4 5 ° C), ±1 ° C (+ 5 0 to + 1 2 0 ° C) Air temperature-RH probe- 0 to + 1 0 0 % R H, -20 to + 7 0 ° C, ±2 %R H (+ 2 to + 9 8%R H) ±0.4 ° C (- 10 to + 5 0 ° C), ±0.5 ° C Air velocity probe- 0 to + 10 m/s (-20 to + 7 0°C) Accuracy of air velocity probe (Hot bulb type)- ±(0.05 m/s ±5% of measured value)</p>
2	<p>Logging type Co2 analyzer: 0 to +10000 ppm CO2 Accuracy- ± (10 ppm CO2 ± 2% of mv) (0 to +5000 ppm CO2) and ± (100 ppm CO2 ± 3% of mv) (+5001 to +10000 ppm CO2), with memory, software and USB transfer cable</p>
3	<p>Three Phase Power Quality Analyzer kit with 4*400 current sensors (Fluke 435/universal or equivalent) Including 4x 400A clamp CTs, min. 8MB of memory, software, case, CTs for 5A to 3000A, battery Input Number: 4 voltage and current (3 phases + neutral), Maximum voltage: 1000 Vrms (6 kV peak), Sampling speed: 200 kS/s on each channel simultaneously</p>
4	<p>Portable Emission Analyzer with probes, logger and software Measurement of O2, CO2, CO, NO, temperature, NO2, SO2, HC, H2S, flow.O2: 0-25%, CO- 0 to 10000ppm 0.1ppm resolution, NO- 0 to 3000ppm 0.1ppm resolution, NO2- 0 to 500ppm, 0.1 ppm resolution, calculated NOx, SO2 0 to 5000ppm, HC- 0 to 4%, 0.001% resolution, H2S 0 to 300ppm, 0.1ppm resolution, CO2- 0 to 50% be vol., 0.1% resolution, flow velocity 0 to 10m/s resolution 0.05m/s Built-in datalogger, RS232/SB stat transfer, software interface</p>
5	<p>Thermal conductivity analyzer Material: Ceramic/Glass/Building Materials, Metals/Alloys, Inorganic Temperature range: 0 ... 500°C Measuring range: 0.01 W/mk ... 200 W/mK (thermal conductivity) Sample dimensions: round samples upto 50mm diameter or higher square samples 50x50 mm or higher, Sample Thickness: 10 mm thickness or higher Accuracy: 0.3% of measured value Confirming to applicable ASTM</p>
6.	<p>Climatic chamber for thermal comfort studies Fabrication of chamber for analysis of thermal comfort as per design: Size: 10X10X10 feetMaterial for walls and roof: 12mm- 2 layer PVC hollow profiles for walls, 8mm profile for roof Type of construction: knock down type, to be assembled on site, inside lab roomDoor: PVC door, 1 no.Window: Sliding windows with PVC frame, 2 nos, size 3’X3’, one double glazed, one single glazedSplit air conditioner with heat pump, humidifier, dehumidifier: 1.5TR one no, temperature controllability: 0.5 degree from 15 to 40 degree, humidity controllability: 2% from 20% RH to 90% RH with DBT range 10- 50 degree. Fresh air fan: 1000 CFM, ½” static pressure, variable speed, linearly controllable upto 10% of full flowInternal wiring with four light points, two plug points 5 amps 1 plug point 15 amp</p>

7.	Datalogger (2 nos.) Universal data logger 3-slot mainframe with built-in GPIB and RS232 interfaces 6.5-digit (22-bit) internal DMM, scanning up to 250 channels per second 8 switch and control plug-in modules to choose from Built-in signal conditioning measures thermocouples, RTDs and thermistors, ac/dc volts and current; resistance; frequency and period Software for data transfer
8.	Two stage evaporative cooler 5000 CFM, variable speed drive, adjustable ratio of sensible and latent heat, compatible to BMS
9.	Energy Recovery Ventilator Supply air 80CMH flow rate, maximum heat recovery efficiency upto 70% or more, with economizer, variable speed controller, CO2 monitor, backward curved radial fans (DRI ERV-80 or equivalent)
10.	Weather station I/O: Direct connection RS232/USB Optimal wireless RF Optimal IP server module Air temperature: Capacitive ceramic, -52 to +60 °C Relative humidity: 0 to 100% Barometric pressure: capacitive silicon. 60 to 110 kPa Solar radiation: Silicon pyranometer, 0 to 1000W/m ² Rain: Piezoelectric, 0 to 200mm/hr Wind direction: Ultrasonic Wind speed: Ultrasonic, 0 to 60m/s SD Card: Data logging upto 2GB
11.	Hot Bulb Anemometer Velocity range 0.1 to 5 m/s, resolution 0.05 m/s, accuracy 3% of measured value, omni directional velocity measurement, digital display, logging type with software and transfer cables
12	High temperature pyranometer: Make Kipp and Zonen Spectral range 300 - 2800 nm Sensitivity 4 - 10 μV/W/m ² Response time < 8 s Zero offset A < 4 W/m ² Zero offset B < 15 W/m ² Directional error (up to 80 ° with 1000 W/m ² beam) < 20 W/m ² Temperature dependence of sensitivity (0 °C to +100 °C) < 2 % Operating temperature range -40 °C to +150 °C Maximum solar irradiance 4000 W/m ² Field of view 180 °

ASSISTANT REGISTRAR

