

निविदा / कोटेशन के लिए आमंत्रण
INVITATION FOR TENDER / QUOTATION

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मोतीलाल नेहरू राष्ट्रीय प्रौद्योगिकी संस्थान इलाहाबाद
इलाहाबाद-211004 (भारत)
Motilal Nehru National Institute of Technology Allahabad
Allahabad-211004 (India)
An Institute of National Importance as Declared by NIT Act, GOI, 2007

INVITATION FOR QUOTATION

TEQIP-II/2015/MNNIT/Shopping/

06-April-2016

To,

Sub: Invitation for Quotations for supply of Goods

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at **Annexure I**,

Sr.	Brief Description	Qty.	Delivery Period (In days)	Place of Delivery	Installation Requirement (if any)
1	Computerized Engine Test Setup	01 No.	60	MNNIT Allahabad	YES

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme [TEQIP]-Phase II** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. Quotation,
 - 3.1 The contract shall be for the full quantity as described above.
 - 3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
 - 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
 - 3.4 Applicable taxes shall be quoted separately for all items.
 - 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
 - 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
6. Evaluation of Quotations,
The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

- 6.1 are properly signed ; and
6.2 confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together.
8. Award of contract:
The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
- 8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
9. Payment shall be made in Indian Rupees as follows:
Delivery and Installation - 90% of total cost
Satisfactory Acceptance - 10% of total cost
10. All supplied items are under warranty of **12** months from the date of successful acceptance of items.
11. You are requested to provide your offer latest by **11:00** hours on **21-April-2016**.
12. Detailed specifications of the items are at Annexure I.
13. Training Clause (if any) **Training should be provided onsite at MNNIT Allahabad**
14. Testing/Installation Clause (if any) **Testing/Installation should be done onsite at MNNIT Allahabad**
15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
16. Sealed quotation to be submitted/ delivered at the address mentioned below,
Director, MNNIT Allahabad Teliarganj, Allahabad-211004
17. We look forward to receiving your quotation and thank you for your interest in this project.

Faculty In Charge (Purchase)

Annexure I

The Computerized Engine Test Set-Up should consist of the following:

Sl. No.	Name of the Equipment
1.	Engine: Four stroke, Single Cylinder, Diesel Engine, Speed Range: 0-3000 rpm, Power approx. 10 HP @rated rpm , Air/Water Cooled Engine.
2.	Eddy Current Dynamometer: It should be suitable for testing supplied engine and must be equipped with load cell type weighing mechanism with micro controller based digital torque indicator
3.	Dynamometer Controller: It should ensure the operation of dynamometer at constant torque and constant speed mode, so that experiments could be carried out at given operating point. It should also include safety trip features: low cooling water pressure, high water outlet temperature and engine overload setting. Suitable capacity transformer need to be supplied with controller
4.	Cardan Shaft: Suitable Cardan shaft to couple engine with eddy current dynamometer
5.	Cardan Shaft Guard: For protection in case of failure of shaft
6.	Calibration kit including calibration arm and set of weights for checking calibration up to maximum torque capacity of Dynamometer
7.	Gravimetric fuel meter: For measuring fuel consumption independent of density and temperature effects. Accuracy should be Better than $\pm 0.5\%$ FS
8.	Control Panel Cabinet – Should have Monitor Mounting capability, duly powder coated
9.	Data Acquisition and presentation system: Windows based system with necessary hardware, suitable cards, engine analysis software and PC. The data acquisition system should have sufficient number of channels to acquire data from various sensors installed in engine with at least a sampling frequency of 50 KHz and a 16 bit resolution
10.	Crank Angle Encoder: Heavy Duty Optical increment encoder with 360 PPR resolution with TDC marker. This should provide 720 data points per combustion cycle and one index marker pulse per revolution. Using the pulse of this encoder measurement of crankshaft speed fluctuations should be possible at a resolution of 1° , i.e., 720 speed data points per combustion cycle
11.	Cylinder Pressure Sensor with charge amplifier: Quartz pressure sensor (Non Cooled) integrated with charge amplifier to plot variation of cylinder pressure with crank angle. In crank angle domain it should have a resolution of 1° , i.e., 720 data points per cycle
12.	16 channel universal input scanner with 6 K-type thermocouples
13.	Orifice meter for air flow measurement with DP transmitter
14.	Intake manifold pressure sensor with power supply: Sampling Frequency of at least 100Hz
15.	Intake manifold temperature sensor with adaptor : Sampling Frequency of at least 100Hz
16.	Injection pressure sensor
17.	Exhaust manifold pressure sensor with power supply: Sampling Frequency of at least 100Hz
18.	Exhaust manifold temperature sensor with adapter: Sampling Frequency of at least 100Hz
19.	Load Torque sensor: Sampling Frequency of at least 100Hz

FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)

Date: _____

To: _____

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. ———— (Amount in figures) (Rupees —————amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ————— months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____