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/2016/MNNIT/Shopping/133 **07-Jun-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	Quantity	Delivery Period(In days)	Place of Delivery	Installation Requirement (if any)
1	Ball & Plate Control System	1	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 **12:30** hours on **23-Jun-2016 .**
12. Detailed specifications of the items are at Annexure I.
13. Training Clause (if any) **YES**
14. Testing/Installation Clause (if any) **YES**
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,
    Office of Faculty In-charge (Purchase), 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

Sr.	Item Name	Specifications
1	Ball & Plate Control System	• Imagine throwing a ball onto a plate and it being stabilized exactly in the centre within two seconds. • The remarkable response of this control system is due to the implementation of advanced control techniques which are now prevalent in modern industrial processes. • Instrument's Ball and Plate Control System is controlled by NI LabVIEW using a NI interface card and demonstrates a classic control problem of balancing a sphere on a flat surface and maintaining its position. • It can then be programmed to make the ball describe a circular or any other shaped path around the plate. • The unique electromagnetic table actuation enables the study of this unstable system in real-time using sophisticated controllers in NI LabVIEW. • The progressive nature of the student exercises enables the study of the problem from first principles to more advanced control concepts. • The product provides a useful insight into control engineering at all levels of undergraduate study and enables advanced users to model and control the Ball and Plate using their own strategy. **Specification:** • A self-contained positional control training instrument utilising electro-magnetic actuators. • To be used for the teaching of the principles of position control. • The system operates in real-time when connected to a PC via a USB connection. • Supplied with teaching manual and student exercises. • Operates within NI LabVIEW environment. **Curriculum Coverage** **Ball and Plate Model Ball and Plate Model** • Non-linear Ball and Plate model • Non-linear model simplification • Non-linear model testing • Model linearization • Linear model **Ball and Plate model identification** • Model identification • Plate model identification • Ball on plate model identification **Ball and Plate setup control Ball** • Plant control • PID controllers • Plate orientation control PID control of plate orientation Real-time PID control **1-D Ball Control** • 1 D Ball Control D Ball Control • 1-D PID control of ball position • Real-time 1-D PID control of ball position **2-D Ball Control** • 2-D PID control of ball position • Real-time 2-D PID control of ball position **Trajectory Tracking** • Trajectory tracking with ball • Real-time trajectory tracking with ball **Features:** • Intriguing control experiment featuring extensive courseware • Progressive student exercises • Enables study of real-time control of a non-linear and unstable process • Implementation of digital control techniques using NI LabVIEW • Ball position sensing and image processing using USB camera

		• Open and closed loop configurations • Fully assembled plant with integral power supply • Open architecture, design-orientated system, suitable for undergraduate courses in electrical, Electronic and mechanical engineering

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: _____