



**NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI-620 015**  
**INVITATION FOR QUOTATION**

**TEQIP-III/2017/NITT/Shopping/28**

**01-Nov-2017**

To,

**Address (Firm)**

**Sub: Invitation for Quotations for supply of Electrical Machine.**

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,

<b>Sl. No</b>	<b>Brief Description</b>	<b>Quantity</b>	<b>Delivery Period (In days)</b>	<b>Place of Delivery</b>	<b>Installation Requirement (if any)</b>
<b>1</b>	<b>Electrical Machine</b>	<b>1</b>	<b>60</b>	Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli	Installation to be done in the Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu

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 III** 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 **45** 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, Installation & Satisfactory Acceptance - 100% 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 **15:00** hours on **30-November-2017**.
12. **Opening time : 30-November-2017 16:00 hours at TEQIP Office, Administrative Building, NIT Trichy**
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) **NA**.

15. Testing/Installation Clause (if any) **100% payment after delivery and successful installation at Department of Electrical and Electronics Engineering, NIT, Tiruchirappalli - 620 015, Tamil Nadu**

16. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.

17. **Sealed Quotations to be submitted at the following address:**

**The Head of Department**  
Dept. of Electrical and Electronics Engineering  
National Institute of Technology  
Tiruchirappalli – 620 015.

18. We look forward to receiving your quotation and thank you for your interest in this project.

**Note:** The cover should be duly superscribed with the following details.

- (1) Quotation Reference Number (2) Quotation for the supply of .....
- (3) Date of opening .....

**(Dr. K. Sundareswaran)**

**HoD /EEE**

## Annexure I

Sl. No	Item Name	Specifications
1	<b>Electrical Machine</b>	<p><b><u>a) DC Motor coupled with 3 Phase Slip Ring Induction Motor</u></b></p> <p><b><u>Slip Ring Induction Motor</u></b></p> <ul style="list-style-type: none"> <li>• Power Rating :1 kW, Stator Voltage :415V ±10%</li> <li>• Rotor : Wound Rotor, Frequency : 50Hz ±5%</li> <li>• Poles : 4, slip to be in range (4-6)%</li> <li>• Power factor: Greater than or equal to 0.8 @ full Load</li> <li>• Efficiency : Greater than or equal to 80% @ full load</li> <li>• Insulation :Class F with temperature rise limited to Class B</li> <li>• Protection : IP55,Enclosure : TEFC, Duty Class :S1,</li> <li>• Standards for testing : Applicable IS</li> <li>• Termination: Terminal box, all six terminals of stator winding</li> </ul> <p><b><u>DC Motor</u></b></p> <ul style="list-style-type: none"> <li>• Power Rating :1.1 kW, Speed(rpm) :1500</li> <li>• Type : Shunt/Separately Excited Armature Voltage :220V,</li> <li>• Field voltage :220V,Maximum Field Current: not more than 0.8A,Poles: 4 pole, laminated</li> <li>• Full load Efficiency: Equal to or better than 70%</li> <li>• Insulation: Class F with temperature rise limited to Class B,</li> <li>• Protection :IP23,Enclosure:TEFC,Standards:Applicable IS</li> <li>• No load voltage ripple factor: lesser than1% at rated speed</li> <li>• Duty class : S1</li> <li>• Termination: Terminal box, all 4 winding terminals (2 field + 2 armature) brought out Efficiency shall be as given above</li> </ul>

**b) DC Motor coupled with Permanent Magnet Alternator**

**DC Motor**

- Power Rating : 1.1 kW
- Speed(rpm) : 1500
- Type : Compound / Separately Excited Armature Voltage :220V
- Field voltage : 220V
- Maximum Field Current: not more than 0.8A
- Poles : 4 pole, laminated
- Full load Efficiency: Equal to or better than 70%
- Insulation: Class F with temperature rise limited to Class B,  
Protection : IP23
- Enclosure : TEFC
- Standards : Applicable IS
- No load voltage ripple factor : lesser than1% at rated speed
- Duty class : S1
- Termination: Terminal box, all 4 winding terminals (4 field + 2 armature) brought out Efficiency shall be as given above.  
Deviation shall not be accepted w.r.to IS guidelines.

**SYNCHRONOUS MACHINE**

**Generator: Permanent Magnet Three Phase Alternator (Variable Speed)**

- Power Rating : 1 kW
- Type : Permanent Magnet Rotor
- Voltage Wave form / Back EMF: Sinusoidal
- No. of poles : 8/12, Frequency : 50±5%Hz
- Stator voltage : 230/415±10%V,3 phase
- Efficiency : Equal to or better than 80%
- Short Circuit current :Greater than 3 times full load current
- Duty Class : SI
- Insulation :Class F with temperature rise limited to Class B,

		<p>Protection : IP23</p> <ul style="list-style-type: none"><li>• Enclosure : TEFC</li><li>• Termination : Terminal box, six stator winding terminals Stator phase voltage waveform - 3<sup>rd</sup></li><li>• Harmonic : &lt; 3% of fundamental THD: &lt; than 4%, slot harmonics &lt;0.1% of fundamental, Horizontal Mounted, Efficiency shall be as given above. Deviation shall not be accepted w.r.to IS guidelines.</li></ul>
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**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)
<b>Total Cost</b>							

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: \_\_\_\_\_