

DEPARTMENT OF ELECTRICAL ENGINEERING  
INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY,  
SHIBPUR, HOWRAH-711 103.

No. 170/2020/EE-3/21(KM-MCL)

Dated: 28/02/2020

From : The Head of the Department,  
Electrical Engineering,  
IEST, Shibpur, Howrah-711 103

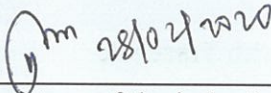
To : Enlisted vendors of the institute and other interested parties/ For Website Tender.

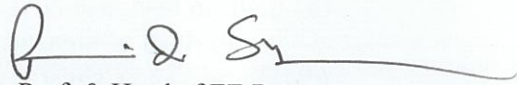
Dear Sir(s),


Sealed quotations are invited for supply of the following item(s) within 09/03/2020. The quotation should include the taxes as per rule, delivery charges, entry tax if any, etc. to Indian Institute of Engineering Science and Technology, Shibpur and should mention a firm delivery period. Preferences will be given to the suppliers who can supply ex-stock.

The vendors, who are not enlisted in the Institute register, should submit the copies of their valid Trade License, PAN, latest Income Tax / Sales Tax Statement /Return, SSI/MSME certificate, GST certificate if any etc. and any other commercial credentials.

Yours faithfully,

  
Signature of the indenting Officer/  
Concerned Faculty Member

  
Prof. & Head of EE Dept.  
IEST, Shibpur, Howrah – 711 103

  
Prasid Syam  
Professor & Head  
Electrical Engineering Deptt.  
Indian Institute of Engineering Science  
and Technology, Shibpur  
Howrah-711 103

**List of Items:** Required for Electrical Machines laboratory, IEST Shibpur

- Variable resistance 25ohm, 5A, 18"long carbon brush contact ,hexagonal porcelain type,  
Toshniwal - 6 no.s tentatively (final quantity to be decided based on funds available,  
quote must be given on a per unit basis)
- Variable resistance 2ohm,10A,18" carbon brush contact ,hexagonal porcelain type,  
Toshniwal - 2 no.s tentatively (final quantity to be decided based on funds available,  
quote must be given on a per unit basis)

**Detailed desired specifications/requirement:**

The above should be rheostats and should follow the specifications given below:

- (i) 25 ohms, 5A continuous rating for item (a); 2 ohms, 10A continuous (at least) for item (b)
- (ii) Resistance wire should be wound on a SINGLE hexagonal steel tube, vitreous enamelled
- (iii) Wound tube should be fitted in two end castings with mounting holes, duly insulated with micanite cups.
- (iv) Brush should be of Copper graphite to provide lubrication and prevent wear and tear of wire.
- (v) Heat resistant compression springs to be used to ensure firm contact of Brush with the resistance winding.
- (vi) Winding should be covered with a perforated steel sheet enclosure with only the Slider Knob & two Insulated Banana plug Terminals accessible externally from all sides, except bottom, to ensure that the operator cannot come in contact with the slider bar/winding to avoid shock hazard.
- (vii) The Rheostat should meet the requirements of IS:9051 in respect to
  - (a) Tolerance on resistance value : + 20% to -5%
  - (b) H.T. Test : 2kV for 1 minute
  - (c) Temperature rise : 375°C (mounted vertically)
  - (d) Maximum working voltage : 500 V
  - (e) Ambient room Temperature : 0 - 45°C
- (viii) Ratings in Amperes & ohms to be provided on a duly marked Nameplate affixed with Rivets to the Rheostat

Manufacturer of the rheostat should be reputed, who

- (a) have proved past experience of supplying to Government Educational Institutions / Public Sector Companies in the past 3 years as follows: a) One order of Rs 2.4 Lacs OR b) Two orders of Rs 2.0 Lacs OR c) Three orders of Rs 1.6 Lacs
- (b) have an in-house NABL accredited Electrotechnical Laboratory with Traceable capabilities of measuring Resistance.
- (c) Manufacturer's test certificates have to be provided during supply of items.
- (d) Warranty of at least one year has to be given.