

^{GSTIN : 20AAAA10686D1ZA} भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. EE/INS/217/18-19

Date: 12 September 2018

NOTICE INVITING TENDER

Subject: Supply & Installation of Kit for Study of A, B, C, D constants and the Ferranti Effect of a 300 km Long Transmission Line.

Indian Institute of Technology (Indian School of Mines), Dhanbad invites quotations for the following to be supplied and delivered in Electrical Engineering Department.

S No	Full Description of items/ store	Qty	Delivery
1	Supply & Installation of Kit for Study of A, B, C, D constants and the Ferranti Effect of a 300 km Long Transmission Line. (Detailed Specification is given in Annexure – I)	04 Nos.	At the Earliest

<u>Tender Schedule</u>

Particulars	Date & Time
Bid Security or Earnest Money Deposit	Rs. 6,000.00 (Six Thousand Only)
Last date and time for submission of tenders	09.10.2018 at 1:00 P.M.
Date and time of opening of tenders	09.10.2018 at 4.00 P.M.

1. You are requested to quote your lowest rates for the supply of above items in the attached format for Financial Bid (Annexure – II)

- 2. You may send your representative in the office of the undersigned at the scheduled date and time of opening of tender.
- 3. Tender should be submitted in sealed cover only superscribed with Enquiry No. and due date at the following address only:

The Deputy Registrar (P&S) Indian Institute of Technology (Indian School of Mines), Dhanbad – 826 004 Jharkhand HILLING WINDLAW SCHUTCH

^{GSTIN : 20AAAA10686D1ZA} भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. EE/INS/217/18-19

Date: 12 September 2018

Terms & Conditions

- 1) The rates should be quoted for each item separately.
- 2) Conditional offer will not be accepted.
- 3) IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate. Hence, full rate of sales tax/VAT, GST applicable should be quoted.
- 4) Since IIT(ISM) Dhanbad is an Indian Institute of Technology and subject item will be used for research, hence benefit of reduced rate of GST should be considered if applicable.
- 5) *Educational discount,* if any, should be clearly mentioned.
- 6) Earnest Money Deposit (EMD) : Should be submitted in form of A/C payee demand draft drawn in favor of Registrar, IIT(ISM) and payable at SBI, IIT (ISM) campus branch or any other Bank/ Branch located in Dhanbad.
- 7) You are requested to submit your quotation strictly as per the specifications mentioned in the NIT.
- 8) Your tender must be valid for **minimum 90 days** from the date of opening of tender.
- 9) Please mention warranty/ guarantee in your offer clearly. Material/ equipment to be supplied must have minimum warranty/guarantee of **12 months**.
- 10) Each page in the bid document must be numbered properly and duly signed & sealed by the bidder on every page of the bid.
- 11) The items/ materials shall be required to be delivered at EE Department/ Section through Purchase & Store Section, IIT (ISM) Dhanbad at the risk and cost of the tenderer.
- 12) Unloading and installation shall be the complete responsibility of the supplier.
- 13) The stores are required to be delivered within 30 days. Late delivery may not be accepted.
- 14) The items offered should be of good quality confirming to BIS standards, wherever applicable.
- 15) *Advance payment is not admissible*. Payment shall normally be made within 30-45 days subject to receipt and acceptance & installation of the ordered materials/items PBG and other documents.
- 16) Successful bidders will have to submit Performance Security (PBG) in the form of Bank Guarantee as per the Purchase Order before releasing payment.
- 17) In the event date on which the tender is opened for acceptance is declared to be a holiday, the tenders shall be deemed to remain open for acceptance till the next working day.
- 18) Please send your sealed offer by Regd. Post/ Speed Post/ Courier only along with Courier receipt. By hand delivery of the tender will not be accepted. Tender/ quotation will be received during IIT (ISM) working hours only (i.e. Monday to Friday). *Late or delayed tenders shall be summarily rejected.*
- 19) Any other information that you may like to obtain, you are free to contact IIT (ISM) before submission of tender.
- 20) IIT (ISM) reserves the right to accept and/or to reject any/ all tenders without assigning any reason.

GSTIN : 20AAAA10686D1ZA भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. EE/INS/217/18-19

Date: 12 September 2018

<u>Annexure-I</u> <u>Technical Specification for Supply & Installation of Kit for Study of A, B, C, D constants and the</u> <u>Ferranti Effect of a 300 km Long Transmission Line.</u>

Set-up to be supplied, is required to perform the following experiments

- (i) To find out A, B, C, D constants of a 300 km Long Transmission Line.
- (ii) To find out A, B, C, D constants of a Medium Transmission Line.
- (iii) To find out A, B, C, D constants of a Short Transmission Line.
- (iv) To show the Ferranti Effect with voltage tripping device.

The components of kit are to supplied as per following specification :

Sl. No.	Equipment required for Kit for study of A, B, C, D constants and the Ferranti Effect of a 600 km Long Transmission Line	Specification Range	Quantity
1.	Variac (AE / Supreme make)	1-φ, 0 – 220 V / 270 V, 5 Amp	01 No
2.	AC Voltmeter (AE / Supreme make)	0 – 150 / 300 V	1 No.
3.	AC Ammeter (AE / Supreme make)	0 – 2 Amp. / 5 Amp.	1 No
4.	Isolation Transformer	220 V / 110 V, 2 Amp,	01 No.
5.	Digital Phase Angle meter (APLAB make)	0° - 360° with current interface module 1 / 5 / 10 Amp. & input measured voltage set-up 150 V / 300 V	2 Sets.
6.	Air Gap Type Inductors (each set of them representing 100 km long length of transmission line)	Referred to 110 V, 550 VA, 3-phase Transmission System may be connected in π - line or T – line configuration using suitable patch chords.	12 Sets.
7.	AC Capacitors	Suitable value AC Capacitors of 400 V (600 V is preferable)	12 Nos.
8.	Voltage Tripping Device	Adjustable Voltage Tripping Device	2 Sets.
9.	Switch (Gilard make)	DPDT, 5 Amp.	1 No.
10.	Accessories	Indicator, Fuse, Mains AC Power supply chord, sufficient Patch Chords. Engraved / Printed circuit diagram on the experimental board of the trainer kit Hard copy manual with circuit details, component specification, operating procedure.	1 Set.

Page 4 of 4

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

धनबाद, झारखण्ड, भारत, पिन-826004 (मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. EE/INS/217/18-19

NIT No.: EE/INS/217/18-19

Format for Financial Bid

Date: 12 September 2018

Bidders Ref: No.

GSTIN No.:

Subject: Supply & Installation of Kit for Study of A, B, C, D constants and the Ferranti Effect of a 300 km Long Transmission Line.

Sl. No.	Full Description of Items with (HSN Code/SAC Code)	Qty.	Rate	Amount
		Packing & Forwarding		
		(if any)		
		Total GST		
		Freig	ght (if any)	
		Installati	on (if any)	
Amount should be in figure as well as word		Gr	and Total	

Note:

- 1) Price basis must be FOR IIT(ISM) Dhanbad only.
- 2) All the details must be provided as per prescribed format only.
- 3) Prices quoted by the bidders should include all local taxes, VAT, service tax, GST, HSN Code, SAC Code, livies, transportation cost and insurance costs etc. if any



Date: 12 September 2018

<u>Annexure - II</u>

भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

GSTIN: 20AAAAI0686D1ZA

Date: