

GHANI KHAN CHOUDHURY INSTITUTE OF ENGINEERING & TECHNOLOGY (CFTI, Estd. by MHRD, Govt. of India) Narayanpur, Malda-732141, West Bengal, India

## Tender ID: 2018\_GKCIE\_280801 Date: 07.01.2018

# **TENDER NOTICE**

# Tender Enquiry for Supply and Installation of Lab Equipment for Department of Mechanical Engineering

For and on behalf of GKCIET, Malda, invites open tenders for the supply of Laboratory Equipment for Department of Mechanical Engineering. The bid documents for technical bid and price bid separately should be sent directly to the Chairman, Central Tender cum Purchase Committee, GKCIET, Malda under Sealed Cover duly super scribed with **"Tender for Supply and Installation of Lab Equipment for Department of Mechanical Engineering"**, **"Tender ID, Date"**, and **"The Due Date"**. The bids should be submitted in hard copy directly or through Registered Post to the **Chairman, Central Tender cum Purchase Committee, GKCIET, Narayanpur, Malda-732141, West Bengal, India.** 

# Important Dates

| Event                   | Date                 | Time                  | Venue                  |  |
|-------------------------|----------------------|-----------------------|------------------------|--|
| Date of Publication     | 07/01/2018           | 11:00 AM              | -                      |  |
| Pre-bid Conference      | 18/01/2018           | 12:00 Noon            | Seminar Hall, Academic |  |
|                         |                      |                       | Block-A, GKCIET, Malda |  |
| Bid submission end date | 29/01/2018           | 1:00 PM               | -                      |  |
| Technical bid opening   | 29/01/2018           | 2:00 PM               | Seminar Hall, Academic |  |
| date                    |                      |                       | Block-A, GKCIET, Malda |  |
| Price (financial) bid   | To be informed to t  | echnically successful | Seminar Hall, Academic |  |
| opening date            | bidder by mail and p | hone                  | Block-A, GKCIET, Malda |  |

## **IMPORTANT NOTES:**

- Tender Documents can be downloaded from GKCIET website http//www.gkciet.ac.in. or from the Central Public Procurement Portal <u>www.eprocure.gov.in/eprocure/app</u>. under **Tender ID:** 2018\_GKCIE\_280801 dated 07.01.2018. However, the bidding process (submission and finalization) will be done in offline mode at the office of GKCIET, Malda.
- 2. GKCIET will assess the ability of the agencies to render the requisite services based on its past record, profile and on such other criteria and only those found fit will be considered.

- 3. GKCIET reserves the right to accept / reject any or all the tenders in part /full without assigning any reason thereof, revise the requirement of service at the time of placing the order, modify, relax or waive any of the conditions stipulated in the tender specification, wherever deemed necessary and award contracts to one or more bidders for the items covered by the tender.
- 4. This Tender Notice is being simultaneously published on e-publishing module of CPPP Portal also (**Tender ID: 2018\_GKCIE\_280801 dated 07.01.2018**). However, bid assessment and finalization of the successful bidder(s) shall be made including the bids submitted manually as well as any bids submitted on CPPP Portal e-publishing module.

Chairman Central Tender cum Purchase Committee, GKCIET Place: Malda Date: 07.01.2018

## **INSTRUCTION TO BIDDER**

The tender shall be submitted in accordance with these instructions and any tender not confirming to the instructions as under is liable to be rejected. These instructions shall form the part of the tender and the contract.

- 1. Please go through the enclosed "bid document" carefully for other bidding instructions.
- 2. **IMPORTANT NOTE:** Being a Two-Part Tender (techno-commercial and price bid), bids received in sealed envelope only will be considered. Bids in any other form sent through email/ fax etc. will be rejected. Please note carefully that;
  - Quotations received without prescribed form will not be considered.
  - No request for extension of the due tender date will be considered.
  - In the event any date indicated above is declared as holiday, the next working day at Institute shall be considered as the due date for receiving & opening of tenders.
  - The bids shall be opened on date and time as mentioned above. The bidders who wish to attend the bid opening may present themselves or send their authorized representatives with an authority letter.
  - The Tenders/Quotations received incomplete and/or received after due date and time shall be summarily rejected.
- 3. The bid should remain valid for a period of **180 days** from the date of opening. In case your offer has a different validity period that should be clearly mentioned in the quotation. Validity period may also be extended without change in bid prices, if required on mutually agreed basis only.
- 4. The bids may be dropped in the Tender Box kept in the office of GKCIET, Malda on any normal working day that is Monday to Friday except holidays (from 11 AM to 5 PM) of the Institute. The bids may also be submitted in hard copy through Registered Post or Speed Post to the Chairman, Central Tender cum Purchase Committee, GKCIET, Narayanpur, Malda-732141, West Bengal, India. Bids reaching after bid submission end date through post will not be accepted. It is strictly advised do not hand over the quotation to any person by hand.
- 5. **Clarification of bidding documents:** If a prospective bidder requires any clarification in regard to the bidding documents, they may mail to ctpc.gkciet@gmail.com at least 10 days before the deadline for receipt of bids or may meet at office of Store Section, GKCIET, Narayanpur Campus, Malda West Bengal on any working day between 11.00 AM to 3:00 PM.

#### 6. Amendment of Bidding Documents

• Any change/corrigendum/extension of opening date, if issued any for the tender, shall form part of the Tender Document. Any amendment will be notified on GKCIET website (http//www.gkciet.ac.in.). Bidders/Tenderers are requested to visit GKCIET website

regularly and note the corrigendum/amendments to the tender without fail and submit the offer accordingly. GKCIET will not be responsible for ignorance of corrigendum.

- At any time prior to the deadline for submission of bids, the Institute may, for any reason, whether on its own initiative or in response to a clarification requested by a prospective Bidder/Tenderer, modify the bidding documents by amendment. The same would also be posted on the website of the Institute and all prospective bidders/tenderers are expected to surf the website before submitting their bids to take cognizance of the amendments. Bidder/Tenderer who has submitted bids before publishing the amendment may revise their bid incorporating the amendments before the last date of tender.
- In order to allow prospective Bidder/Tenderer's reasonable time in which to take the amendment into account in preparing their bids, the Institute, at its discretion, may extend the deadline for the submission of bids and host the changes on the website of the Institute, if required.

## 7. Bid Security (BS)/(Earnest Money/ EMD)

- i) The Bidder/Tenderer shall furnish, as part of its bid, a bid security (BS) of 3 % of gross bid value has to be submitted as Bid Security (Earnest money Deposit/EMD). Gross bid value means F.O.R. GKCIET, Malda final price.
- i) In the case of foreign bidders/tenderers, the BS shall be submitted either by the principal or by the Indian agent and in the case of indigenous bidders/tenderers; the BS shall be submitted by the manufacturer or their specifically authorized dealer/Bidder/Tenderer.
- iii) The bid security shall be in Indian Rupees. The bid security shall be in one of the following forms at the Bidder/Tenderers' option:
  - (a) A Banker's cheque or demand draft in favour of the Account Officer, GKCIET, Malda
  - (b) FDR in favour of the Account Officer, GKCIET, Malda
- iv) The bid security should be submitted in its original form. Copies shall not be accepted.
- v) Any bid without EMD or bid not secured in accordance with above will be rejected by the Institute as non-responsive.
- vi) The bid security of unsuccessful Bidder/Tenderer will be discharged /returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity or placement of order whichever is later.
- vii) The successful Bidder/Tenderer's bid security will be discharged upon the Bidder/Tenderer furnishing the performance security.
- viii) The bid security may be forfeited if a Bidder/Tenderer withdraws or amends or impairs or derogates its bid during the period of bid validity specified by the Bidder/Tenderer on the Bid.

#### 8. Sealing and Marking of Bids:

In a two bid system, all Bidders/Tenderers are requested to follow carefully the following instructions before preparing their offer.

#### Part I: Technical & Commercial Bid

#### Part - (a) Technical

- i. This part should contain detailed specifications of the items quoted by you along with technical literature and leaflets.
- ii. A compliance statement showing the compliance of the item quoted by you with that of item tendered by us should be prepared and enclosed to this.
- iii. Any other information called for in the tender related technical and commercial specifications can also come in this part.
- iv. *Prices should NOT be indicated in this* cover.

#### Part - (b) Commercial terms: (WITHOUT PRICE)

- i. The commercial terms applicable for the items quoted by you should be indicated in this part.
- ii. If any compliance statement is called for the commercial terms/contractual terms and conditions, the same is to be attached in this part.
- iii. **Prices should NOT be indicated in this part.** However, a copy of unpriced bid (without prices) must be enclosed (filled by the word "Quoted" against the item being quoted) in this part to enable to understand whether all the items required to be quoted by you have been quoted in the price bid.
- iv. The Commercial terms such as delivery terms, delivery period, payment terms, Warranty, validity of the offer, installation & commissioning, duties and taxes etc., shall come into this.
- v. The required EMD should be enclosed.
- vi. The Tenderer/ bidder need to submit the following certificates along with the Tender Documents to confirm their eligibility in this part :
  - Proof of establishment of Firms/shop/business/ manufacturing unit etc. and Dealership Certificate from the principals etc.
  - Proof of registration with any other central government organization (if any)

- Photocopies of purchase orders received from any central govt. organization to the firm (if any).
- The tenderer must have latest VAT/Sales Tax Clearance certificate alongwith copy of Registration certificate under Sales Tax.
- Goods & Service Tax registration certificate, EPF registration certificate, ESI registration certificate, etc. should be enclosed.
- The tenderder must submit the blacklisting certificate if they are blacklisted from any Govt. Organization.
- The bidder should enclosed proof of turnover by way of Audited Balance Sheet/Auditor's certificate, if required.
- $\circ~$  The bidder should enclosed Photocopy of PAN card issued in the name of the bidder's firm.

#### Note:

- Technical Specifications and terms & conditions as above should be very clearly reflected item-wise with reference to the items called for in the tender.
- Please note that the **PRICE SHOULD NOT BE** indicated in this part.
- Technical and Commercial part as described above shall be prepared and put it in a sealed cover.

## Part II: Price Bid

The prices applicable for the items, item-wise in response to the tender shall come into this part in the prescribed format only. *Bid will be rejected if rates are not quoted in the prescribed format.* Tenderer shall indicate very clearly item-wise prices with reference to their technical offer.

- 9. The bidders should quote their offer/rates in clear terms without ambiguity.
- 10. The rates should be **quoted both in figures and words** and legibly written without any overwritings. In case of any correction, the same must be attested by the bidder with full signature. However, no over-writing is permissible. Manufacturer's price-list, where applicable, should be submitted along with the bid.
- 11. In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.

- 12. Each bidder shall submit only one bid against a particular work. A bidder, who submits more than one bid for a particular work will in the tender, shall be disqualified and considered non-responsive.
- 13. The bidder has to sign in full at all pages of the bidding document.

## 14. Bid Prices

- (i) The Bidder/Tenderer shall indicate prices in the prescribed format only.
- (ii) Prices indicated on the price-schedule form shall be entered separately in the following manner:

#### (a) For Goods being offered from India/ abroad in INR

(b) The price of the goods quoted should be FOR GKCIET, Malda inclusive of all taxes (GST, Custom etc), charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the price schedule form, installation, commissioning, training charges etc, if any. (Annexure IV).

#### (b) For Goods being offered from abroad in currency other than INR

- i. The price of the goods, quoted on FCA (named place delivery abroad) or FOB (named port of shipment), as specified in the price schedule form. The price should be FOR GKCIET, Malda inclusive of all taxes, charges for insurance and transportation of the goods, agency commission, installation, commissioning, training charges etc if any (Annexure V).
- ii. The terms FOB, FCA, CIF, CIP etc. shall be governed by the rules prescribed in the current edition of the Incoterms published by the International Chambers of Commerce, Paris.
- iii. Prices quoted by the Bidder/Tenderer shall be fixed during the Bidder/Tenderer's performance of the Contract and not subject to variation on any account.
- iv. If at any stage of the price quoted GST applicable, it should be clearly mentioned.
- 15. Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.

#### 16. Responsiveness of Bids

- (i) Prior to the detailed evaluation, the Institute will determine the substantial responsiveness of each bid to the bidding documents. For purposes of this clause, a substantive responsive bid is one, which conforms to all terms and condition of the bidding documents without material deviations, reservations or omissions. A material deviation, reservation or omission is one that:
  - (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
  - (b) limits in any substantial way, inconsistent with the Bidding Documents, the Institute's rights or the Bidder/Tenderer's obligations under the Contract; or

- (c) if rectified, would unfairly affect the competitive position of other bidders/tenderers presenting substantially responsive bids.
- (ii) The Institutes' determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- (iii) If a bid is not substantially responsive, it will be rejected by the Institute and will not subsequently be made responsive by the Bidder/Tenderer by correction of the material deviation, reservation or omission.

#### 17. Evaluation and comparison of bids

(i) A two stage procedure will normally be adopted:

#### Stage-I: Commercial and Technical Evaluation

- a) Evaluation of Technical Bids to assess their suitability against the laid down parameters.
- b) Tenderers must ensure that they enclose all original technical literature and detailed documentary proofs which specifically bring out the compliance of the equipment being offered against the specifications. If necessary the Tenderers may be directed to give a presentation for evaluation by a technical committee constituted for the purpose.
- c) In case it is not possible to verify compliance of equipment as per technical bid due to lack of adequate documents, in original no reference will be made to tenderer and the bid will not be considered further and **treated as cancelled**.

#### Stage-II: Financial Evaluation

- a) The price bids of only those firms found meetings the laid down specifications at stage I shall be opened, evaluated and considered further.
- (ii) It is in the tenderers interest to include all relevant and detailed technical data as supporting documents along with their bid.
- (iii)To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology shall be permitted.
- (iv) The bids shall be evaluated on the following basis which shall be arrived as under:

#### For goods being offered from India.

Goods price will be calculated **FOR GKCIET, Malda**. Lowest bid (L1) will be deciding by the price of the goods quoted should be **FOR GKCIET, Malda** inclusive of all taxes (GST & Custom Duty, etc), charges for inland transportation, installation, commissioning, training charges, insurance and other local services required if any for delivering the goods at the desired destination as specified in the price schedule Price Bid format.

#### For goods being offered from Abroad

- a. In case of goods being offered from abroad, Lowest bid (L1) will be decided based on total cost at GKCIET, Malda, that include basic price of goods, freight and Insurance up to Indian Airport/port (CIF/CIP value up to Indian airport/port), custom duty and other taxes as applicable etc., Inland transportation and insurance up to GKCIET, Malda, packaging, forwarding, agent commission for custom clearance and installation, commissioning and training charges if any.
- b. **Conversion to Single Currency:** To facilitate evaluation and comparison, Bids quoted in foreign currency will be converted into Indian Rupees at the selling exchange rate established by Reserve Bank of India on its website, on the date of price bid opening.
- c. In case charges for packing, forwarding, transportation inside India, custom clearance charges or other incidental charges are quoted extra in addition to the quoted rates, the amount thereof must be specified. Packing, forwarding, freight, entry tax etc., when quotes separately are reimbursable at actuals after production of original receipts/invoices. If external agencies are employed, their receipts must be enclosed with the invoice.
- d. If vender wishes, he/they may alternatively, quote price of imported items in Indian rupees. In this case item may be treated as offered from India. Payment will be released accordingly.
- **Note:** Where there is no mention of packing, forwarding, freight, transportation, insurance charges, taxes etc. such offers shall be REJECTED as incomplete.

## (v) Terms and Conditions of MSME:

- a. The bidders in the category of Micro and Small Enterprises (MSEs) who are registered with MSME bodies like National Small Scale Industries Corporation etc. are exempted from payment of Bid Security/Earnest Money Deposit. A poof regarding current registration with MSME/NSIC for the tendered items will have to be attached along with bid/quotation/offer.
- b. SSI Units registered with NSIC should participate in tender directly enclosing copy of NSIC certificate and offers from their agents will not be considered.
- c. In compliance of Public Procurement Policy for Micro and Small Enterprise (MSEs) Order 2012, purchase preference shall be given to Micro and Small Enterprise (MSEs) registered with District Industries or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or consortia or Micro and Small Enterprises formed by National Small Industries Corporation, if the price quoted by the MSEs is within 15% of L- 1 price (L- 1 price means Landed Lowest price) quoted by any other bidder, for the tendered items for which they are the L- 1.

- d. Purchase preference shall be applicable for the 20% of the tendered quantities only provided L-1 bidder is MSE and the MSEs accept the L-1 price.
- e. In case of an MSEs in the L-1 bidder for an item, the 100% tendered quantities shall be placed an order to MSEs firm.
- f. In case of an MSE owned by SC/ST and price quoted is within 15% of the L-1 price quoted by the L-bidder then 20% quantity shall be ordered on them at L-1 rate, subject to their acceptance.
- g. In case of more than one MSEs participates in the tender and their prices are within 15% of L-1 price and L-1 bidder is an enterprise other than MSEs then 20% of the tendered quantities shall be shared proportionately between participating MSEs on their acceptance of L-1 price.
- h. In case of more than one MSEs participate in tender and their prices are within 15% of L-1 bidder price who is not a MSEs and one of the MSEs is owned by SC or ST then 4% tendered quantities or say 20% of the 20% tendered quantities shall be procured from MSEs owned by SC or ST entrepreneurs exclusively subject to their acceptance of L-1 price in addition to sharing of equal portion of balance of 16% with other non SC/ST owned MSEs subject to their acceptance of L-1.
- i. In case of more than one MSEs owned by SC or ST then 4% tendered quantities or say 20% of the 20% tendered quantity shall be procured from these MSEs owned by SC or ST entrepreneurs exclusively subject to their acceptance.
- 18. **Packing & Marking:** The packing and preservation of the supplied goods shall be airworthy/ seaworthy /roadworthy (as the case may be) so that it may provide their safety during transit period. The seller shall guarantee that the packing is strong enough to withstand the safety of the goods during transport. The packing should satisfy the security seal in the clearing warehouse and shall carry the fragile or other markings as required.

Each packing case shall have labels as follows:

Contract No.\_\_\_\_\_

Consignee: Name of the Division/Unit\_\_\_\_\_

19. **Pre-dispatch inspection:** The Institute reserves right to conduct pre-dispatch inspection of goods and the vender must facilitate it at GKCIET's cost for pre-dispatch inspection. In the event of joint inspection at the consignee's location, the personnel of successful tenderer must be able to unpack, assemble and demonstrate the use of the equipment fully and identified each Part/Machines supplied. Any consumables that are essential will be provided by the supplier free of cost.

#### 20. Clearance and delivery

- i) The supply should be delivered at GKCIET, Narayanpur, Malda, West Bengal 732141 and the supplier shall be responsible for damage during the transit of goods. In case of receipt of materials in damaged condition the suppliers will have to arrange the replacement of goods free of cost. All expenses in this regard will be borne by the supplier.
- ii) On arrival of shipment/consignment, the supplier is required to arrange custom clearance and transportation of the consignment up to GKCIET, Malda premises. The Tenderer/ bidder will do all types of clearance work and **formalities to deliver/provide the equipment at the site of installation. The expenses incurred will be reimbursed on actual basis not exceeding the quoted amount.** Institute will provide all types of documentary support including Customs Duty exemption certificate. The custom duty, demurrage (in case of delay in release of custom duty to the custom department by GKCIET, Malda) and government taxes/levies (if any) will be paid extra by the buyer after as per term of payment. Please note that the State of Chhattisgarh may charge entry tax on all goods entering the State. This may be included in your quotation as a separate item. Entry Tax will be reimbursed on production of proof of payment. **Principals will themselves have to procure any requisite permission from the Govt. of country of origin of equipment.**
- iii) All the communications with respect to the delivery of items shall be addressed to:

## The Controller, Store & Purchase

#### Ghani Khan Choudhury Institute of Engineering & Technology

Narayanpur, Malda - 732 141. West Bengal (India)

#### 21. Guarantee/Warranty Period:

(i) Except otherwise provided in the invitation to tender the contractor hereby declares that the goods/stores/articles/equipment sold/supplies to the purchaser/consignee under this contract shall be of best quality and workmanship and new in all respects and shall be strictly in accordance with the specification and particulars mentioned/contained in the contract. The contractor hereby guarantees that the said goods/stores/articles would continue to conform to the description and quality aforesaid for a period of **Twenty Four** months from the date of receipt of goods/articles/equipment in good condition at site by the consignees in case of supply contract and **Twenty Four** months from the date of installation and satisfactory taking over of the goods/stores/articles/equipment at site by consignee where installation and commission is involved and notwithstanding the fact that the purchase /inspection authority has inspected and/or approved the said goods/stores/articles equipment or such if during the **24 months** the said goods/stores/articles/equipment be discovered not to conform to the description and quality aforesaid or not giving satisfactory performance or have deteriorated and the decision of the purchase /consignee in that behalf shall be final and binding on the contractor/seller and the purchaser shall be entitled to call upon the contractor/seller to rectify the goods/stores/articles/equipment or such specified period as

may be allowed by the purchaser in his discretion on application made thereof by the contractor/seller, and in such an event, the above period shall apply to the goods/stores/articles/equipment rectified from the date of rectification mentioned in the warranty thereof, otherwise the contractor/seller shall pay the purchaser such compensation as may arise by reason of the breach of warranty therein contained.

- (ii) Guarantee that they will supply the spare parts, if and when required on agreed basis for an agreed price. The agreed basis could be and including but without limitation an agreed discount on the catalogue price or an agreed percentage of profit on landed cost.
- (iii)Warranty to the effect that before going out of production for the spare parts they will give adequate advance notice to the purchaser of the equipment so that the later may undertake the balance of lifetime requirements.

**NOTE:** In case of any discrepancy in the period of guarantee/ warranty mentioned anywhere else in this Tender document, the stipulations as mentioned in the chapter III (specification of the equipment/ item to be purchased) would prevail.

22. **Annual Maintenance Contract (AMC) of Equipment:** After the warranty/Guarantee term is over, the firm should mention the charges of AMC atleast for **first three years**.

**NOTE:** In case of any discrepancy in the period of and/or AMC mentioned anywhere else in this Tender document, the stipulations as mentioned in the **Annexure 2** (specification of the equipment/ item to be purchased) would prevail.

23. **Terms of Payment**: Tenderer shall take into account all costs including installation, commissioning, cartage etc. for giving delivery of material at site quoting the rates. No extra payment shall be paid on account of any discrepancy in nomenclature of items. The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

## (i) Payment for Goods and Services offered from India:

Payment for Goods and Services supplied from within India shall normally be made in Indian Rupees, as follows: 100% payment will be made in account payee cheque or Draft/ online Transfer using RTGS to the Supplier normally within thirty (30) days after the successful installation and commissioning of equipment's subject to submission of performance security, if any.

#### (ii) Payment for Goods and services offered from abroad:

Payment of foreign currency portion shall normally be made in the currency of contract in the following manner:

a) **On Shipment:** Ninety (90) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit (L/C) opened in favor of the Supplier in a bank in its country, upon submission of following documents specified as below:

Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/ courier and copies thereof by FAX.

- i. Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;
- ii. Packing list;
- iii. Certificate of country of origin;
- iv. Manufacturer's guarantee and Inspection certificate/test report;
- v. Inspection certificate issued by the Purchaser's Inspector, if any.
- vi. Insurance Certificate, if required under the contract;
- vii. Name of the Vessel/Carrier;
- viii. Bill of Lading/Airway Bill;
- ix. Port of Loading;
- x. Date of Shipment;
- xi. Port of Discharge & expected date of arrival of goods and H S code of classification of goods.
- xii. Any other document(s) as and when required in terms of the contract.

#### Note:

- 1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)
- 2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.
- b) On Acceptance: Ten (10) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security, if any.
- The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. All bank charges in India to the account of

the opener and all bank charges outside India to the account of the beneficiary. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The L/C for 100% value of the contract shall be established after deducting the agency commission payable, if any to the Indian agent from the CIF/CIP value.

24. **Performance Security (PS):** The successful bidder has to furnish "**Performance Security of 10% of the ordered value in Indian Rupee**", in the form of Account Payee Demand Draft, / Fixes deposit and/or unconditional Bank guarantee encashable on demand from Account Officer, GKCIET, Malda, from a nationalized Bank with validity period of sixty (60) days beyond the date of completion of all contractual obligations of supplier including guarantee/ warranty obligations. The Performance Security is to be furnished in favor of the Account Officer, GKCIET, Malda, within ten days of intimation, failing which his bid security will be forfeited.

The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations.

- 25. **Delivery period**: Delivery should be made within **45 days** from the date of placement of order for goods offered from India or opening of the LC in case of goods offered from abroad.
- 26. The Insurance shall be for an amount equal to 110% of the CIF or CIP value of the contract from within "warehouse to warehouse/installation site (GKCIET, Malda)" on "all risk basis" including strikes, riots and Chemistry commotion.

## 27. Delayed delivery:

In case the firm does not complete the supply within the laid down agreed delivery period as per contract, liquidated damages will be charged **@ 1% per week** or part thereof. However, the Institute reserves the right to either further extend or cancel the contract after expiry of delivery date and recover the liquidated damages from the dues of the firm by legal means.

An extension in delivery period may be given on the receipt of written request of the successful vendor; however liquidated damage at the above rate will be recovered from the firm of the value of undelivered goods. Request for extension in delivery period should be made before the last date of supply as mentioned in Purchase Order.

**Non delivery beyond extended period:** If the Tenderer fails to execute the order within the delivery period as mentioned above the order will be cancelled and EMD will be forfeited by the institute.

28. **Installation time:** The Company must install the equipment within a period of two months from the date of delivery of the equipment at GKCIET, Malda failing which order will be cancelled and EMD will be forfeited. However, necessary requirement for installation of goods/equipment will be provided by institute.

29. **Copy Right:** The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

## 30. Insurance:

- a. Should the purchaser elect to buy on CIF/CIP basis, the Goods supplied under the Contract shall be fully insured in Indian Rupees against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.
- b. Where delivery of the goods is required by the purchaser on CIF or CIP basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary, initiate & pursue claims till settlement, on the event of any loss or damage.
- c. With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.
- 31. **Right to use Defective Goods:** If after delivery, acceptance, installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.
- 32. **Site preparation and installation:** The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. The Purchase will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of Award / Purchase Order / Agreement.

## 33. Force Majeure:

(i) Notwithstanding the Clauses relating to extension of time, penalty and Termination for Default the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

- (ii) For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- (iii) If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- (iv) If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

#### **34. Defective Equipment:**

- (i) If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, unmerchantable or not in accordance with the description /specification or otherwise faulty, the institute will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made to him.
- (ii) All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office of GKCIET, Malda at the cost and risk of supplier including all other charges.
- 35. **Training:** The tenderers shall provide training to the user as per the terms & conditions of the contract as has been specified in technical & financial bids free of cost at the time of installation/commission of equipment at the consignees/ users location. As specified by the purchaser, all expenses in this regard will be borne by the supplier.
- 36. **Penalty for use of undue influence**: The seller should undertake that he has not given offered or promised to give directly or indirectly any gift, consideration, reward, commission, fees brokerage of inducement to any person in service of the Purchaser or otherwise in procuring, the contract or forbearing top do or for having done or for borne to do any act in relation or execution of the contract or any other contracts with the Institute for showing or for bearing to show favour or disfavor to any person in relation to the contract or any other contract in the GKCIET, Malda. Any breach of the aforesaid undertaking by the seller or any one employed by him or acting his behalf whether with or without the knowledge the seller or the commission of any offers by the seller or any one employed or acting on his behalf, as defined in Chapter-IX of the IPC, 1860 or the Prevention of Corruption Act, 1947 or any other Act enacted for the Prevention of Corruption

shell entitle the purchase to cancel the contract and all or any other contract with the Institute seller and recover from the seller the amount of any loss arising from such cancellation. A decision of the purchaser or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the seller.

Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the seller towards any officer /employee of the purchaser or to any other person in a position to influence any officer /employees of the purchaser for showing any favour in relation to this or any other contract sell render

- 37. **Termination of contracts:** Time shall be the essence of the contract. The purchaser shall have the right to terminate the contract without any notice in part or in full in any of the following cases.
  - a) The delivery of the material is delayed for causes not attributed to Force Majeure after the scheduled date of delivery.
  - b) The seller is declared bankrupt or becomes insolvent.
  - c) The delivery material is delayed due to causes of Force Majeure by more than reasonable time.
  - d) In case Performance Security is not furnished within the time period specified by the purchaser.

Supply in the case of successful Tenderer should strictly confirm to the specifications of the equipment being purchased. Any change in Address /Telephone/Fax/e-mail of the tenderer should immediately be informed. The state of non-communication by the firm will make the offer liable for rejection.

- 38. No additional terms & conditions over and above the conditions stipulated above shall be entertained by GKCIET, Malda.
- 39. The dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & court at Malda.
- 40. Bidder has to sign all the pages of this tender and enclose it with the bid.

# List of Annexure

- 1. List of Equipment Annexure 1
- 2. Technical Specification of Equipment/goods Annexure 2
- 3. Technical Compliance of the bidder with reference to the 'Specification of Equipment Annexure 3
- 4. Price Schedule for goods being offered from India Annexure 4
- 5. Price Schedule for goods being offered from Abroad. Annexure 5
- 6. Deviation statement form Annexure 6
- 7. Bidder information & check list Annexure 7

# List of Equipment to be procured under Tender

| Sr. No. | Name of Equipment   | Quantity |
|---------|---|----------|
| 1.      | Closed Circuit Venturimeter Test Rig                              | 1        |
| 2.      | Closed Circuit Pipe Friction Apparatus                            | 1        |
| 3.      | Closed Circuit Pitot Tube Apparatus                               | 1        |
| 4.      | Pelton Turbine Test Rig.  | 1        |
| 5.      | Closed Circuit Single Stage Multispeed Centrifugal Pump Test Rig. | 1        |
| 6.      | Closed Circuit Reciprocating Pump Test Rig.                       | 1        |
| 7.      | Brinell Hardness Testing Machine                                  | 1        |
| 8.      | Izod & Charpy - Impact Testing Machine                            | 1        |
| 9.      | Heat Transfer in Natural Convection                               | 1        |
| 10.     | Heat Transfer in Forced Convection                                | 1        |
| 11.     | Shell and Tube Heat Exchanger Apparatus                           | 1        |
| 12.     | Emmissivity Measurement Apparatus                                 | 1        |
| 13.     | Heat Transfer from Pin Fin  | 1        |
| 14.     | Cam analysis apparatus  | 1        |
| 15.     | Motorised epicyclic gear train apparatus                          | 1        |
| 16.     | Static and dynamic balancing apparatus                            | 1        |
| 17.     | Motorised gyroscope test rig.                                     | 1        |
| 18.     | Universal governor apparatus                                      | 1        |
| 19.     | Universal vibration apparatus                                     | 1        |
| 20.     | Melting Furnace (Induction)                                       | 1        |
| 21.     | Sieve Shaker Model  | 1        |
| 22.     | Permeability Tester/Meter   | 1        |
| 23.     | Universal Strength Machine  | 1        |
| 24.     | Moisture Tester   | 1        |
| 25.     | Clay Content Tester   | 1        |
| 26.     | Drawing Board with Wooden Drawing Table                           | 60       |
| 27.     | Wooden Stool  | 60       |

# **Technical Specification of Equipment/Goods**

| Sr.<br>No. | Name of<br>Equipment                         | Quantity | Specifications   |  |  |  |
|------------|--|----------|--|--|--|--|
| 1.         | Closed Circuit<br>Venturimeter               | 1        | MEASURING TANK: M.S with FRP lining or stainless steel of size<br>0.3x0.3x0.5m with control valve, Piezometer with scale.  |  |  |  |
|            | Test Rig                                     |          | SUMP TANK: M.S with FRP lining or stainless steel of<br>size1.0x0.3x0.3m for storage of Water to circulate through<br>experimental unit.   |  |  |  |
|            |  |          | SUPPLY PUMP SET: 0.5 HP single phase [ISI marked] pump fitted<br>with a control valve  |  |  |  |
|            |  |          | PIPING SYSTEM: Two G.I pipelines of size 20 & 25mm each line fitted<br>with respective size venturimeter &Gate valve provided with a set of<br>distribution chamber having isolating cocks to facilitate experiment<br>on individual venturimeter. |  |  |  |
|            |  |          | DIFFERENTIAL HEAD MEASUREMENT: Differential mercury manometer with mercury.  |  |  |  |
|            |  |          | MAIN SWITCH: Single phase DP switch  |  |  |  |
|            |  |          | <ul> <li>SERVICES REQUIRED: Single phase power supply 200/220V &amp; water<br/>to fill up sump tank.</li> </ul>  |  |  |  |
| 2.         | Closed Circuit<br>Pipe Friction<br>Apparatus | 1        | PIPING SYSTEM: Two G.I pipe lines of size 15, 20 & 25 mm with<br>tapings at 1m having a set of individual gate valves & distribution<br>chamber with isolating cocks to facilitate individual experiment on<br>piping system.                      |  |  |  |
|            |  |          | <ul> <li>FRICTIONAL HEAD LOSS: Differential mercury manometer with<br/>mercury.</li> </ul>   |  |  |  |
|            |  |          | MEASURING TANK: M.S with FRP lining or stainless steel of size<br>0.3x0.3x0.5m with control valve, Piezometer with scale.  |  |  |  |
|            |  |          | SUMP TANK: M.S with FRP lining or stainless steel of size<br>1.0x0.3x0.3m for storage of water to circulate through experimental<br>unit.  |  |  |  |
|            |  |          | SUPPLY PUMP SET: 0.5 HP single phase [ISI marked] pump fitted<br>with a control valve  |  |  |  |
|            |  |          | MAIN SWITCH: Single phase DP switch  |  |  |  |
|            |  |          | FRAME WORK MOUNTING: Mounted on structure frame work & completely fitted with all the above items as self contained unit suitable for operation without any foundation.  |  |  |  |
|            |  |          | SERVICES REQUIRED: Single phase power supply 200/220V & wate<br>to fill up sump tank.  |  |  |  |

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| Sr.<br>No. | Name of<br>Equipment         | Quantity | Specifications   |
|------------|------------------------------|----------|--|
| 3.         | Closed Circuit<br>Pitot Tube | 1        | PIPING SYSTEM: A pipe line of size 25mm fitted with pitot tube & Gate valve.   |
|            | Apparatus                    |          | ▶ HEAD LOSS: Differential mercury manometer with mercury.  |
|            |                              |          | MEASURING TANK: M.S Unit with FRP Lining / S.S Unit of suitable<br>size with an overflow arrangement & provided with a GM control<br>valve& an elbow.    |
|            |                              |          | SUMP TANK: M.S Unit with FRP Lining / S.S Unit of suitable size for<br>storage of water to circulate through experimental unit.                          |
|            |                              |          | SUPPLY PUMP: 0.5 HP single phase [ISI marked] to pump water from<br>the sump fitted with a control valve (Gun Metal gate valve).                         |
|            |                              |          | MAIN SWITCH: Single phase main switch  |
|            |                              |          | MOUNTING: Mounted on frame work & completely fitted with all the<br>above items as self contained unit suitable for operation without any<br>foundation. |
|            |                              |          | > STOP WATCH : Digital .   |
|            |                              |          | SERVICES REQUIRED: Single phase power supply 200/220V & water<br>to fill up sump tank.   |
| 4.         | 4. Pelton Turbine            |          | > Capacity: 2 HP   |
|            | Test Rig                     |          | ➢ Rated Speed: 1000 RPM  |
|            |                              |          | Discharge: 400 LPM   |
|            |                              |          | Supply Head: 40 Mts.   |
|            |                              |          | Buckets: Gun Metal   |
|            |                              |          | Casing : Grey Cast Iron  |
|            |                              |          | Shaft: High Carbon Steel   |
|            |                              |          | Yype: Impulse  |
|            |                              |          | Supply Pump: 2.5" x 2'   |
|            |                              | >        | Discharge: 400 LPM   |
|            |                              |          | ➢ Total Head : 45 Ltrs   |
|            |                              |          | Motor Capacity: 7.5 HP   |
|            |                              |          | Starter : Dol/ Star Delta  |
|            |                              |          | Flow Measurement: Venturimeter   |
|            |                              |          | > Size: 50mm   |
|            |                              |          | Material of Construction : CI Body with Brass lining   |
|            |                              |          | Pressure Measurement :Double Column differential   |
|            |                              |          | ➢ Mercury Manometer Speed Measurement : Digital RPM  |

| Sr. | Name of                         | Quantity | Specifications   |
|-----|---------------------------------|----------|--|
| No. | Equipment                       |          | indicator.   |
|     |                                 |          | Sump Tank :SS/MS with FRP lining   |
|     |                                 |          | <ul> <li>Loading : Rope Brake</li> </ul>   |
|     |                                 |          | <ul> <li>Drum Diameter: 200mm</li> </ul>   |
|     |                                 |          | Service Requirement: 7.5 HP, 3 Ph, 440 V AC supply and water to be provided by purchaser.  |
| 5.  | Closed Circuit<br>Single Stage  | 1        | PUMP: Centrifugal Pump of size 40 mm to discharge about 150 LPM<br>at 15 m total head when run at maximum speed.   |
|     | Multispeed<br>Centrifugal       |          | MOTOR : 01 HP, 2880 RPM, 3 Phase, 400 / 440 V, AC Supply ((ISI marked)   |
|     | Pump Test Rig.                  |          | SPEED VARIATION: Stepped pulley "V" belt drive to run the pump at<br>3 different speeds.   |
|     |                                 |          | ELECTRICAL PANEL: Switch and Energy meter for the measurement<br>of input power.   |
|     |                                 |          | Measuring Tank : M.S with EPOXY coating or stainless steel of Size<br>0.8 x 0.5 x 0.6 m with control valve, piezometer with scale and an<br>overflow arrangement |
|     |                                 |          | SUMP TANK: M.S with EPOXY coating or stainless steel of size 1 x 1<br>x 0.4 m for storage of water to circulate Through experimental unit.                       |
|     |                                 |          | OTHERS: Piping system consisting of Pipes, Pressure relief valve,<br>Gate Valve and fitting with Pressure gauge.   |
| 6.  | Closed Circuit<br>Reciprocating | 1        | PUMP : Double acting reciprocating pump of size 25 x 20 mm with air vessel to discharge about 20 LPM at 20 meters total head                                     |
|     | Pump Test Rig                   |          | MOTOR: 1 HP, 1440 RPM, Single phase, 200 / 220 V, AC Supply.   |
|     |                                 |          | SPEED VARIATION: Stepped pulley reduction "V" belt drive to run<br>the pump at 4 different speeds.   |
|     |                                 |          | ELECTRICAL PANEL: Switch and Energy meter for the measurement<br>of power input.   |
|     |                                 |          | Measuring Tank: M.S with EPOXY coating or stainless steel of size<br>0.3 x 0.3 x 0.5 m with control valve, Piezometer with scale and an<br>overflow arrangement  |
|     |                                 |          | SUMP TANK: M.S with EPOXY coating or stainless steel of size 1.0 x<br>0.3 x 0.4 m for storage of water to circulate through experimental<br>unit.                |
|     |                                 |          | OTHERS: Piping system consisting of Pipes, Pressure relief valve,<br>Gate Valve and fitting with Pressure gauge.   |
| 7.  | Brinell Hardness                | 1        | > Type of Machine: Digital Electronic Brinell Hardness Testing machine   |

| Sr.<br>No. | Name of<br>Equipment                         | Quantity          | Specifications   |
|------------|--|-------------------|--|
|            | Testing                                      |                   | With testing range 8-650HBW  |
|            | Machine.                                     |                   | Test Force (Kgf): 62.5; 100; 125; 187.5; 250; 500; 750; 1000; 1500; 3000   |
|            |  |                   | Maximum Height of specimen (mm): 225   |
|            |  |                   | Throat Depth (mm): 135   |
|            |  |                   | Magnification of microscope: 15X   |
|            |  |                   | Minimum Reading grade of the drum wheel of the microscope (mm):<br>0.0025  |
|            |  |                   | ➢ Power: AC 220V/50-60Hz   |
|            |  |                   | Dimensions (mm): 839x720x470   |
|            |  |                   | ➢ Weight (Kg): 130   |
| 8.         | Izod & Charpy -<br>Impact Testing            | 1                 | <ul> <li>Max. Capacity : 300 J/170J</li> <li>Minimum Scale Graduation : 0.5J</li> </ul>  |
|            | Machine.                                     |                   | Solution Scale Graduation $\cdot$ 0.5)<br>Solution Overall Size (Approx.): 1.32m x 0.45m x 1.05 m (H)  |
|            |  |                   |  |
| 9.         | HEAT<br>TRANSFER IN<br>NATURAL<br>CONVECTION |                   | <ul> <li>S. S. CYLINDRICAL TUBE</li> <li>Diameter: 40 mm</li> <li>Length: 400 mm.</li> </ul>   |
|            |  |                   | <ul> <li>MEASURING INSTRUMENTS</li> <li>Digital Voltmeter, Range: 0 to 300 V</li> <li>Digital Ammeter, Range: 0 to 10 Amps</li> <li>Digital Temp. Indicator with selector switch: Ambient to 199.9 deg.C.</li> </ul> |
|            |  |                   | <ul> <li>THERMOCOUPLES</li> <li>Type: Cr. Al.</li> <li>Length: 1 Mtr.</li> </ul>   |
|            |  |                   | VARIAC Range: 02 Amps  |
| 10.        | HEAT<br>TRANSFER IN                          | ANSFER IN<br>RCED | <ul> <li>BLOWER :</li> <li>Capacity: 35watts/1.5cumts/m</li> </ul>   |
|            | FORCED<br>CONVECTION                         |                   | <ul> <li>TEST SECTION :</li> <li>Diameter : 40mm</li> <li>Length : 300 mm</li> </ul>   |
|            |  |                   | <ul> <li>COOLING WATER CHAMBER:</li> <li>Diameter : 50 mm</li> <li>Length: 300 mm (approx)</li> </ul>  |
|            |  |                   | <ul> <li>MEASURING INSTRUMENTS:</li> <li>Digital Voltmeter, Range : 0 to 300 V</li> </ul>  |

| Sr.<br>No. | Name of<br>Equipment                             | Quantity | Specifications  |
|------------|--|----------|---|
|            |  |          | <ul> <li>Digital Ammeter, Range: 0 to 5 Amps.</li> <li>Digital Temp. Indicator with: Ambient to 199.9 deg. C.</li> <li>&gt; THERMOCOUPLES</li> <li>Type: Cr. Al.</li> <li>Length : 1 mtr.</li> </ul>                                      |
|            |  |          | <ul> <li>VARIAC:         <ul> <li>Range: 02 Amps</li> </ul> </li> <li>MEASURING JAR &amp; U TUBE MANOMETER : 01 No. each         <ul> <li>Material : Glass</li> </ul> </li> </ul>   |
|            |  |          | MAIN FRAME: MS Square Tube 16 Gauge   |
|            |  |          | PANEL: MS with Powder Coating   |
| 11.        | SHELL AND<br>TUBE HEAT<br>EXCHANGER<br>APPARATUS | 1        | <ul> <li>SHELL:</li> <li>Length : 600 mm including end caps</li> <li>Diameter : 300 mm</li> <li>Material : MS</li> <li>Thickness : 6 mm</li> <li>Baffles : 25% cut 100 mm distance x 4 nos</li> <li>Insulation: Asbestos cloth</li> </ul> |
|            |  |          | <ul> <li>TUBES:</li> <li>Length: 500 mm</li> <li>Diameter: 10 mm id x 16 mm od</li> <li>Material: copper</li> <li>No. of Tubes: 24 Nos</li> </ul>   |
|            |  |          | <ul> <li>HOT WATER SYSTEM</li> <li>Geyser: 2 nos</li> <li>Capacity: 3 KW</li> <li>Power supply : 230 VAC</li> </ul>   |
|            |  |          | <ul> <li>ROTAMETER FOR MEASUREMENT</li> <li>Range: 0 - 60 cc/sec.</li> <li>Material : Acrylic</li> </ul>  |
|            |  |          | <ul> <li>DIGITAL TEMPERATURE INDICATOR</li> <li>Range: Ambient to 199.9 deg.c.</li> </ul>   |
|            |  |          | <ul> <li>THERMOCOUPLES</li> <li>Length: 1 mtr</li> <li>Type: Cr.Al</li> </ul>   |
| 12.        | EMMISSIVITY<br>MEASUREMENT                       | 1        | <ul> <li>PLATES:</li> <li>Diameter: 150 mm</li> <li>Material: Brass</li> </ul>  |

| Sr.<br>No. | Name of<br>Equipment      | Quantity | Specifications   |
|------------|---------------------------|----------|--|
|            | APPARATUS                 |          | <ul> <li>Heater: 250 W</li> <li>Specimen: Black Body and Grey Body</li> </ul>  |
|            |                           |          | <ul> <li>RECTANGULAR DUCT</li> <li>Material: MS with Powder Coating front Acrylic</li> </ul>   |
|            |                           |          | <ul> <li>MEASURING INSTRUMENTS</li> <li>Digital Voltmeter : Range: 0 to 300 V</li> <li>Digital Ammeter : Range: 0 to 10 Amps</li> <li>Digital Temp. Indicator with selector switch: Ambient to 199.9 deg c.</li> </ul> |
|            |                           |          | <ul> <li>THERMOCOUPLES</li> <li>Type: Cr.Al.</li> <li>Length: 1 Mtr.</li> </ul>  |
|            |                           |          | <ul> <li>VARIAC:</li> <li>Range: 02 Amps</li> </ul>  |
| 13.        | HEAT<br>TRANSFER          | 1        | <ul> <li>BLOWER</li> <li>Capacity: 350 watts/1.5cumts/m</li> </ul>   |
|            | FROM PIN FIN              |          | <ul> <li>TEST SECTION</li> <li>Diameter: 12 mm</li> <li>Length: 150 mm</li> <li>Material: Brass</li> </ul>   |
|            |                           |          | <ul> <li>DUCT</li> <li>Size : 100 x 150 x 500 mm</li> <li>Material: MS with Powder Coating</li> </ul>  |
|            |                           |          | <ul> <li>MEASURING INSTRUMENTS</li> <li>Digital Voltmeter, Range : 0 to 300V</li> <li>Digital Ammeter, Range : 0 to 10 Amps</li> <li>Digital Temp.indicator with selector switch: Ambient to 199.9 deg.C.</li> </ul>   |
|            |                           |          | <ul> <li>THERMOCOUPLES</li> <li>Type: Cr. Al.</li> <li>Length: 1 mtr.</li> </ul>   |
|            |                           |          | <ul> <li>VARIAC</li> <li>Range: 2 amps</li> </ul>  |
|            |                           |          | ➢ U TUBE MANOMETER: 01 No.   |
| 14.        | Cam analysis<br>apparatus | 1        | <ul> <li>Cam:</li> <li>Eccentric type - 1 NO</li> <li>Tangent type - 1 NO</li> <li>Circular arc type - 1 NO</li> </ul>   |

| Sr.<br>No. | Name of<br>Equipment                           | Quantity | Specifications   |
|------------|--|----------|--|
|            |  |          | <ul> <li>Follower:</li> <li>Flat faced type - 1 NO</li> <li>Knife edge type - 1 NO</li> <li>Roller type - 1 NO</li> </ul>  |
|            |  |          | <ul> <li>Weights:</li> <li>500gms - 1 NO</li> <li>1000gms - 1 NO</li> </ul>  |
|            |  |          | <ul> <li>Motor:</li> <li>Variable speed D.C. motor 1/4 H.P</li> <li>0-1500 rpm with speed control unit.</li> <li>Dial gauge of standard make.</li> <li>Digital rpm indicator for speed measurement.</li> </ul>   |
| 15.        | Motorised<br>epicyclic gear<br>train apparatus | 1        | <ul> <li>External type Epicyclic Gear Train</li> <li>Bearing blocks for input and output Shafts.</li> <li>A Gear train with holding drum.</li> </ul>   |
|            |  |          | <ul> <li>Internal type Epicyclic Gear Train</li> <li>A compact gear train.</li> <li>Variable speed D.C. motor.</li> <li>Rope brake arrangement to measure output</li> <li>Torque and Holding Torque</li> </ul>   |
|            |  |          | <ul> <li>Control panel</li> <li>Digital RPM Indicator</li> <li>Speed controller.</li> </ul>  |
| 16.        | Static and<br>dynamic<br>balancing             | 1        | <ul> <li>Precision shaft, mounted in ball bearing to a sturdy frame and chains hang the frame.</li> <li>Claim half is the language for the start of the s</li></ul> |
|            | apparatus                                      |          | <ul> <li>Slotted adjustable hangers - four nos.</li> <li>Drive mater of FUD conceptuation with variable speed control unit.</li> </ul>   |
|            |  |          | <ul> <li>Drive motor of FHP capacity with variable speed control unit.</li> <li>Scale for measurement of angular and longitudinal position of weights.</li> </ul>  |
|            |  |          | Cord and container with steel balls for relative weight measurement  |
| 17.        | Motorised<br>gyroscope test                    | 1        | DISC ROTOR: 240 mm. diameter and 10 mm thick precisely balanced<br>which can be rotated mutually perpendicular axis.   |
|            | rig.   |          | Variable speed AC/DC motor.  |
|            |  |          | Dimmer state to control the rotor speed.   |
|            |  |          | ➢ Weights: 1/2 kg, 1 kg, 11/2 kg - One each.   |
|            |  |          | Stop watch: Electronic ( Racer make )  |
|            |  |          | Accurately marked scale and pointer to measure precession rate.  |

| Sr.<br>No. | Name of<br>Equipment         | Quantity | Specifications  |
|------------|------------------------------|----------|---|
|            |                              |          | Digital rpm indicator with proximity sensor fixed with unit   |
| 18.        | 18. Universal 1              |          | ➢ Hartnell Governor.  |
|            | governor                     |          | System to give spindle speed 100 to 500 rpm.  |
|            | apparatus                    |          | ➢ Drive Unit: D.C. motor, 1/4 H.P., 1500 rpm.   |
|            |                              |          | Speed control unit working on 230 V. A.C. supply with 0-200 V. D.C. output.   |
|            |                              |          | Scale and pointer to measure governor lift.   |
|            |                              |          | Digital rpm indicator to measure spindle speed  |
| 19.        | Universal                    | 1        | Scillation of simple pendulum   |
|            | vibration                    |          | Scillation of compound pendulum.  |
|            | apparatus                    |          | Radius of gyration of Bi-Filar suspension.  |
|            |                              |          | > Undamped torsional vibration of single rotor system.  |
|            |                              |          | Damped torsional vibration of single rotor system.  |
|            |                              |          | > Undamped torsional vibration of double rotor system.  |
|            |                              |          | Free vibration of helical coiled spring.  |
|            |                              |          | Free vibration of spring mass system.   |
|            |                              |          | Forced damped vibration of a spring mass system.  |
|            |                              |          | Lateral vibration of simply supported beam.   |
|            |                              |          | Verification of Dunker ley's rule.  |
| 20.        | Melting Furnace              | 1        | Material Loading Capacity: 0-500 kg,  |
|            | (Induction)                  |          | Max Temperature (degree Celsius): 500-1000  |
|            |                              |          | Body Material: Stainless Steel, Cast Iron   |
|            |                              |          | Frame Material: Aluminum  |
| 21.        | Sieve Shaker                 | 1        | Driven Type: Electric   |
|            | Model                        |          | ≻ Weight: Upto 16 Kg  |
|            |                              |          | ➢ Voltage: 220V-280V  |
|            |                              |          | SIEVE FRAME DIAMETER: 200mm   |
|            |                              |          | > MOTION/AGITATION: Vibratory   |
|            |                              |          | > PARTICLE SIZE RANGE: Any Size   |
| 22.        | Permeability<br>Tester/Meter | 1        | <ul> <li>Sand Type: Green Sand, No-bake, Oil Sand. Width:300 mm</li> <li>Depth: 300mm</li> <li>Height: 440mm</li> <li>Weight: 13kg</li> </ul> |

| Sr.        | Name of  | Quantity | Specifications   |
|------------|--|----------|--|
| No.<br>23. | <b>Equipment</b><br>Universal<br>Strength<br>Machine | 1        | <ul> <li>Sand Type: To Test Various strength for molding and core sands.</li> <li>Range: 0-400kg</li> <li>Weight: 45kg</li> <li>Mechanism: Hydraulic</li> </ul>  |
| 24.        | Moisture Tester                                      | 1        | <ul> <li>Sand Type: Green Sand</li> <li>Width: 405mm</li> <li>Depth: 300mm</li> <li>Height: 115mm</li> <li>Range: 0-10%</li> </ul>   |
| 25.        | Clay Content<br>Tester                               | 1        | <ul> <li>Sand Type: Green Sand</li> <li>Witdth:320mm</li> <li>Depth :320mm</li> <li>Height: 875mm</li> <li>Weight: 18kg</li> <li>Range: 50Gms.</li> </ul>  |
| 26.        | Drawing Board<br>with Wooden<br>Drawing Table        | 60       | <ul> <li>Drawing Table: <ul> <li>Length-900mm</li> <li>Width-800mm</li> <li>Height-1050mm Approx.(Incline desk)</li> </ul> </li> <li>Drawing Board: <ul> <li>Length -700mm</li> <li>Width: 500 mm</li> </ul> </li> </ul> |
| 27.        | Wooden Stool   | 60       | <ul> <li>Height-750mm</li> <li>Length-450mm</li> <li>Width-450mm</li> </ul>  |

Technical Compliance of the bidder with reference to the 'Specification of Equipment'

Tender ID & Date: Name of the Bidders: Address:

Name and model no. of offered goods/equipment:

| Item | Technical<br>specification<br>from<br>GKCIET<br>Malda | Comment of<br>CTPC/Technical<br>Committee,<br>GKCIET Malda | Any<br>deviation<br>from<br>Specification,<br>if any<br>Features<br>available in<br>Equipment<br>Yes or No | Corresponding<br>part<br>number/datasheet<br>/page no in<br>broacher in<br>support of<br>specification | Comment of<br>CTPC/Technical<br>Committee,<br>GKCIET Malda |
|------|---|--|--|--|--|
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Signature of Bidder with seal

Price Schedule form: Price Schedule for Goods Being Offered from India/Abroad in INR

(Separate form to be used for each item offered)

## Tender ID & Date: Name & Model No. of offered good:

| Sr. No.   | Details   |              | Price per Unit in INR |
|---|---|--------------|-----------------------|
| 1.  | Ex-works, Ex-warehouse, Ex-show room off the shelf price<br>(inclusive of all taxes already paid) |              |                       |
| 2.  | GST payable, if contract is awarded (%)   | C.G.S.T.(%)  |                       |
|   |   | S.G.S.T. (%) |                       |
|   |   | I.G.S.T. (%) |                       |
| 3.  | Packing & forwarding up to station of dispatch, if any  |              |                       |
| 4.  | Charges for inland transportation, insurance to ultimate destination i.e. GKCIET, Malda if any    |              |                       |
| 5.  | Installation, Commissioning and training Charges, if any  |              |                       |
| 6.  | Any other charges (Please specify)  |              |                       |
| Total Price (Sum of S. No 1 to 6) FOR GKCIET, Malda |   |              |                       |

Total Bid price in Indian currency \_\_\_\_\_

In words: \_\_\_\_\_

Name \_\_\_\_\_

Business Address

Note:

(a) The cost of optional items shall be indicated separately.

Signature of Bidder with seal

Department: Mechanical Engineering

Price Schedule Form: Price schedule for goods being offered from abroad in currency other than INR

(Separate form to be used for each item offered)

Tender ID & Date:

Name of the Bidder/Tenderer:

Name & Model No. of offered good:

| Sr. No. |   | Price per unit in ( ) |
|---------|---|-----------------------|
| 1.      | Country of origin   |                       |
| 2.      | FOB (named port of shipment)                                      |                       |
|         | Or  |                       |
|         | FCA (named place of delivery)                                     |                       |
| 3.      | Freight and Insurance up to Indian Airport/port                   |                       |
| 4.      | Total Price at Indian Airport /port (2+3)                         |                       |
| 5.      | **Custom charges (please mentioned %)                             |                       |
| 6.      | Custom clearance and other charges if any (with breakup)          |                       |
| 7.      | Inland Charges for Insurance & transportation to GKCIET,<br>Malda |                       |
| 8.      | Installation, commissioning and training Charges, if any          |                       |
| 9.      | If any other charges (Please Specify)                             |                       |
|         | Total Price (FOR GKCIET, Malda) (Sum of S. No 1 to 9)             |                       |

*Note: Kindly mention GST if applicable at any stage under S.No. 9 of the above table.* 

Total Bid price in foreign currency: ------words: \_\_\_\_\_words: \_\_\_\_\_

(a) Indian agents name & address \_\_\_\_\_

(b) The cost of optional items shall be indicated separately------

Signature of Bidder with seal

Department: Mechanical Engineering

## **DEVIATION STATEMENT FORM**

Tender ID & Date: Name of the Bidders: Address:

## Name and model no. of offered goods/equipment:

The following are the particulars of deviations from the requirements of the tender specifications:

| CLAUSE | DEVIATION | REMARKS<br>(INCLUDING JUSTIFICATION) |
|--------|-----------|--------------------------------------|
|        |           |                                      |
|        |           |                                      |
|        |           |                                      |
|        |           |                                      |
|        |           |                                      |
|        |           |                                      |

Signature of Bidder with seal

(Please put this annexure at the top of the tender document)

# **Bidder's information & Check list**

#### Tender ID & Date:

1. Name of the Firm:

2. Type of the firm: (Propritership, Pvt Ltd, Public Ltd, Partenship etc.)

3. Address of the firm:

| 4. Contact detail:                   | Phone No.: | Mob No. : |  |  |
|--------------------------------------|------------|-----------|--|--|
|                                      | Fax No.    | E mail:   |  |  |
| 5. Name of the authorised signatory: |            |           |  |  |

| 6. EMD detail : Intrument No.      | Date :     | Amount: |  |  |  |
|------------------------------------|------------|---------|--|--|--|
| Issuing Bank name & branch detail: |            |         |  |  |  |
| 7. Bank details of the firm:       |            |         |  |  |  |
| Account No.:                       | IFSC Code: |         |  |  |  |
| Name of the Bank:                  | Branch:    |         |  |  |  |

Check List (Please enclose the copy of the following &tick as per applicability)

- 1. Proof of registration of the firm:
- 2. Authorisation certificate of delership:
- 3. PAN card in Firm's name:
- 4. GST Registration Certificate:
- 5. Proof of registration with any central govt . organisation :
- 6. Purchase orders issued by any central govt organisation.

Signature of Bidder with seal