

# VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA



P.O: Engineering College Burla (Siddhi Vihar), Dist: Sambalpur  
Odisha– 768018, India

Website : [www.vssut.ac.in](http://www.vssut.ac.in), E-mail: [registrar@vssut.ac.in](mailto:registrar@vssut.ac.in), Ph:(0663)2430573,Fax-2430592

No. VSSUT/ CIVIL / 151

Date: 11 /01/2017

## **TENDER CALL NOTICE**

Sealed Tenders are invited from the intending reputed Original Equipment Manufacturers/Direct Importers/Registered Dealers for supply of Equipments for different laboratories of **Civil Engineering Department of VSSUT, Burla**. Detailed information and the tender document are available in the University website [www.vssut.ac.in](http://www.vssut.ac.in).

Sd/-

REGISTRAR

**Memo No. VSSUT/CIVIL/ 152 (06 )**

\ **Dated 11 /01/2017**

Copy to:

- 1) M/s Display lines, 219, Saheed Nagar, Bhubaneswar-751007 with a request to publish the above advertisement in one issue of the Odisha daily edition (ALL ODISHA EDITION) of THE SAMAJ and The Indian Express (All India edition) using minimum space at I & PR approved/lowest rates. The bills may be sent to the Comptroller of Finance, VSSUT, Burla-768018 in TRIPLICATE along with copies of the paper in which the publication is made, for necessary payment.
- 2) The University/Department Notice Board for publicity.
- 3) Dean F&P, with a request to hoist the tender call notice in the University web site [www.vssut.ac.in](http://www.vssut.ac.in) for wide publicity.
- 4) S.O. Accounts, for information and necessary action.
- 5) Steno to Registrar for record. This is based on the allocation of Rs.30 lakhs from RUSA grant as per letter No.VSSUT/F & P/1397(15)/2016 Dated 16/07/2016 of Dean F & P & RUSA Coordinator.

Sd/-

REGISTRAR

## **SECTION I: INVITATION FOR BIDS (IFB)**

Sealed Bids (properly stitched separately) in two separate covers (Technical Bid and Price Bid) are invited by the “The Registrar, Veer Surendra Sai University of Technology, Odisha” from the manufacturers/authorized distributors/ dealers for supply of Instrument, equipment, machineries etc. of reputed make (National/ International) for the Department of Civil Engineering, VSSUT Burla, Odisha.

The Bidders may download the Tender Documents directly from the website available at <http://www.vssut.ac.in> and the Tender cost fee of Rs.1000/- (Non-refundable) by way of separate Demand Draft drawn in favour of “The Registrar, Veer Surendra Sai University of Technology, Burla” payable at SBI, Burla should be enclosed along with the Bid. The Tender cost fee and the EMD amount should be submitted separately in separate demand drafts. In case of any bid clarification, responsibility lies with the bidders to collect the same from the website and the purchaser shall have no responsibility for any delay/ omission on part of the bidder.

### **TIME SCHEDULE:**

- a) Date of commencement of downloading bidding document 14/01/2017 at 11.00 AM
- b) Last date and time for Receipt of bids 13 /02/2017 up to 5.00PM
- c) Time and date of opening of Tender & technical bid 16/02/2017 at 11.30 AM
- d) PLACE OF OPENING OF TENDER – Conference Hall of VC Secretariat, VSSUT, Burla
- e) ADDRESS FOR COMMUNICATION AND RECEIPT OF BID DOCUMENTS:

**THE REGISTRAR**  
**VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA**  
**At- Burla, Po-Burla Engineering College, Dist-Sambalpur-768018,**  
**Tel. No-0663-2430211 Fax No-0663-2430204**

**REGISTRAR**  
**VSSUT Burla**

## **SECTION-II: GENERAL TERMS AND CONDITIONS**

### **1. Document Establishing Bidder’s Eligibility & Qualification**

The Bidders shall furnish as part of the Bid the following Documents establishing Bidder’s eligibility and qualification to the Purchaser's satisfaction. Non-compliance of any of these conditions shall disqualify the eligibility.

- 1.1 Manufacturer / Authorized Distributor / Dealer having valid license / certificates for the quoted item and the direct Importers holding valid Import License Manufacturer / Authorized Distributor / Dealer of the product are eligible to participate in the Bid.

- 1.2 The Bidder whether manufacturer/ distributor/ dealer must have experience of supply and installation of the quoted items in different IITs/ NITs/ Institutes of national repute during last preceding 3(Three) years reckoned from the date of bid opening and the details must be submitted along with documentary proof.
- 1.3 The Bidders shall have to produce document in support of their service associates preferably nearest to Bhubaneswar/ Sambalpur, Odisha.
- 1.4 The Bidder shall quote items of one reputed Brand/model with all accessories in complete to perform functionality of Equipment/Machinery.

## **2. Document Establishing Goods Eligibility**

The instruments and equipment offered against the schedule of requirement of instruments, equipment and Machineries should be in accordance with the stipulated specifications and of one reputed brand/model (N.B: Variation in specification is allowed up to  $\pm 5\%$  in case of Machineries/Equipments)

- 2.1 The documentary evidence establishing the brand and the model may be in the form of literature, pamphlets, manuals, drawing, circuit diagram etc.
- 2.2 Detailed description of instruments and equipment with essential technical and performance characteristics may also be furnished.

## **3. Technical Bid (COVER - A)**

The following document should be submitted in cover-A.

- 3.1 Earnest Money Deposit
- 3.2 Technical details of the equipment and machineries as per Annexure-V
- 3.3 Copy of the manufacturing license/ import license/ Authorized Distributor/ Dealer certificates
- 3.4 Copy of the authorization from the Manufacturing Company in case of Authorized Distributor /Dealer.in Annexure-III along with Manufacturer Industry Registration and Tax Registration Certificate.
- 3.5 VAT clearance certificate up to date where applicable.
- 3.6 Performance/ Market standing certificate establishing that the Bidders have executed supply of similar items as mentioned in Schedule of Requirement of instruments and equipment to different IIT/ NIT/ Institute of national repute.(proof of documents).
- 3.7 Copy of the IT PAN Card.
- 3.8 Detail name, address, telephone no. fax, e-mail of the firm and of the Director/ Managing Director/ Proprietor of the firm (As per Annexure IV)
- 3.9 Address, Telephone No., e-mail, Fax of the Branch Office/ Contact Person/ Liaisoning Office in Odisha. (As per Annexure IV)
- 3.10 Power of Attorney/ Authorization to a person for liaisoning and monitoring the business on behalf of the manufacturer / bidder but not entitled to raise the bills.
- 3.11 The original bid document signed & sealed by authorized person in each page as a token of acceptance of all terms and conditions of the tender with original receipt.
- 3.12 Any deviation in the specification of the item including standard accessories / optional accessories in complete for functionality of Machine should be marked in bold letters.( N.B: Variation in specification is allowed upto  $\pm 5\%$  in case of Machineries/Equipments)

#### **4. Price Bid (COVER – B)**

- 4.1 The hard copy of price bid giving the rates for various instruments & equipment and other items should be submitted along with sealed soft copy of price bid in Excel format through CD/Pen drive both in separate sealed cover here in after called Cover B (Price Bid). Price Bid (Cover - B) of the bidders who qualify in Technical Bid (Cover – A) will only be opened and will be communicated through E-mail/Fax.
- 4.2 The price of the each item shall be quoted as per the prescribed Price Schedule Format at Annexure-I along with price break up of custom duty, Excise Duty, CST, Packing, Forwarding and Handling charges, Insurance charges, ET, Freight up to destination including unloading, VAT, commissioning including testing and training with total price per item at FOR destination. The bidders are required to submit the individual price of each instrument(s) and equipment(s) as indicated in the schedule of requirements.
- 4.3 Each quoted item and all accessories should cover the warranty / guarantee for 2 (two) year from the date of commissioning (Annexure-II).
- 4.4 The Cover B of the technically qualifying bidders shall be only opened at the conference Hall of VC Secretariat,VSSUT, Burla” on the date and time to be communicated to them after technical evaluation of Cover A by E-mail/Fax..

#### **5 BID CONDITIONS**

- 5.1 The bidders should verify the sites of existing laboratories of Department of Civil Engineering, VSSUT, Burla and the proposed lay out Plan indicating the location of each unit for necessary Technical Evaluation. The scope of Supply as mentioned in the schedule of requirements if not sufficient for full function of the Equipment/Machinery should be intimated in writing with the technical bid.
- 5.2 The quoted rate shall not vary with the quantum of order placed or destination point.
- 5.3 A copy of the original bid conditions and the schedules should be signed by the bidder at the bottom of each page with the office seal duly affixed and returned along with the bid. Bid schedule should be duly filled in with an index and page number for the documents, enclosures & EMD etc. Paging must be done for all the documents submitted.
- 5.4 Bids should be type written or Computerized and every correction/ over writing in the bid should invariably be attested with signature of the bidder with date before submission of the bids to the authorities concerned. No revision of price upward or downward will be allowed once the bid is opened. However the purchaser shall have the right for considering the exchange rate of foreign currencies on verification of documents.

#### **5.5 Bid Price**

- The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialling, dating and re-writing.
- All duties, taxes, and other levies payable on the raw materials and components, job contract shall be included in the total price.
- VAT in connection with the sale shall be shown separately.
- The rates quoted by the bidders shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- The price shall be quoted in Indian Rupees only.

#### **5.6 VAT clearance**

Copies of valid VAT clearance Certificates shall be furnished by the Bidders and the originals of the above certificates shall be produced to the purchaser before placement of notification of award if asked for by the Purchaser.

### 5.7 EMD

All bidders are required to submit EMD not less than 2% of the quoted amount in shape of Demand draft drawn in favour of "The Registrar, Veer Surendra Sai University of Technology, Burla" payable at SBI, Burla only. The EMD shall be in Indian Rupees.

NOTE: Non-submission of EMD or submission of less EMD than the desired one or submission of EMD in any other form except Demand Draft shall result in rejection of Bid. The EMD deposited against other Bids cannot be adjusted or considered for this Bid. No interest is payable on EMD.

### 5.8 SUBMISSION OF BIDS

Sealing and Marking of Bids

Bid should be submitted only through post/courier in two Bid system containing two parts as detailed below.

Sealed Cover-A: Technical Bid.

Sealed Cover-B: Price Bid (hardcopy & sealed soft copy in CD/pen drive)

Both the sealed envelopes should then be put in one outer cover and each cover should have the following indication:

- i) Reference No of Bid \_\_\_\_\_
- ii) Due date & time for submission of the Bid \_\_\_\_\_
- ii) Name of the Firm \_\_\_\_\_

**NOTE: A. Bids submitted without following two bid system procedures as mentioned above will be summarily rejected.**

**B.** Please Note that prices should not be indicated in the Technical Bid. The Prequalification document including EMD as required in the Bid document should invariable be accompanied with the Technical Bid (**Cover A**).The outer envelope shall indicate the name and address of the bidders to enable the bid to be returned unopened in case it is declared "late". If the cover containing the outer envelope is not sealed and marked as required, **Purchaser** will assume no responsibility for the bid's misplacement or premature opening.

The above procedure shall be adopted both for the Technical bid and price bid separately. Telex, cable, email or facsimile bids and bids submitted by hand will not be entertained.

### 5.9 Deadline for Submission of Bids

Bids must be received by the **Purchaser** at the address specified not later than the time and date specified in the Invitation of Bids. In the event of the specified date for the submission of bids being declared a holiday for the **Purchaser**, the bids will be received up to the appointed time on the next working day. The **Purchaser** may, at its discretion, extend this deadline for submission of bids by amending the bid document, in which case all previous rights and obligations of the purchasers and bidders will remain same till the extended date.

### 5.10 Modification and Withdrawal of Bids

No Modification and Withdrawal of Bids is allowed between the interval of time of submission and the last date and time of the bids.

No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidders on the bid form.

### 5.11 BID OPENING

The **Purchaser** will open all bids, in the presence of bidder's representatives who choose to attend at **11.30 AM on dated 16/02/2017 at the Conference Hall of the VC's Secretariat, Veer Surendra Sai University of Technology, Burla**".

5.12 The bidder's representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of bid opening being declared a holiday for the **Purchaser**, the bids shall be opened at the appointed time and location on the next working day.

5.13 The bidder's names, and the presence or absence of the requisite EMD and such other details as the **Purchaser**, at its discretion, may consider appropriate will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the bidders.

### 5.14 Acceptance of the Bid

- Bidders submitting bids would be considered who have considered and accepted all terms and conditions. No enquiries, verbal or written, shall be entertained in respect of acceptance or rejection of the bid.
- Genuine equipment and instrument etc. should be supplied. Bidders should indicate the source of supply i.e. name and address of the manufacturers from whom the items are to be sourced.
  - Supply of equipment means – Installation and Commissioning (except civil works), Demonstration as well as Training at site. No separate charges will be paid on this account.

### 5.15 Rejection of the Bid

The Bid document shall be out-rightly rejected under following stipulation and no correspondence will be entertained whatsoever.

- If the Bidders has not furnished the required Tender paper cost and EMD or EMD exemption certificate from competent authority.
- If the Bidders has not submitted the Price as per the prescribed format Annexure-I
- If the bid is not supplemented with breakup of standard accessories / Optional accessories & cost of AMC separately for three years after completion of warranty period (In case of major machinery only).
- Photo copy of the up-to-date valid manufacturing license/ import license (if it is imported) /dealership certificate/Distributor certificate of the product along with Tax registration Certificate of Manufacturer issued from competent authority.
- If the bidders, whether manufacturer or authorized distributor/ dealer have not supplied the required quantity for qualification as per the eligibility criteria and not submitted the performance statement at Annexure-IV with supporting documents.
- If the quoted product of the bidders not confirms to technical specification with complete accessories for functional Equipment/Machinery and standard of workmanship required by the Purchaser.
- If the bidder has not furnished technical details of the equipments and machinery with one make & model as per Annexure-V.
- If bidder will quote items of more than one make/model.

- If the bidder has not submitted the detailed catalogue, Foundation drawings & schedule of supply of items, if required.
- If the bidders have not agreed to give bid validity.

### **5.18 Purchaser's Right to accept any Bid and to Reject any Bid**

The Purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all the bids without assigning any reason thereof at any time prior to award of Contract, without thereby incurring any liability to the affected Bidders or Bidders on the grounds of such action of the purchaser. In case no bidder qualifies as per qualifying criteria and standards, purchaser may at his discretion relax qualification criteria for award of contract.

### **5.19 Evaluation and Comparison of Bids**

The comparison shall be of FOR destination price basis including the price of all costs wherever applicable as well as duties and taxes (**but excluding VAT**) paid or payable on Machineries, instruments & equipment incorporated or to be incorporated in the items including the warrantee/guarantee period from the date of installation.

- The Purchaser's evaluation of a bid will take into account, in addition to the bid price and the price of incidental services.
- The purpose of bid evaluation is to determine substantially responsive bid with the lowest evaluated cost, but not necessarily the lowest submitted price, which should be recommended for award.
- Evaluation of bids should be made strictly in terms of the provisions in the bid document to ensure compliance with the commercial and technical aspects.
- The past performance of the suppliers will be taken into account while evaluating the bids.
- Cost of the inland transportation, insurance and other costs within the Purchaser's Country incidental to delivery of the goods to their final destination;
- Alternative options of offer shall not be allowed.
- Each Bidder shall submit only one quotation with one make & model.
- The quotation would be evaluated separately for each item
- Sales Tax in connection with sale of goods shall not be taken into account in evaluation.

## **6.0 Supply Conditions**

### **6.1 Delivery of Goods**

The delivery of goods shall be made by the supplier to the Consignee in accordance to the order placed as shall be detailed in the Schedule of requirements & technical specifications.

### **6.2 Warrantee Period (comprehensive)**

The Bidders must quote for a minimum period of **2 (Two) years** of comprehensive **warranty** from the date of completion of the satisfactory commissioning as per (**Annexure-II**). This also includes all accessories related to instruments & equipment quoted for.

### **6.3 Payment Terms**

No advance payment will be made by the Purchaser to the supplier for performance of the contract. 100% of the contract price shall be paid within 30 (thirty) days after satisfactory supply, installation, demonstration, Commissioning & training and stock entry of bills of the goods within due date of delivery.

### **6.4 Transportation**

The Supplier shall be required to meet all transport and storage expenses until commissioning of the instrument(s) / equipment covered in the contract.

#### **6.5 Taxes and Duties**

The Supplier shall be entirely responsible for payment of all Taxes, Duties etc. incurred until delivery of the contract goods to the Consignee subject to recovery afterwards in the bill as claimed in the Bid offer. VAT as applicable is payable, to the suppliers of the State of Odisha if claimed in the Bid offer.

VAT/ CST will be paid to the Suppliers of the outside State other than Odisha, if claimed in the Bid offer. Any revision of VAT/ CST shall automatically be taken into account.

**Entry Tax**, if paid by the Supplier, at the local (destination head) Corporation/ Municipality/ NAC is allowed once only on production of money receipt for such payment, if claimed in the Bid offer. Any other statutory levy imposed by the Govt. of India/ Govt. of Odisha from time to time will be considered extra on demand with adequate proof thereof. The service tax and the work contract tax shall be levied (Wherever applicable). Income Tax as applicable shall be deducted at source.

#### **6.6 Period of Validity of Bids**

- The bid rates should be kept open/ valid for a period of **180** days from the date the Bids are opened.
- A bid valid for a shorter period i.e less than **180** days shall be rejected, as nonresponsive.
- In absence of any indication of the date of validity in the bid, it will be presumed that the offer will remain valid for the minimum period i.e. **180** days as prescribed above.

#### **6.7 Penalty against Non Supply**

In case of non supply of Stores within the due date i.e. within the date of delivery the EMD deposited by the bidder shall be forfeited.

#### **6.8 Annual Maintenance Contract**

The Cost of Annual maintenance contract for next 3 years after warranty period shall be submitted as per the **Annexure at I(b)** . The after sales service during and after the warranty / guarantee period should be available from companies own engineers.

#### **6.9 Jurisdiction of the Court**

The Purchaser and the Supplier shall agree that the competent Court at Sambalpur shall have the jurisdiction to try and decide anything between the parties and they may approach the Competent Court at Sambalpur if required at any time.

**REGISTRAR  
VSSUT, Burla**



**SECTION – III: FORMS AND ANNEXURES****ANNEXURE-I (a)****PRICE SCHEDULE (ITEM WISE)**

Name of the Firm: \_\_\_\_\_

Sl. No.	Name of the Instrument Make: Model No.: Country of origin	
01	(A1) Base Price/Unit	
02	(A2) VAT @	
03	(A3) Freight Charge (if any)	
04	(A4) Any Other (If any, Mention Details)	
05	(A ) Total= A1+A2+A3+A4 in INR	
06	IN WORDS	

**Note-** (i) Price Bid proforma should be provided individually for all equipments.

(ii) Taxes like VAT, Freight and or other taxes/ Charges, if any applicable must be explicitly mentioned in this price bid. Any type of correction/ addition in price schedule shall not be permissible. **Taxes mentioned elsewhere except this price bid will not be taken into consideration.**

**ANNEXURE-I (b)****PRICE SCHEDULE (ITEM WISE) - B****PRICE SCHEDULE FOR ANNUAL MAINTANCE CONTRACT AFTER COMPLETION OF WARRANTY PERIOD.**

Sl.No	Brief description of Goods Total annual	Quantity in nos.				Annual Maintenance Contract cost 3 years i.e. 3x (4a+4b+4c)
			4			
1	2	3	1st yr.	2nd yr.	3rd yr.	
			(a)	(b)	(c)	

**Note:-**

1. The cost of Annual Maintenance Contract ( AMC) which includes preventive maintenance including testing & calibration as per technical/ service/ operational manual, labour and spares, after satisfactory completion of warranty period may be quoted for next 3 years on yearly basis for complete equipment and turnkey (if any).
2. The cost of AMC may be quoted along with taxes applicable on the date of bid opening. The taxes to be paid extra should be specifically stated. In absence of any such stipulation the price will be taken inclusive of all taxes and no claim for the same will be entertained later.
3. Cost of AMC will not be added for Ranking/Evaluation purpose. However, the cost of AMC for lowest evaluated bidder is subject to negotiation.
4. The payment of AMC will be made as per payment terms of the bid document.
5. The uptime warranty and down time penalty shall be as per the bid document.
6. All software update should be provided free of cost during AMC period.
7. The stipulations in Technical Specification will supersede above provisions.
8. The supplier shall keep sufficient stock of spares require during Annual comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

Place:

Date:

Signature of Bidder  
Business Address  
Seal of the Bidder

**ANNEXURE - II**

**WARRANTY MAINTENANCE CONTRACT AGREEMENT.**

THIS AGREEMENT made the.....day of ....., 20\_\_\_ between the “**The Registrar, Veer Surendra Sai University of Technology, Burla**” (hereinafter "the Purchaser") of the one part and M/s..... (here in after called "the Supplier") of the other part:

WHEREAS the Purchaser invited bids for certain Goods & ancillary services viz, supply and commissioning of the instruments & equipment at Bhubaneswar including Comprehensive Warranty Maintenance Services and has accepted a bid by the Supplier for the instruments & equipment specified below at the Consignee site including Comprehensive Warranty maintenance Services for a period of 2 (Two) year from the date of installation & commissioning of the instruments & equipment as per award of Contract No..... dated

**Name of the Equipment & machineries Qty**

(To be filled in as per details of goods in the award of Contract)

**NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:**

1. Maintenance Services shall consist of Preventive and Corrective maintenance of equipment specified above & will include repair and replacement of parts free of cost.
2. Preventive maintenance, monthly once, which includes:
  - 2.1 Check-up to ensure that device connection is proper, cabling is at proper condition etc.
  - 2.2 Cleaning of the above instruments & equipments and checking the System Performance.
3. The Supplier is to furnish the tentative schedule of the preventive maintenance of Warranty Maintenance Contract (WMC) to be carried out.
- 4 The parts replaced must be new parts or equivalent in performance to new parts.
5. The Supplier will also provide the same maintenance service in case of the movement of equipment from the place of original installation to a different place or location, if the equipment is shifted by the Purchaser to another place or location at the cost and risk of the purchaser.
6. Any complaint informed through telephone must be acknowledged with a Complaint No. by the Supplier which will be noted by Consignee. All further contact with the Supplier on such complaint will be initiated through that Complaint No. Once

rectification is done, that No. will be cancelled by both parties. A register is to be maintained by the Supplier where complaints are to be noted along with Complaint No.

7. The maintenance shall normally be done at the earliest.

8. The Service Engineer of the Supplier will be allowed to handle the respective plant & machineries only in presence of the officer in charge at the Consignee site.

9. The Supplier should ensure that maintenance job is not hampered/delayed due to paucity of spares/inadequate manpower etc.

10. The Supplier should submit the services call report, to the Consignee for each and every service call without fail.

11. The Supplier evaluation data format for the WMC of Consignee systems may be filled up for necessary action.

12. All formats after filled up should be signed at the end of each page by the Supplier.

13. After completion of the work/repair/maintenance, the Purchaser shall issue a certificate of completion to the supplier to that effect.

Signature

Signature

For the Purchaser

For the Supplier

Name:

Name:

Designation:

Designation:

Address:

Address:

Telephone No:

Telephone No:

**ANNEXURE-III**

**MANUFACTURES' AUTHORISATION FORM**

**No.** \_\_\_\_\_ / **Date** \_\_\_\_\_ /

To

The Registrar,  
VSSUT Odisha  
Burla, Sambalpur.

Dear Sir, Bid No. \_\_\_\_\_

We \_\_\_\_\_ who are established and reputable manufacturers of \_\_\_\_\_ having factories at \_\_\_\_\_ (Address of Factory) do thereby authorize M/s. \_\_\_\_\_ (Name and address of Agent) to submit a bid and sign the contract with you against the above bid.

\* No company or firm or individual other than M/s. \_\_\_\_\_ are authorized to bid and conclude the contract in regard to this business against this specific invitation for bid.

We hereby extend our full guaranty and warranty as per general conditions of contract for the goods and services offered by the above firm against this bid.

Yours faithfully,  
(Signature for and on behalf of Manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person, competent and having the power of attorney to bind the manufacturer. It should be included original by the Bidders in its bid.

- This para should be deleted for simple items where manufacturers sell the product through different stockiest.

**ANNEXURE-IV**

**DETAILS OF THE BIDDERS**

Bid Reference No.

Name and address of the Bidder:

01 Name of the bidder

- a) Full postal address
- b) Full address of the premises
- c) Telegraphic address
- d) Telephone number
- e) Fax number
- f) E mail:
- g) PAN No
- h) TIN No

02 Total annual turn-over (value in Rupees)

03 Quality control arrangement details

04 Test certificate held

- a) Type test
- b) BIS/ISO certification
- c) Any other

05 Details of staff

- a) Technical
- b) Skilled
- c) Unskilled

06 Branch Office/ Contact Person/ Liaisoning Office in Odisha.

- a) Address
- b) Telephone No.
- c) e-mail,
- d) Fax

Signature and seal of the Bidder

**ANNEXURE-V**

**Technical details of the Machineries & Equipments to be supplied by the bidder**

<b>Bid SI No. of the item</b>	<b>Tender specification</b>	<b>Bidders Specification with make and model no (Enclose manufactures catalogue / brochure for each item)</b>	<b>Deviation if any With university specification</b>

Signature and seal of the Bidder

## SECTION-IV: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

SI no	Name & Specification of articles/materials/machineries/services	quantity
<b>Structural Engineering Laboratory</b>		
1	<p><b>4 ch Input &amp; 1 ch Generator Output Dynamic Signal Analyzer with accessories.</b></p> <ul style="list-style-type: none"> <li>• Portable and lightweight: weighs less than 250 gms</li> <li>• Should have USB 2.0 interface with computer</li> <li>• Power to system should be over USB connection,</li> <li>• Expandable multichannel analyzer with two to four inputs, one output (waveform source) and one tachometer</li> <li>• it should have Real-time FFT analyzer with frequency range greater than 80 kHz</li> <li>• 32-bit processing should work on Microsoft window based OS</li> <li>• should provide Wide dynamic range greater than 112 dB</li> <li>• It should have Built-in CCLD signal conditioning facility</li> <li>• Easy installation facility to be available with USB interface and should provide 'plug and play' facility</li> <li>• System should have FFT analyzer, vibration analyzer and signal analyzer applications</li> <li>• the signal processing should be on Windows based applications suitable for noise and vibration testing purpose also</li> <li>• FFT analyzer should be of high precision with 24-bit having full anti-alias protection</li> <li>• should have real-time processing facility, capable of obtaining results on-site for data verification</li> <li>• facility to Programmed digital filtering, real-time zooming and signal calculation possible</li> <li>• system should have One-click data recording, post-processing and real-time measurements facility</li> <li>• Waveform recording should be possible which streams gap-free data to</li> </ul>	1 number



	<p>a PC disk drive</p> <ul style="list-style-type: none"> <li>• should also have Data Recorder: Tape recorder functionality with voice annotation facility</li> </ul> <p>* following mathematical operation on recorded signal should be possible- Add, Subtract, Multiply, Divide, Single and double integration or differentiation, A, B and C-weighting, Square Square root, Mobility, Compliance, Sine, Cosine, Tan, Arctan, Inverse FFT.</p> <p>* recording sampling rate Up to 192000 samples per second should be possible</p> <p>* Data export facility should be provided - Binary, ME'scopeVES™, MATLAB®, UFF, WAV, Agilent® SDF, MTS® ATI/AFU, Common (BKC)</p> <p>*the software Applications should have : Signal Analysis and Waveform Source; Modal, Data Acquisition; Acoustic Analysis; Real-time, Order Tracking; Transient Capture and SRS, Analysis; Automatic Pass/Fail Testing; Swept-sine, Measurement; Waveform Recording; Data Recording; and Re-calibration facility</p> <ul style="list-style-type: none"> <li>• Waveform Signals such as : Swept-sine, shaped random, shaped burst, random, white noise, pseudo-random, burst, random, burst chirp, chirp, sine wave, square, wave, triangle wave, pulse chain, arbitrary, waveform, and DC level be enabled</li> </ul>	
(a)	<p><b><u>Accessories</u></b></p> <p><b>(a)</b> Accelerometers should have following ranges with accessories for fixing</p> <ul style="list-style-type: none"> <li>* Sensitivity: 90 to 100mV/ms-2</li> <li>* Sensitivity tolerance: 10%</li> <li>* Measuring Range: 70ms-2</li> <li>* Frequency range: 0.4 –6k (Hz)</li> <li>* Build in TEDS should be available</li> <li>* Hermatic Sealing</li> <li>* Cable, coax, 10-32 UNF (M) to BNC (M),10m(33,3ft), max.+80°C (176°F)</li> <li>* Mounting clips, Set of 100 small, glass reinforced polycarbonate</li> <li>* Micro wax, white beeswax for quick mounting of accelerometer</li> </ul>	5 numbers

<p><b>(b) Impact Hammer</b>  * hammer should have Voltage Sensitivity of mV/N (mV/lbf):2.27 (10)  * hammer should have Full Scale force range N (lbf): 2200 (500)  * hammer should have Linear error at full scale: &lt;math&gt;\leq \pm 1&lt;/math&gt;  * hammer should have Full Scale Output voltage: +5 V  * the working Temperature °C (°F): -73 to +60 (-100 to +140)  * Max force compression up to N (lbf) : 4448 (1000)  * Connector type: BNC  * Hammer should be supplied with:  • Impact tip of aluminium, • Impact tip of plastic (Delrin), • Impact tip of rubber (Polyurethane)  • Carrying box, • Calibration chart, • Head extender (40 grams)  • PVC Insulated Cable, 70°C, 10–32 UNF to BNC Connector, 5m (16.4 ft), Plug Adaptor, BNC to 10–32UNF</p>		1 set
	<p><b>(c) Operational Modal Analysis software</b>  <b>The software should have following features and capabilities</b></p> <ul style="list-style-type: none"> <li>. Capacity to run several projects simultaneously for easy comparison of results</li> <li>. Handles multiple datasets and multiple reference points, including automatic mode shape merging</li> <li>. Effective and easy-to-use signal processing wizard</li> <li>. Capacity to set a reduced number of projection channels for analysis</li> </ul> <p><b>Time ODS</b> in displacement, velocity and acceleration using SI, Imperial or user-defined units</p> <p><b>Frequency domain techniques:</b> FDD and EFDD . (Enhanced) Frequency Domain Decomposition,. Automatic mode estimation in FDD and EFDD,. Automatic identification and suppression of deterministic signals using the EFDD technique</p> <p><b>Time domain</b> Stochastic Subspace Identification techniques: Principal Components, Unweighted Principal Components and Canonical Variate Analysis. Clear stabilization diagrams to discriminate between physical and computational modes</p>	1 set

	<ul style="list-style-type: none"> <li>. Synthesis of response spectra for validation</li> <li>. Prediction Error calculation between measured and synthesized response spectra and correlation functions</li> <li>. Single, overload, difference, side-by-side, top-bottom or quad views of mode shape animation</li> <li>. Definition of slave node equations and interpolation of non-measured nodes to nearest measured nodes</li> <li>. Calculation of Modal Assurance Criterion (MAC) plots and tables</li> <li>. ActiveX® support for geometry and data transfer using PULSE, Microsoft® Word and Excel®, and MATLAB®</li> <li>. Transfer of all modal results in Universal File Format</li> <li>. Export of all animations using AVI movie files</li> </ul>	
	<p><b>(d)MODAL ANALYSIS SOFTWARE</b></p> <p><b>The software should have following features and capabilities</b></p> <ul style="list-style-type: none"> <li>• Mode indicator functions: Normal MIF (NMIF) and Power MIF (PMIF)</li> <li>• Curve-fitting: <ul style="list-style-type: none"> <li>– SDOF: Least Squares Global Partial Fraction, Quadrature Picking</li> <li>– MDOF: Polyreference Time, Polyreference Frequency – limited to one reference</li> <li>– Stability diagram</li> <li>– Automated mode selection</li> </ul> </li> <li>• Analysis validation: AutoMAC and CrossMAC</li> </ul> <p><b>* Geometry Import Formats: DXF from AutoCAD® v. 10, UFF data set types 15, 82 or 2411, ME'scopeVES native geometry format (*.str), and Microsoft® Excel® (*.csv)</b></p> <p><b>Geometry Export Formats: UFF data set types 15, 18 or 82, ME'scopeVES native geometry format (*.str), and Microsoft® Excel® (*.csv)</b></p> <p><b>Views:</b></p> <ul style="list-style-type: none"> <li>• Three 2D views: Plan View, Side View and Front View (PV, SV, FV),</li> <li>• Isometric view</li> <li>• Split screen views combining 2D and 3D views</li> </ul>	1 set

	<ul style="list-style-type: none"> <li>• Hidden lines and transparency</li> <li>• Pan, zoom and rotate options for viewing geometry</li> <li>• All views scalable</li> <li>• Full dynamic rotation of test object geometry including auto-rotation</li> </ul> <p><b>Drawing:</b> Creation of points, lines, faces and basic 3D shapes.</p> <p>Drawing using mouse, or by inputting coordinates. Automatic mesh generation for basic shapes. Easy object rotation and adjustment in 3D space including:</p> <ul style="list-style-type: none"> <li>• Cartesian, spherical and cylindrical coordinates</li> <li>• Local coordinate systems</li> <li>• Geometry components</li> </ul>	
	<b>Environmental Engineering Laboratory</b>	
1	AAS Standard Solutions for metal such as Cr, Cu, Fe, Mn, Ni, Ag, Cd, Pb, Zn, Ca, Mg, As, Hg, Si, Al, Sn, Sr, Co & Mo	100 ml each
2	Double Stage Distillation Set ( Quartz) (1.5 l/hr)	01 set
	<b>Transportation Engineering Laboratory</b>	
1.	<b>Radar Speed Guns</b> digital technology and Digital Signal Processing to provide accurate real time measurement, accurate to $\pm 2.0$ KPH. Velocity measures speed of a race car from 16-300 KPH from 450m). Battery operated, Operating Time: Up to 20 hours Operating Temperature Range: 0-45 C, with accessories for data recoding.	02 set
2.	<b>Professional Flash Camcorders</b> 20x Optical Zoom Flash Memory Full HD 1080p 1/2.84-inch imager 3.5 inch OLED Native 24p, XLR audio HDMI out f1.8 – 2.8 Lens 26.8mm – 576mm - - - 1080p @ 24, 30, 60fps 35Mbps Bit Rate Infrared Night Vision Built-in WiFi Dual Card Slots Wide Dynamic Range	02 set