

**VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA, BURLA**

**No. VSSUT/ CIVIL / 350**

**Date: 03/03/2016**

**TENDER CALL NOTICE**

Sealed Tenders are invited from the intending reputed Original Equipment Manufacturers/Direct Importers/Registered Authorized 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).

**REGISTRAR**

**Memo No. VSSUT/CIVIL/351(5)**

**Dated 03/03/2016**

**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 Odisha edition of The Indian Express 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. The expenses shall be met from Self-financing funds of the University.
- 5) Steno to Registrar for record. This is based on FC-11.4 & BoM-17.4 and subsequent approval of the Hon'ble Vice Chancellor at Note page N-1 of the File No VSSUT/CIVIL/77 of the Civil Engg. Dept.

**REGISTRAR**

### **GUIDE LINES, TERMS AND CONDITIONS**

1. **Cost of Tender documents:** The cost of Tender documents is Rs.500.00 (Rupees five hundred only) (Non-refundable). The Tender documents can be downloaded from the University website [www.vssut.ac.in](http://www.vssut.ac.in). A bank draft towards the cost of Tender documents drawn in favor of **“The Registrar, Veer Surendra Sai University of Technology, Burla” payable at SBI, Burla** must be submitted along with Tender.
2. This Tender documents must be filled in completely and signed by the authorized signatory of the bidder on all the pages as acceptance of all the guidelines, terms and conditions laid in this Tender document. (This document should be printed on both sides of the A4 size paper sheet).
3. The completed document must reach to “The Registrar, Veer Surendra Sai University of Technology, Burla, PO. Burla, Dist. Sambalpur-768018 (Odisha)” by the last date of submission i.e. 31<sup>st</sup> March 2016 by 12 Noon under a sealed cover by **REGISTERED/SPEED POST**. The Tenders received after the due date & time are liable to be rejected. Tender by FAX/ e-mail or any other media will not be entertained.
4. The envelope containing the Tender must be super-scribed as **“TENDER FOR CIVIL ENGINEERING DEPARTMENT”** with due date & time of submission.
5. The University is not responsible for delay, loss or non-receipt of Tender documents sent by post.
6. The Tender should contain the following documents.
  - a. This Tender document must be signed on each page by the authorized signatory of the bidder.
  - b. Detail Name & address with Phone no./FAX No, e-mail ID of the contact person.
  - c. Bank draft (Non-refundable) towards the cost of Tender documents.
  - d. Self attested copies of VAT clearance certificate/IT return/service tax clearance certificate.
  - e. Documentary evidences/ technical literature/catalogues in original for the model.
7. The Tender shall contain the firm and final rates in clear and unambiguous terms in Indian Rupees.
8. The quoted price must be inclusive of freight, packing, forwarding, transit insurance etc. for delivery at VSSUT, Burla. The installation, commissioning and demonstration shall be at the supplier cost of the supplier. Any reagent/accessory necessary for demonstration of the instrument must be provided by the supplier.
9. The bidder shall also indicate the applicable prevailing VAT.
10. The Tender and the quoted prices shall be valid for 90 days from the date of submission of the Tender.

11. The University will evaluate the technical & financial aspects of the Tenders. The University shall consider placement of orders for commercial supplies only on those eligible bidder whose offers are found to be technically, commercially and financially acceptable and who have accepted the terms and conditions as stipulated in this Tender document.
12. On all the matters relating to this Tender call document, the decision of the University shall be final and binding and the same cannot be referred to the court of law. The University reserves the right to reject any or all of the Tenders without assigning any reason what so ever.
13. The University reserves the right to call the bidders and to conduct negotiations, if necessary and has the right to select more than one bidder for one or more items at its discretion.
14. Any deviation in technical specifications shall not be entertained ordinarily. The University reserves the right to modify the specifications during the execution stage of the purchase process. Wherever the technical specifications of items are changed either at the University request or at Bidder's request, revised price will be fixed, if necessary, by negotiations and as agreed upon by both parties.
15. The University reserves the right to order all or part or none of the items and/or services given in this document.
16. The quantities in the schedule may be increased or decreased to any extent depending upon the actual requirement.
17. The supplier shall **quote for the latest model of their equipments** only.
18. Unless otherwise specified in the order, the order price shall remain firm and will not be subject to escalation of any description during the pendency of the order, notwithstanding the change in the cost of materials, labour and/or variations in the taxes, duties and other levies on raw materials and components may take place while the order is under execution even if the execution of the order is delayed beyond the completion date specified in the order for any reason whatsoever.
19. The University may reject the bid even if it is accepted but the successful bidder fails to execute any of the guidelines, terms and conditions mentioned in this Tender document.
20. All the instruments are to be door-delivered to the University within 30 days of the issue of the purchase order. In case the supplier fails to deliver the goods within the due period, the University reserves the right to cancel the purchase order and to place orders with other firms without assigning any reason thereof.
21. The supplier must supply all ordered items at a time. Part supplies are not acceptable and will not be entertained on any account. Any loss or damage during transit will be replaced at the cost of supplier.
22. The supplier shall be liable to complete all installation and demonstration of the instruments at the site within 30 days from the date of receipt. All packing must be opened at the site and be handed over to the consignee, at the supplier's cost.

23. The instruments supplied will be under warranty for a period of 2 years from the date of installation and demonstration. Free replacement of faulty parts including free technical support shall be provided during the warranty period. Warranty Certificate shall be submitted at the time of delivery.
24. The supplier is required to take care of change in technology and supply the higher version of the instruments available at the time of delivery at the same total cost as per the order. **The operating manuals in original must be supplied at the time of delivery of the instruments.**
25. The supplier shall submit all bills in triplicate on printed forms to the University.
26. The supplier must submit valid and up-to-date VATCC and copy of IT return along with the bill before release of payment.
27. The University will make payments through account payee cheque drawn on SBI Burla, in Indian Rupees. No interest on any deferred claim arising out of this purchase shall be payable in any case whatsoever. No payment will be made for instruments rejected at site during demonstration.
28. The 100% of the billed amount will be released only after 30 days of receipt of instruments in good conditions and successful performance on site from the final date of demonstration as per the specifications.
29. The University reserves the right to cancel the purchase order if the instruments supplied fail to meet the specification mentioned within the terms and conditions of this Tender call document. The University shall not be held responsible for any loss or damage suffered by the bidder as a result of the cancellation of the purchase order.
30. Any dispute arising out of the deal shall be subjected to the jurisdiction of the court at Sambalpur within the State of Odisha.

**DELIVERY AS WELL AS BILLING ADDRESS**

**THE REGISTRAR**

**VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA**

**BURLA-768018**

**DIST. SAMBALPUR (ODISHA)**

**Table-1: DESIRED SPECIFICATIONS OF THE INSTRUMENT**

Sl no	Name & Specification of articles/materials/machineries/services	Quantity
<b>Fluid Flow Laboratory</b>		
1	<p><b>Metacentric Height Apparatus</b></p> <p>Pontoon: Size 300 x 300 mm (approx.) with a Horizontal Guide Bar for aliding weight and Removable Strips, Graduated arc with Pointer with moveable hanger And set of weights Water Tank: Size 550 x 500x 400 mm (approx.) Front Window of Tank: Made of Glass/Perspex A set of weights are to be supplied with the apparatus Instruction Manual: An ENGLISH instruction manual must be provided along with the Apparatus Tanks should be made of Stainless Steel Pendulum and graduated for accurate measurement of Tilt angle</p>	05 SETS
2	<p><b>Bernoulli's Apparatus</b></p> <ul style="list-style-type: none"> <li>• Supply Tank Capacity: 85 Ltrs. MOC SS</li> <li>• Measuring Tank Capacity: 40 Ltrs. MOC SS fitted with Piezometer Tube &amp; scale</li> <li>• Piezometer Tubes: Material P.U. Tubes (9 Nos.)</li> </ul>	03 SET
3	<p><b>Impact of Jet Apparatus</b></p> <ul style="list-style-type: none"> <li>• Cylindrical operating area made of Plexiglas, diameter 200mm, height 340mm</li> <li>• Measurement of jet impact forces with weights</li> <li>• 4 interchangeable deflectors</li> <li>• Unit mounted on base plate,</li> <li>• 400x400x40mm, powder-coated steel plate</li> </ul>	03 SET
4	<p><b>VENTURIMETER &amp; ORIFICEMETER APPARATUS</b></p> <p>TECHNICAL DETAILS:</p> <ul style="list-style-type: none"> <li>• Venturimeter : - Material Clear Acrylic compatible to 1" Dia. Pipe</li> <li>• Orificemeter Material: - Clear Acrylic compatible to 1" Dia. Pipe.</li> <li>• Water Circulation : FHP Pump, Crompton make</li> <li>• Flow Measurement : - Using Measuring Tank, Capacity 40 Ltrs.</li> <li>• Sump Tank Capacity: - 100 Ltrs</li> <li>• Stop Watch: Electronic</li> <li>• Control Panel : On/Off Switch, Mains Indicator, etc</li> <li>• Pressure head measurement :- Mercury manometers (differential)</li> <li>• Material of Tanks and wetted parts:- Stainless Steel</li> </ul>	03 SETS
<b>Environmental Engineering Laboratory</b>		
1	<p><b>Autoclave (35cm dia and 55cm height)</b></p> <p>Double wall design has single chamber for steam and water. Working chamber made of stainless steel. Outer cover made of stainless steel. Lid, flange &amp; bottom sheet also made of stainless steel. All joints argon welded. Joint less silicon gasket, heavy duty industrial flange heater.                      Pressure range : 15 to 22 PSI                      Temperature Control: Microprocessor Based digital display.                      Temperature Sensor: Pt-100.                      Temperature Range : 121 Deg. C to 125 Deg. C.                      Temperature Resolution: 0.1 Deg. C.                      Temp. Accuracy +/- 0.5 Deg. C                      Lid fitting pressure gauge 0-30 PSI, safety spring loaded pressure valve, steam</p>	01 no

	release valve. Hydraulically tested. Electrical : 230 V/15 A/50 Hz.	
2	<b>Incubation chamber for coliform</b>  Temperature Settings (factory preset): 35°C, 41.5°C, 44.5°C, 45.5°C. Sensitivity (cover on) 0.1°C Uniformity (cover on) ± 0.2°C Chamber Size Length 14 inches (35 cm.) Width 12 inches (30 cm.) Height 8 inches (20 cm.) Capacity (1.5" from top) - 4.8 gallons (19.3L.)	01 no
3	Laminar air flow cabinet Laminar Cabinets Inner Chamber & Outer Chamber made of stainless steel high efficiency particular air filters, to achieve the air purification upto 0.3 Microns in Working area. Working area 2 ft x 2 ft x 2 ft Blower fitted with ¼ HP Motor, with RPM 1200 to 1400. Pre-filters made of high grade nylon Net fixed in S.S. frame for first Stage air purification, through blower system. Closed Inner Chamber fitted with HEPA having very accurate performance rate of air filtration, rated 99.99%, resulting in ceasing all air bore molecule of particle up to 0.3 micron in working Area of Laminar Bench. Working area of Laminar Airflow Cabinets illuminated by fluorescent light ;cabinets operated at 230V. Single Phase 50Hz. AC Supply. Fitted with UV Germicidal lamp for sterilization. Fitted with Acrylic Front Door sliding type Fitted with Manometer for measurement of HEPA Filters Choking system. Fitted with Cock for Gas Connection.	01 no
4	Ion meter with Nitrate Electrode Plastic membrane, Concentration range: $10 \times 10^{-6}$ to 1 M (0.10 to 10,000 ppm as N) Temperature/pH range: 0 to 40°C/2 to 12	01 no
5	ORP meter Range: ±1999.0 mV ,Resolution: 0.2 mV , Accuracy: ±1.0 mV	01 no
6	Desiccators	02 No
<b>Structural Engineering Laboratory</b>		
1	Portable three hinged parabolic arch made of steel members (approximate span = 4', rise = 1') based on the availability.	04
2	Portable two hinged parabolic arch including hanger bars made of steel members (approximate span = 4'x rise = 1') based on the availability.	04
3	Needle beam apparatus for verification of Maxwell reciprocal theorem (span= 3.5', height =1')	04
4	Redundant Joint Apparatus, size= (2.5'x2.5')	04
5	Bow string Arch Model, size= (3.5' x 1.5')	04
6	Linear Arch Model, size= (2.5' x2.5')	04
7	Elastically coupled Beam, size= (2.5' x2.5')	02
8	Electronic weighing balance Max-15 kg, Least count = 1 gm	02
9	Magnetic type dial gauge for deflection measurement (Least count = 0.01 mm)	10
10	Slide caliper and screw gauge	03
11	Computer with printer (combo type) (for UTM)	01
12	<b>Demec gauge (Demountable mechanical strain gauge)</b>	03

	<p>The DEMEC consists of a standard or a digital dial gauge attached to an Invar bar. A fixed conical point is mounted at one end of the bar, and a moving conical point is mounted on a knife edge pivot at the opposite end. The pivoting movement of this second conical point is measured by the dial gauge.</p> <p>A setting out bar is used to position pre-drilled stainless steel discs which are attached to the structure using a suitable adhesive.</p> <p>Each time a reading has to be taken, the conical points of the gauge are inserted into the holes in the discs and the reading on the dial gauge noted. In this way, strain changes in the structure are converted into a change in the reading on the dial gauge.</p> <p>The gauge has been designed so that only minor temperature corrections are required for changes in ambient temperature, and an Invar reference bar is provided for this purpose.</p> <p>To simplify analysing the results, a software programme which will run on any MSDOS computer is available. This gives user friendly instructions on how to enter the data and then calculates the strain changes</p> <p>200mm Dial 1 div = <math>8 \times 10^{-6}</math> 2.6kg 300 x 200 x 110mm                      50mm Dial 1 div = <math>20 \times 10^{-6}</math> 1.2kg 260 x 120 x 115mm                      200mm Digital 1 div = <math>4 \times 10^{-6}</math> 2.6kg</p>	
13	<p>Hand held optical microscope (for crack with measurement)</p> <p><b>Details:</b> 3 inch Handheld 500x 5m 8 LCD Digital Video Camera Microscope 4x Digital Zoom</p>	03
14	In-situ flat jack testing (2 point)	02
<b>Transportation Engineering Laboratory</b>		
1	<p><b>Ring and ball apparatus</b></p> <p>Steel balls of dia 9.5 mm and weight 2.5g                      Brass ring of depth 6.4mm, inside dia at top 17.5mm, inside dia at bottom 15.9mm, outside dia 20.6mm                      Metallic support; Glass container of dia 85mm, depth 120mm</p>	06 sets
2	<p>IS Sieve set</p> <p>Brass, 125mm to 32 micron with lid &amp; receiver</p>	02
3	<p>Marshall hammer</p> <p>8.8cm dia, weight 4.5kg, free fall 45.7cm</p>	04
4	<p>Length gauge</p> <p>thickness gauge</p> <p>According to IS 2386 part I</p>	02 02
5	<p>Standard proctor compaction mould+ base plate+ collar</p> <p>1000cc capacity, internal dia 10cm, height 12.73cm</p>	04
6	Spring balance (1g to 1kg)	02
7	Spring balance (1g to 15kg)	02
8	Spring balance (1g to 5kg)	02
9	Weighing balance (0.001g to 300g)	02
10	Weighing balance (1g to 15kg)	02
11	<p>Thermometer</p> <p>1°C to 400°C                      -20°C to 170°C</p>	04 04
12	Glass Desiccators (Inner Dia 300mm)	04
13	Glass conical flask (500 ml).	10

<b>Geotechnical Engineering Laboratory</b>		
1	Electronic weighing machine with battery backup facility Make-Mettler Toledo. Capacity -15 kg; Readability -02 gms	01
2	Electronic weighing machine with battery backup facility Make-Mettler Toledo. Capacity -30 kg ; Readability - 05 gms	01
3	Electronic analytical balance Make-Mettler Toledo. Capacity -420 gms; Readability – 0.001 gms	02
4	Universal extractor frame , hand operated complete with hydraulic jack to extract sample of the 60 cms length in single stroke.All the components are enclosed in all elegant looking cabinet Unit is complete with : 1. Thrust plate for 38 , 50, 75, 100,150mm diameter 2. Adaptors for 38 , 50, 75, 100,150mm diameter.	01
<b>Concrete Laboratory</b>		
1	Laboratory Electric Oven, with digital indicator cum controller with safety alarm, range 25 to 250 ± 1 deg. C. , with air circulating Fan, SS. Inside and size: 60 x 60 x 60 cm , with aluminum tray complete	01
2	Lab Concrete Mixer Motorized 150 Ltr. Capacity	01
3	Motorized Sieve Shaker able to carry 7 sieves of 200 mm or 300 mm dia. Cast Iron Body, adjustable top clamping plate provided for holding sieves, Suitable for operating on 220 v, 50 Hz, single phase supply.	01
4	Electronic Weighing Balance; Capacity 50 Kg, Accuracy ± 2 gm	01
5	Serological water bath, double walled, with digital controller cum indicator with stirring arrangement, inside stainless steel,, Temp: 10°C to 100 °C (± 0.5°C)deg. C, size: 450 x 300 x 175 mm (for 6 Racks)	01
6	Cube Moulds: Mould cast iron for 150mmX150mm cube, with ISI-10086 certification Mark, supplied complete with base plate.	30
7	Mortar cube : Mould steel, for 70.6mm cube with ISI-10086 certification mark, supplied complete with base plate	18
8	Standard Test Sieves 30 cm diameter as per IS specifications, for coarse aggregate made of G.I. frame with joint fitted with steel (M.S.) Punched sheets square hole opening. Size: mm 80, 40, 20, 12.5, 10, 4.75 with lid and pan.	2
9	Standard Test Sieves 20cm dia as per IS specification, brass frame without joint nicely polished Endcott Pattern, double folded bottom having beading at top tight fitting with each other finished and having stainless steel mesh. Size: mm 4.75, 2.36, 1.18, 600 µ, 300 µ, 150 µ with lid and pan.	2
10	Standard Test Sieves 20cm dia brass frame without joint nicely polished Endcott Pattern, double folded bottom having beading at top tight fitting with each other finished and having stainless steel mesh. Size: 90 µ with lid and pan.	6
11	Vicat Needle Apparatus conforming to IS specifications. Consists of a metallic frame bearing a movable rod with cap at one end and a vicat mould 80mm in dia at the base, 70mm at the top and 40 mm high and with a glass base plate, consistency plunger initial and final needless in a nice Jewellery case. Fitted with Dashpot to facilitate the gentle lowering of the needle.	6
12	Le-Chatelier apparatus conforming to IS specifications 5514, 4031(P-3). Supplied complete with two glass plates and lead weight. Per set of six nos.	1 Set (Six Nos.)

- The Tenderer shall quote the quality/specification if any. Deviations from the specifications stated above, if any, may be mentioned in a separate sheet.
- Rates of all the instruments must be inclusive of all the standard accessories.



## Price Bid Proforma for INR

Name of the OEM/Business Partner of OEM: \_\_\_\_\_

Sl. No.	Name of the Instrument Make: Model No.:	
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 each equipment.

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