

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
(संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
(A Central University established by an Act of Parliament in 2009)

Ref no. CUJ/ P&S/CNT/07/2016/86

Dated: ...९९...../06/2016

संलग्न शीट (अनुबंध- II) में सामानों के लिए नीचे दिए गए नियम एवं शर्तों के अधीन मुहरबंद कोटेशन आमंत्रित किए जाते हैं:

Sealed quotations are invited for the article enclosed in the separate sheet (Annexure-II) subject to the terms and conditions given below:

कोटेशन प्रभारी क्रय, झारखण्ड केन्द्रीय विश्वविद्यालय, रातु लोहरदगा रोड, ब्राम्बे, राँची - 835205 के नाम होना चाहिए एवं दिनांक 08-09-2016 को या उससे पहले मिल जाना चाहिए। तकनकी बोली दिनांक 13-09-16 को अपराहन 3:00 बजे खोला जाएगा।

The quotation should be addressed to The Purchase In-charge, Central University of Jharkhand, Ratu-Lohardaga Road, Brambe, Ranchi, 835205 and should reach on or before 08-09-16 Technical bid will be opened on 13-09-16 at 3:00 pm.

नियम एवं शर्तें

TERMS AND CONDITIONS

1. बिना किसी मिटान और ओवरराइटिंग वाले कोटेशन मुहरबंद लिफाफे में प्रभारी क्रय, झारखण्ड केन्द्रीय विश्वविद्यालय, रातु लोहरदगा रोड, ब्राम्बे, राँची - 835205 के नाम भेजा जाना चाहिए। लिफाफे पर संविदा/इन्क्वायरी संख्या एवं नियत तिथि लिखा होना चाहिए नहीं तो कोटेशन को नज़रअंदाज कर दिया जा सकता है। कोटेशन / इन्क्वायरी को डाक/कूरियर/हाथो-हाथ भेजा जाना चाहिए।

Quotations without any erasures and overwriting must be submitted in sealed cover addressed to Purchase In-charge, Central University of Jharkhand, Ratu- Lohardaga road, Brambe, Ranchi- 835 205 super-scribed Tender/ Enquiry No. and the due date failing which, quotation may be ignored. Tender/ quotation should be sent through Post/ Courier/ By Hand.

2. उद्धृत दर पैकिंग, अग्रेषण, बिक्री कर, माल ढुलाई और बीमा शुल्क सहित होना चाहिए और कोटेशन के खुलने की नियत तिथि से तीन महीने के न्यूनतम अवधि के लिए हमारी स्वीकृति के लिए वैध होनी चाहिए। कोटेशन परेषिती के स्थान यथा झारखण्ड केन्द्रीय विश्वविद्यालय, रातु लोहरदगा रोड, ब्राम्बे, राँची - 835205 के आधार होना चाहिए।

The rate quoted should be inclusive of all packing, forwarding, sales tax, freight and insurance charges and should remain valid for our acceptance for minimum period of three months from the due date of opening of the quotations. The quotation should be CUJ consignee's site basis i.e. Central University of Jharkhand, Ratu- Lohardaga Road, Brambe, Ranchi.

3. आपूर्ति की जाने वाली सामग्री के मूल कंपनी के निर्माता का नाम स्पष्ट रूप से निर्दिष्ट किया जाना चाहिए। सचित्र साहित्य / या चित्र, में पूरा विवरण, यदि कोई हो, की मूल प्रति (फोटोकॉपी नहीं) सभी कोटेशन के साथ अनिवार्य रूप से संलग्न करना चाहिए।

Manufacturer's name of the company of materials offered must be clearly specified. Complete details of illustrated literatures/ or drawings, in original (not photocopies), if any must accompany all quotations.

4. ठेका अवधि के दौरान निविदाओं के खुलने के बाद विश्वविद्यालय उद्धृत मूल्यों में संशोधन के अनुरोध पर विचार नहीं करेगा चाहे जो भी कारण हो।

The University will not entertain requests for revision in prices once quoted for whatever reason after the tenders are opened during the period of contract.

5. सभी माल हमारे निरीक्षण प्राधिकारी द्वारा निरीक्षण के लिए रातु लोहरदगा रोड, ब्राम्बे, राँची - 835205 में हमारे विश्वविद्यालय में दिया जाना चाहिए।
All goods must be delivered at our university at Ratu- Lohardaga Road, Brambe, Ranchi for inspection by our inspecting authority.
6. हमारे गंतव्य पर आपूर्ति किए गए माल के निरीक्षण के बाद स्वीकृति के 30 दिनों के भीतर पूर्ण भुगतान कर दिया जाएगा। विभिन्न भुगतान की शर्तें युक्त कोटेशन को नजरअंदाज किया जा सकता है।
Full payment will be made within 30 days of the receipt and acceptance after inspection of supplies at (our) destination, quotations containing different payment terms are liable to be ignored.
7. आदेश की पुष्टि के बाद सभी वस्तुओं को रातु लोहरदगा रोड, ब्राम्बे, राँची - 835205 स्थित हमारे विश्वविद्यालय (क्रय व भंडारण) में निःशुल्क आपूर्ति किया जाना चाहिए।
All goods must be delivered at our university at Ratu- Lohardaga road, Brambe, Ranchi (Stores & Purchase Section) free of cost after confirmed order.
8. केवल ऐसे निर्माता / अधिकृत डीलर / ख्यातिप्राप्त कंपनियां जो कोटेशन में सूचीबद्ध सामानों की खरीद-बिक्री करते हैं एवं जिन्हें इन सामानों की बिक्री और मरम्मत का अनुभव है, कोटेशन दें।
9. Only Manufacturer/ Authorized dealer/ firms of repute dealing in the items listed in the quotation having experience in sale and repair/ maintenance, need apply.
10. सामानों के केवल नवीनतम मॉडल ही कोट करें।
Only latest models of items need to be quoted.
11. यह विशेष रूप से उल्लेख किया जाना चाहिए कि क्या उद्धृत मूल्य में सभी कर और शुल्क भी शामिल हैं। बिक्री कर और / या अन्य शुल्क जो कानूनी तौर पर लगाया जाना है और जिन्हें दावा करने का इरादा है तो स्पष्ट रूप से निविदा में दिखाया जाना चाहिए।
It should be mentioned specifically whether price quoted includes all taxes and duties. Sales tax and/ or other duties legally leviable and intended to be claimed should be distinctly shown in the tender.
12. वैट/सीएसटी पंजीयन संख्या एवं इसकी वैधता दिखाया जाना चाहिए। निविदा कागजातों के साथ दस्तावेजी साक्ष्य संलग्न किया जाना चाहिए।
VAT/CST Registration Number and its validity should be indicated. Documentary evidences be supplied/ attached to the tender documents.
13. सभी दर शब्दों एवं अंकों दोनों में दर्शाया जाना चाहिए। शब्दों एवं अंकों में दिए गए दरों में अंतर की स्थिति में शब्दों में दिया गया दर ही मान्य होगा।
All rates shall be indicated both in words and figures. Where there is difference between the rates quoted in words and figures, rate quoted in words will prevail.
14. क्रय आदेश दिए जाने के 30 दिनों के भीतर आपूर्तिकर्ता वस्तुओं की आपूर्ति करेगा। क्रय आदेश आवश्यकताओं के आकलन करने के बाद दिया जाएगा और इसलिए वास्तविक मात्रा में वृद्धि / कमी हो सकती है।
The supplier shall make delivery of the items within 30 days from the placement of the purchase order. The purchase order would be placed after assessing the requirement and hence, actual quantity may increase/ decrease.
15. सामाग्री के लिए निविदा कागजात दो बोली प्रणाली में होगा जिसमें **तकनीकी बोली (अनुलग्नक -I)** एवं **मूल्य बोली (अनुलग्नक - II)** शामिल है। निविदा कागजातों को सामाग्री वार दो अलग-अलग मुहरबंद लिफाफे में देना होगा एवं लिफाफे के ऊपर सामग्री का विवरण जिसके लिए बोली दिया गया है स्पष्ट रूप से दर्शाना होगा।
The Tender Document for items will be Two- Bid system consisting of **Technical Bid (Annexure-I)** and **Price Bid (Annexure-II)**. The Tender Document will be submitted item-wise in two separate sealed covers clearly mentioning on the envelope the details of items for which Bid is submitted.

16. निविदा कागजात का मूल्य रु 1000 / - (केवल एक हजार रुपए) (अप्रतिदेय) है। निविदा कागजात मूल्य बैंक, ड्राफ्ट के माध्यम से "झारखण्ड केन्द्रीय विश्वविद्यालय" के पक्ष में राँची में देय, तकनीकी बोली के साथ संलग्न किया जा सकता है।
The price of Tender Document is Rs. 1000/- only (One Thousand rupees only) (non- refundable). The Tender Document price may be attached to the Technical Bid in the form of Bank Draft in favour of "Central University of Jharkhand" payable at Ranchi.
17. निविदा कागजात जिसमें तकनीकी बोली, मूल्य बोली एवं बयाना, उपकरण मूल्य का 10% बैंक ड्राफ्ट के रूप में "झारखण्ड केन्द्रीय विश्वविद्यालय" के पक्ष में राँची में देय, शामिल है, अलग-अलग लिफाफे में रखा होना चाहिए एवं लिफाफे पर उसका नाम लिखा हुआ होना चाहिए। निविदा कागजात के साथ बयाना अनिवार्य रूप से साथ लगा होना चाहिए अन्यथा निविदा कागजात को निरस्त कर दिया जाएगा। सभी कागजात एक बड़े लिफाफे में रखा जाना चाहिए एवं उसके ऊपर निविदा संख्या एवं सामग्री का नाम लिखा होना चाहिए।
The Tender Documents comprising of Price-Bid, Technical Bid and **Earnest Money Deposit** of 10% of the value of the equipment (**refundable**) in the form of Bank Draft in favour of "Central University of Jharkhand" payable at Ranchi kept in the separate envelope super- scribed with the name of the same. The Tender Document must be (**accompanied with**) enclosed with Earnest Money Deposit otherwise the tender document will be rejected. All the documents must be (**kept in**) enclosed in a bigger size envelope super- scribed with the tender number and item name.
18. ISO 9001 and ISO 14001 प्रमाणन रखने वाले विनिर्माता ही निविदा में भाग लेने के योग्य है ।
Only those Manufacturers (**eligible**) liable to participate (**which are**) having ISO 9001 and ISO 14001 certification.
19. सभी कानूनी विवाद झारखण्ड उच्च न्यायालय, राँची के न्यायाधिकार के अंतर्गत होगा ।
All legal disputes shall be under the jurisdiction of Jharkhand High court, Ranchi.
20. विश्वविद्यालय को किसी बोली को बिना कोई कारण बताए स्वीकृत अथवा निरस्त करने का अधिकार सुरक्षित होगा। इस संबंध में कोई भी पत्राचार पर विचार नहीं किया जाएगा।
The University reserves the right to accept or reject any Bid, without assigning any reason thereof. No correspondence in this regard will be entertained.
21. सभी प्रतिभागी कंपनियों को निम्नलिखित के पक्ष में सहायक कागजात संलग्न करना चाहिए:
All the participating firms should attach supporting documents in favour of (**following**):
- क्षेत्र में कम से कम 5 सालों का अनुभव
Have at least 5 years of experience in the field.
 - पिछले तीन सालों में प्रत्येक वर्ष कम से कम रु 50 लाख का वार्षिक टर्नओवर होना चाहिए (यथा 2012-13, 2013-14 व 2014-15) (कंपनियों को अपने लेखापरीक्षा कंपनी से दिए गए अवधि के लिए टर्नओवर प्रमाणपत्र प्रस्तुत करना होगा)।
Have an annual turnover of at least Rs. 50 Lakh per annum for each of the last 3 years (i.e 2012-13, 2013-14 & 2014-15) (Agency should produce a certificate from their Audit Firm in respect of turnover for the mentioned period).
 - उद्योग निदेशालय या लघु उद्योग या अन्य किसी उपयुक्त प्राधिकारी के साथ पंजीकृत होना चाहिए
Be registered with Directorate of Industries or Small Scale Industries or any other appropriate authorities.
 - वैट/सीएसटी के अंतर्गत पंजीकरण के लिए वैध टीआईएन संख्या
Have valid TIN Number for registration under VAT/CST
 - आयकर के लिए पैन संख्या । आयकर जमा करने संबंधी पिछले दो सालों के लिए सहायक कागजात (यथा 2013-14 व 2014-15)

Have PAN for Income Tax. Supporting documents for Income Tax return for the last Two years (i.e 2013-14 & 2014-15).

- f) सहायक कागजात के साथ तकनीकी बोली के संबंध में दस्तोवजी सबूत
Documents as proof in respect of Technical bid along with supporting documents.
- g) एजेंसी का प्रोफाइल एवं ट्रैक रिकार्ड (3 साल)
Profile and Track Record of the agency. (3 years)
- h) पिछले तीन सालों का हस्ताक्षरित तुलन पत्र
Copy of signed Balance Sheets of last three years.
- i) प्रदर्शन/वारंटी/बैंक गारंटी/निरीक्षण/एलडी/देर से आपूर्ति के लिए जुर्माना संबंधी विस्तृत नियम एवं शर्तें हमारे क्रय आदेश में दिया जाएगा।
Detailed terms and condition regarding performance/ warranty/ Bank guarantee/ inspection/ LD/ Penalty for delayed supplied will be elaborated in our purchase order.
22. उपकरण का विस्तृत ब्यौरा अनुलग्नक - II के रूप में संलग्न है।
Details specification of the equipment annexed as Annexure-II.
23. किसी प्रकार की जानकारी के लिए आप हमारे ईमेल आईडी purchase_stores@cuja.ac.in पर संपर्क कर सकते हैं
For any queries you may contact (at) our email ID purchase_stores@cuja.ac.in.



अध्यक्ष / Chairman
(अकादमिक क्रय / Academic Purchase)



झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
 (संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
 (A Central University established by an Act of Parliament in 2009)

TECHNICAL BID

The tenderer must submit the following information against every serial number as under:-

I. General Particulars to be provided by the Tenderer

The bidder should provide the following particulars along with relevant supporting documentation:

1. Name of the firm
2. Mailing address with contact Number:
-
-
3. Name of the Proprietor
4. (i) Tel. No. (ii) Mobile No
-
- (iii) Fax No. (iv) E-mail address
5. Whether the firm registered firm (Yes/No), if Yes please mentioned registration no.
- (i) VAT No. (ii) TIN No. (iii) PAN No.
6. Name and designation of the person authorized to make commitments to CUJ, Brambe, Ranchi
-
7. Year of establishment of firm.
8. Whether the firm has enclosed the Tender Fees (Yes/ No)
9. Whether the firm has enclosed the Bank Draft/Pay Order/ Banker's Cheque as EMD
10. Whether the Firm/Agency has signed each and every page of Tender/NIT (Yes/No)
11. Any other information, if necessary

Place:

Name:

Date:

Business Address:

.....

Signature of Bidder:

Seal of the Bidder:

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
 (संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
 (A Central University established by an Act of Parliament in 2009)

DETAILS OF ARTICLE

PRICE-BID

Sl. No.	Description of the Items	Quantity	Rate quoted (in Rs.)
1	BENCH TOP CENTRIFUGE Specification:- Max. Speed: 300 -12,000 rpm or higher Capacity: 6 x 50 mL Refrigerated : No Hertz : 50/60Hz Electrical Requirements: 230V, 50/60Hz Control system: Microprocessor Display :Digital Motor Type : Direct, brushless induction, low-profile Timer: 99 hr 59 min, continuous Safety Features: Auto-Lock rotor exchange system, SMARTS pin imbalance detection system, certified Click Seal biocontainment lids Programmability: 4 protocols via direct access key with naming option Noise Level: < 61 dBA or better	01 no.	
	VAT/CST if any		
	Total Price including all taxes etc.		

Place:

Name:

Date:

Business Address:

.....

Signature of Bidder:

Seal of the Bidder:

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
 (संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
 (A Central University established by an Act of Parliament in 2009)

DETAILS OF ARTICLE

PRICE-BID

Sl. No.	Description of the Items	Quantity	Rate quoted (in Rs.)
1	<p>Muffle Furnaces with PID Controller and Gas Purging Facility</p> <p><u>Specification :-</u></p> <p><u>Pre-Qualification Criteria/Condition</u></p> <ol style="list-style-type: none"> 1. Firm/Supplier must have supplied at least 10 similar furnaces to IITs, IISERs or other institutes of national repute in the past 5 years. Please attach the reference list of 10 such users with phone nos. & email addresses. 2. Firm/Supplier Manufacturer must be an ISO-9001 company & equipment must be with CE compliance. Please attach both certificates. 3. Furnace should be from reputed manufacturer. 4. Please attach Principal Authorization Certificate specific for this tender, failing to which quotation can be rejected. <p><u>Technical Specification</u></p> <ol style="list-style-type: none"> 1. Temperature range: Room temperature - 1200°C 2. Ceramic heating plates with integral heating element which is safeguarded against fumes and splashing, and easy to replace 3. Insulation made of non-classified fiber material 4. Housing made of sheets of textured stainless steel 5. Dual shell housing for low external temperatures and high stability 6. Adjustable air inlet integrated in door 7. Exhaust air outlet in rear wall of furnace 8. Solid state relays provide for low-noise operation 9. Inner dimensions in mm (W X D X H) (230 x 240 x 170) or higher 10. Outer dimensions in mm (W X D X H) (480 x 550 x 570) or higher 11. Time to reach Maximum Temperature: Not More than 90 minutes 	01 no.	

	<p>12. Single Phase Electric Connation with operation at Voltage: 220 V</p> <p>13. Compact dimensions and light weight along with manual gas supply system.</p> <p>14. Controller should be mounted in side space under the door.</p> <p>15. Gas supply system should be inbuilt with furnace for non-flammable protective or reactive gas with shutoff valve and flow meter with regulator valve, piped and ready to connect.</p> <p>16. PID Controller Program entry in steps of 1 °C or 1 min.</p> <p>17. Argon and Nitrogen gas cylinder: Seamless carbon steel, cylinder 47 liter, water capacity shield with Gas with regulator and flow meter</p> <p>Upgradable Facility</p> <ol style="list-style-type: none"> 1. Protective gas connection on the rear wall of furnace 2. Chimney, chimney with fan or catalytic converter 3. Vent with fan and catalytic converter 		
	VAT/CST if any		
	Total Price including all taxes etc.		

Place:

Name:

Date:

Business Address:

.....

Signature of Bidder:

Seal of the Bidder:

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
 (संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
 (A Central University established by an Act of Parliament in 2009)

DETAILS OF ARTICLE

PRICE-BID

Sl. No.	Description of the Items	Quantity	Rate quoted (in Rs.)
1	<p>Electrochemical Workstation Workstation includes A. Electrochemical workstation with Potentiostat/Galvanostat B. Electrochemical Cells C. Computer and Software A. Technical specification of Electrochemical Workstation with Potentiostat/Galvanostat:</p> <p>Potentiostat specifications: (i) Maximum potential: At least $\pm 10V$ (ii) Standard Electrode configuration (2- or 3- or 4-electrode) (iii) Current ± 250 mA with 2A option (iv) Compliance Voltage: At least $\pm 12V$ or better (v) Minimum current measurability: 50pA</p> <p>Galvanostat specifications: (i) Galvanostat applied current range: 3nA -250mA or larger range (ii) Applied current accuracy: Less than 0.5% (in the current range $>3e-7A$) (iii) Preferred potential resolution: 0.002 % of measured range or higher resolution</p> <p>Experimental Parameters: (i) CV and LSV scan rate: 0.000001 to 10,000 V/s or better, (ii) Data acquisition: 1ms (iii) IMP frequency: 0.00001 to 1M Hz or better (iv) IMP amplitude: 0.00001V to 0.7V RMS or better</p> <p>Other specifications : (i) Flash memory for quick software update, Serial port or USB port selectable for data communication (ii) Cell control: purge, stir thru software (iii) Digital CV simulator, user defined mechanisms or Digisim simulation software Bipotentiostat option, RRDE with Pt RDE and Pt disc/Pt ring RRDE electrode</p> <p>The Electrochemical Analyzer / Workstation must include all of the following measurement techniques and related accessories:</p> <ul style="list-style-type: none"> • Cyclic Voltammetry (CV), Linear Sweep Voltammetry (LSV) with stripping, Staricase Voltammetry (SCV) with stripping • Tafel Plot (TAFEL) potentiodynamic deactivation, pitting corrosion, corrosion rate, linear Polarisation, Corrosion 	1 no.	

	<p>current etc.</p> <ul style="list-style-type: none"> • Chrono Amperometry (CA), Chrono Coulometry (CC) • Differential, normal square wave, double differential Pulse Voltammetry (DPV) with stripping • AC 1st and 2nd karmonic Voltammetry (ACV) with stripping , Amprometric • Differential Pulse Amperometry (DPA), Double Differential Pulse Amperometry (DDPA), Triple Pulse Amperometry (TPA), Integrated Pulse Amperometry Detection (IAPD) • Bulk Electrolysis with Coulometry (BE) with bulk electrolysis cell • Hydrodynamic Modulation Voltammetry (HVM) • Sweep-Step , multi potential, multi current Steps (STEP) • AC Impedance (IMP), Impedance – Time (IMPT) (Mott-Scottsky), Impedance – Potential (IMPE), impedance simulator • Chrono Potentiometry (CP) with battery. Capacitor charge discharge, Chronopotentiometry with Current Ramp (CPCR), Potentiometric Stripping Analysis (PSA) • Open Circuit Potential – Time (OCPT) • RDE control (0-10V output) • Full version of CV simulator <p>B. Electrochemical Cell Systems</p> <ul style="list-style-type: none"> • Glass cells : 4 nos • Cell top: 1 no • Gold Working Electrode (2 mm (dia) or more): 2 nos. • GC Working Electrode (3 mm (dia) or more): 3 nos. • Ag/AgCl Reference (aq): 3nos • Ag/AgCl Reference (non aq): 3 nos • Calomel Reference Electrode: 2nos • Pt Wire Counter Electrode: 2 nos • Electrode Polishing Kit • Cell Stand <p>C. Computer and Software : 01</p> <ul style="list-style-type: none"> • Licensed & Full version of software for Electrochemistry & all the techniques mentioned above. • The system should come with required computer (01). The software required (as specified) should be preinstalled and preconfigured in PC or it should be done on-site free of cost. • UPS with 30 minutes backup. 		
4	Warranty: Minimum 1 year standard warranty followed by 1 more year non-comprehensive warranty is required.		
5	Installation Free of cost at CUJ, Ranchi		
6	Demonstration and User Training: On-site demonstration of all the features of the system and training to operate the system should be done free of cost.		

Place:

Name:

Date:

Business Address:

Signature of Bidder:

Seal of the Bidder:

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
 (संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
 (A Central University established by an Act of Parliament in 2009)

DETAILS OF ARTICLE

PRICE-BID

Sl. No.	Description of the Items	Quantity	Rate quoted (in Rs.)
1	Spin Coating Unit Specification:- Control: programmable Microprocessor controller. Speed range: 100 to 10000 rpm (Programmable) or higher Accuracy: < ±1% error or better Working Chamber: PTFE coated Power Supply: 230 V/AC, 50 Hz Vacuum Suction: Integrated Vacuum release switch Protocol Setting: Keypad Protocol Saving option: Yes Display: Protocol Status on LCD Console Acceleration: upto 2000 rpm/sec (Programmable)	01 No.	
	VAT/CST if any		
	Total Price including all taxes etc.		

Place:

Name:

Date:

Business Address:

.....

Signature of Bidder:

Seal of the Bidder:

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
 (संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
 (A Central University established by an Act of Parliament in 2009)

DETAILS OF ARTICLE

PRICE-BID

Sl. No.	Description of the Items	Quantity	Rate quoted (in Rs.)
5	Water Purification System Specifications:- Flow rate: 0.8 L/min. or higher Resistivity: 18.2 MΩ-cm at 25°C Total Organic Carbon: ≤ 5 ppb or better Bacteria: < 1CFU/mL or better Daily Output: Up to 5 L/day or higher Power Source: 220/230 volt AC, 50/60 Hz.	01 no.	
	VAT/CST if any		
	Total Price including all taxes etc.		

Place:

Name:

Date:

Business Address:

Signature of Bidder:

Seal of the Bidder:

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
 (संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
 (A Central University established by an Act of Parliament in 2009)

DETAILS OF ARTICLE

PRICE-BID

Sl. No.	Description of the Items	Quantity	Rate quoted (in Rs.)
1	<p>SOLAR SIMULATOR SPECIFICATION:- Beam Size 1.5×1.5 inch or better Spectral Match Classification A (JIS C 8912 or equivalent standard) Beam Non-uniformity A (JIS C 8912 or equivalent standard) ≤ 3% Temporal Instability A (JIS C 8912 or equivalent standard) Irradiance 1 sun(= 1000 W/m²) or higher Lamp : Xenon Arc Lamp Lamp Power ≥ 100 W Lamp Life ≥1000 Hrs Air mass filter: AM 1.5G Shutter : Electronic or Manual Filter Holder : Filter Holder to insert two Optical (ND Filter / Bandpass filter) Filter is included Illumination head must be freely rotatable upward or downward or sideward Input Voltage : 220 V ac, 50 Hz, single phase Power Supply Accessories Optional : 1. Standard Reference Cell for Solar Simulator Calibration -01 no. The short circuit current measured under the illumination condition with the standard sun light spectrum. The certification is attached to the cell Example of a certification : Light source : 100mW/cm² AM1.5G Class A Temperature : Room Temperature compatible 2. Spare Lamp for Solar Simulator 150 Watt -01 no. 3. 2KVA online UPS- 01 no.</p>	01 no.	

Place:

Date:

Name:

Business Address:

Signature of Bidder:

Seal of the Bidder:

झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
CENTRAL UNIVERSITY OF JHARKHAND, RANCHI
(संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय)
(A Central University established by an Act of Parliament in 2009)

DETAILS OF ARTICLE

PRICE-BID

1	Voltage Source Meter	Quantity	Rate quoted (in Rs.)
	Features	Specification	01 no.
	Voltage Source and measurement ranges	20 mV to 200 V	
	Voltage resolution	Measure: 10 nV Source: 500 nV	
	Current Source and measure range	10 nA to 1A	
	Current resolution	Measure: 10 fA Source: 500 fA	
	Voltage Accuracy	0.100% + 150 μ V @ 20 mV 0.015 % + 10 mV @ 200 V	
	Current Accuracy	0.10% + 50 pA @ 10 nA 0.030 % + 500 μ A @ 1A	
	Sweep types	Linear, log, Dual Linear, Dual Log, Custom, Source Memory mode	
	Internal Buffer	250000 point breading buffer	
	Programming interfaces support	USB, GPIB, Ethernet (LXI), TSP	
	Expansion Interfaces for multichannel operation	TSP-used for Trigger and communication with each other supporting master slave mode	
	Signal supported connectors	Front panel Banana Jacks/rear panel 3 lug Triax	
	Measurement speed	3000 reading /sec	
	Measurement display resolution	User selectable 3 1/2 to 6 1/2	
	Measurement Mode	Voltage, Current, Resistance, Power	
	Display and control	5 inch Built-in capacitive Touch screen display. Icon based control to setup measurement, source and graph display	
	Storage and export measurement data	Through USB drive slot	

Digital I/O interface	9-Pin Female D connector 6 I/O user programmable		
Accessories	Accessories: CD, High performance Modular Test Leads, Universal 10-piece test Lead set, Oversize Alligator Clip-On Leads		
Optional	(i) I-V Curve analyzer software with following parameters measurement facility: Open Circuit voltage, Short Circuit voltage, Conversion efficiency, Fill Factor, Maximum power, Maximum current, Maximum voltage, Short circuit current density, Both way scanning measurement, Real time display of I-V data, Data storage automatically in txt file in MS Excel format-01 no. (ii) Compatible Notebook (window 7) with licensed and full version software -01 no.		

Place:

Name:

Date:

Business Address:

.....

Signature of Bidder:

Seal of the Bidder: