



झारखण्ड केन्द्रीय विश्वविद्यालय
Central University of Jharkhand

Brambe, Ranchi, Jharkhand, 835205

Ref. No. CUJ/CEVS/YSS/2016/01

Dated: 13th May, 2016

Sealed Quotations without any erasures and overwriting are invited for Supply of Plant Canopy Analyser and UV-Visible Spectrophotometer with Computer, Printer and 1KVA online UPS, Flame Photometer and Kjeldahl Distillation Unit for soil analysis as per following details:

Sl. No.	Required Item	Quantity
1	Plant Canopy Analyzer	01 no.
2	UV-Visible Spectrophotometer with computer, printer and 1KVA online UPS	01 no.
3	Flame Photometer	01 no.
4	Kjeldahl Distillation Unit	01 no.

Quotation may be submitted keeping in view, the terms and conditions otherwise quotations will be rejected.

Terms and Conditions

1. The specifications for the items quoted should be explicit, clear and all available technical literature, catalogues and other data in support of the specifications of the items should be furnished along with the quotation. Quotation should be valid for a minimum period of 3 months from the due date.
2. The sealed quotation should reach on or before **24/06/2016 at 5:00 PM** to **Dr. Purabi Saikia, Principal Investigator, SERB-YSS Project, Centre for Environmental Sciences, Central University of Jharkhand, Brambe-835205, Ranchi**. The envelope should be super scribed with name of the item (s) to be supplied. Tender/ quotation should be sent through Post/ Courier/ By Hand.
3. **Bids will be opened on 27/06/2016 at 11:30 A.M.** in the Office of the Head, Centre for Environmental Sciences, Central University of Jharkhand, Brambe-835205, Ranchi in the presence of tenderers or their representatives who would like to be present.
4. The rate quoted should be inclusive of all packing, forwarding, commissioning & installation, sales tax, freight and insurance charges. VAT or other duties and levies where legally liable and intended to be claimed should be distinctly shown separately in the quotation. VAT/CST Registration No. and validity date should be indicated.
5. Incomplete/Conditional/Optional quotations will not be accepted.
6. Maximum delivery period will be 30 days from the date of issue of the work order.
7. 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.
8. The Tender Documents comprising of Price-Bid, Technical Bid and **Earnest Money Deposit** of 2% 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 enclosed with Earnest Money Deposit otherwise the tender document will be rejected. All the documents must be enclosed in a bigger size envelope super-scribed with the tender number and item name.
9. The Bidder must enclose point wise compliance of the technical specifications of each item.
10. The Central University of Jharkhand takes no responsibility for delay, loss or non-receipt of quotations/ documents sent by post and reserves the right to accept or reject the quotation without assigning any reason.
11. Corrections if any must be attested. All rates shall be indicated both in words as well as figures. Where there is a difference between the rates quoted in words and figures, rate quoted in words will prevail.

12. 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.
13. Minimum One (01) years Guarantee / warranty period at site will start from the date of acceptance of stores in full and final quantity in satisfactory condition, after due inspection and/ or successful installation and commissioning as applicable
14. Full payment will be made within 30 days of the receipt and acceptance after inspection of supplies at destination, quotations containing different payment terms are liable to be ignored.
15. All goods must be delivered at our university at Brambe, Ranchi (Centre for Environmental Sciences) after confirmed order. The University will not be responsible for issuing any Road Permit.
16. Only Manufacturer/ Authorized dealer/ firms of repute dealing in the items listed in the quotation having experience in sale and repair/ maintenance, need apply.
17. Only latest models/ mentioned models of items need to be quoted.
18. Only those Manufacturers liable to participate having ISO 9001 and ISO 14001 certification.
19. All legal disputes shall be under the jurisdiction of Jharkhand High court, Ranchi.
20. 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. All the participating firms should attach supporting documents in favour of:
 - a) Have at least 5 years of experience in the field.
 - b) Have an annual turnover of at least Rs. 50 Lakh per annum for each of the last 3 years (i.e. 2011-12, 2012-13 & 2013-14) (Agency should produce a certificate from their Audit Firm in respect of turnover for the mentioned period)
 - c) Be registered with Directorate of Industries or Small Scale Industries or any other appropriate authorities.
 - d) Have valid TIN Number for registration under VAT/CST
 - e) Have PAN for Income Tax. Supporting documents for Income Tax return for the last Two years (i.e. 2012-13, 2013-14).
 - f) Documents as proof in respect of Technical bid along with supporting documents.
 - g) Profile and Track Record of the agency. (3 years)
 - h) Copy of signed Balance Sheets of last three years.
 - i) Detailed terms & conditions regarding performance/ warranty/ bank guarantee/ Inspection/ LD/ penalty for delayed supplied will be elaborated in purchase order.
 - j) For proprietary items/ single manufacturers or Government manufacturers, proper certification in original is to be attached along with the Technical Bid.
22. Details specification of the equipment annexed as Annexure-III.
23. Bidders can supply all the items or selected items as per their convenience. But, EMD should be provided separately for separate item.
24. University reserves the right to issue the purchase order to a single firm or may be divide it into more than one firm.

Purabi Saikia
(Principal Investigator, SERB-YSS Project)



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Annexure-I

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 Bank Draft/Pay Order/ Banker's Cheque as EMD
9. Whether the Firm/Agency has signed each and every page of Tender/NIT (Yes/No)
10. Any other information, if necessary

Place:

Name:

Date:

Business Address:

Signature of Bidder:

Seal of the Bidder:



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Annexure-II

PRICE-BID

DETAILS OF ARTICLE

Sl. No.	Description of the Items	Quantity	Rate quoted (in Rs.)
1.	Plant Canopy Analyzer	01	
	Specification		
	i LAI-2270C Control Unit		
	ii LAI-2250 Optical Sensor		
	iii Integrated GPS		
iv 6 AA Batteries			
2.	UV-Visible Spectrophotometer	01	
	Specification		
	i Tungsten-Halogen lamp (320-1100nm) Deuterium lamp (200-340nm)		
	ii Double beam Czerny-Turner monochromator		
	iii UV-Vis Wavelength resolution: 0.1 nm (200-1100nm)		
	iv Work Station PC, 19" TFT-LED Monitor with Printer		
v 1 KVA Online UPS			
3.	Digital Flame Photometer	01	
	Specification		
	i Microcontroller based		
	ii With Na, K filter		
iii Air compressor with built-in air regulator and air filter			
4.	Kjeldhal Distillation Unit	01	
	Specification		
i	Kjeldahl distillation assembly with complete borosilicate glass for soil analysis		

Place:
Date:

Name:
Business Address:
.....
Signature of Bidder:
Seal of the Bidder:

List of Instruments with Specification

Item name	Description of items		Quantity
	Feature	Specification	
UV-Visible Spectrophotometer	Source	Tungsten-Halogen lamp (320-1100nm) Deuterium lamp (200-340nm)	01
	Monochromator	Czerny-Turner	
	Detectors	2 silicon photodiodes	
	Optical design	Double beam Czerny-Turner monochromator	
	UV-Vis Wavelength resolution	0.1 nm (200-1100nm)	
	Wavelength Range	200–1100 nm	
	Wavelength Accuracy	±0.05 nm	
	Wavelength Repeatability	±0.02 nm	
	Photometric Accuracy	±0.005 Abs at 1.0 Abs	
	Photometric Range	- 2.5 to 2.5 Abs (±0.4 Abs)	
	Photometric Repeatability	±0.002 Abs at 1.0 Abs	
	Baseline flatness	200 to 1100 nm, baseline corrected ±0.003 Abs	
	Spectral bandwidth	Variable	
Accessories	a) USB cable and power cord. b) Softwares c) Work Station PC, 19“ TFT-LED Monitor with Printer d) 1 KVA Online UPS		
Plant Canopy Analyser	LAI-2270C Control Unit		01
	Sensor Inputs	Two 6-pin connectors for LAI-2250 Optical Sensors; Two BNC connectors for Light Sensors	
	Data Storage Capacity	128 MB of FAT16 memory	
	Display	128x64 graphics display	
	Keypad	22 button tactile response keypad.	
	Communications	USB	
	Integrated Global Positioning System	Horizontal position accuracy: 2.5 m CEP (50% Circular Error Probability, Open-Sky, 24hr Static, good view of the sky). Maximum position update rate: 1 Hz. GPS receiver sensitivity, autonomous acquisition: -148dBm. Time to first fix (TTFF), hot start: 1 second; warm start: 6s (typical); cold start (with good view of the sky): 37 seconds at 90% probability.	
	Clock	Year, Month, Day, Hour, Minute. Accuracy of ±3 minutes per month.	
	Power Requirements	4 “AA” (alkaline, NiMH, lithium) batteries.	
	Battery Life	90 hours based on 4 “AA” alkaline batteries without optical sensor attached and without GPS enabled	
	LAI-2250 Optical Sensor		
	Sensor Inputs	One 6-pin bulkhead connector for control unit interface	

	Memory	1 MB flash memory for record storage	
	Keypad	2 button, tactile response keypad	
	Clock	Year, Month, Day, Hour, Minute. Accuracy of ± 3 minutes per month.	
	Power Requirements	2 "AA" (alkaline, NiMH, lithium) Batteries	
	Battery Life	180 hours of typical operation (based on 2 "AA" alkaline batteries).	
	Optics	1.00° maximum decentering error as measured from center of mass of ring 4. 0.50° maximum magnification error as measured from the center of mass of ring 4	
	Radiation Rejection	> 99% from 490-650 nm; > 99.9% above 650 nm	
	Wavelength Range	320-490 nm	
	Nominal Angular Coverage	Ring 1: 0.0-12.3°; Ring 2: 16.7-28.6°; Ring 3: 32.4-43.4°; Ring 4: 47.3-58.1° Ring 5: 62.3-74.1°.	
	Lens Coating	MgF ₂ for improved transmission at oblique angles (external and internal lenses).	
	View Caps	Provide azimuthal masking of view into quadrants of 10°, 45°, 90°, 180°, and 270°.	
	Diffuser Cap	Used to cover the lens when measuring sky radiation properties for scattering corrections.	
	Accessories	<ul style="list-style-type: none"> a. Light sensor logging b. File Viewer Software (FV2200 software) c. Two LAI-2250 Optical Sensors with data cables d. one LAI-2270C Control Unit, e. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6 "AA" batteries, j. belt clip 	
Digital Flame Photometer	Controller	Microcontroller	01
	Filter	10 nm Typical for Na and K	
	Compressor	Air Compressor with built-in air regulator and air filter to deliver stable and moisture / oil free air supply	
	Full Scale Sensitivity	Na : 2 ppm and K: 1 ppm	
	Minimum Detective Limit	Na : 0.2 ppm and K: 0.1 ppm	
	Accuracy	$\pm 2.0\%$ of Full scale	
	Reproducibility	Low Conc.: $\pm 1\%$ f.s.; High Conc.: $\pm 2\%$ f.s.	
	Minimum Sample	Approx 3 ml per element (at Avg. Time of 4 sec.)	
	Operating Air Pressure	0.45 k / cm ² (typical)	
	Aspiration Time	(5 Sec + Avg. Time) per element + 4 Sec.	
	Averaging	2 to 15 seconds, selectable	

	Fuel Gas	LPG	
	Power Supply	230 Vac +- 10%, 50 Hz.	
Kjeldhal Distillation Unit	Specification	Kjeldahl distillation with digestion for soil analysis	01
		With dropping funnel, coil condenser for Kjeldahl distillation unit	
		Glass vessel to hold digested sample with trap	
		Funnel to add distilled water	
		Boiler and Quart heater for Kjeldahl	
		Outer jacket for spent liquid	