

V. B. S. Purvanchal University, Jaunpur-222003, UP

e-Tender Notice No:PU-ET13/2018

Department of Electronics and Communication Engineering

e-Tender Notice Offers are invited for the supply and installation of laboratory equipments (Annexure I and Annexure II) in Department of Electronics and Communication Engineering from manufacturers / authorized dealers / distributors / Channel Partners. Tender shall accompany demand draft of Rs. 500/- (Five Hundred only) as tender form cost non-refundable and earnest money deposit (EMD) of Rs.2,02,500/ (Two Lakh Two Thousand Five Hundred Only) forECE and EIE laboratory(Annexure I) and Photonic laboratory (Annexure II). EMD should be remitted in the form of RTGS/NEFT/DD/Banker's Cheque in favour of "Finance Officer", Veer Bahadur Singh Purvanchal University, Jaunpur (A/C 4539000100038627 IFSC – PUNB0453900) from any of the public sector or private bank. Exemption of EMD is permissible if applicable as per rules. The EMD will be valid up to 45 days beyond the final bid validity period. EMD of the unsuccessful bidder will be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30 days after the award of the contract. Tender forms along with specifications and other details can be purchased online from the portalhttps://etender.up.nic.induring 15-08-2018 (document download start date) to 10-09-2018 (online bid submission end date) time 5:00 PM. Detailed information is also available on www.vbspu.ac.in. Physical bid document submission date is 14-09-2018 on or before 5:00 PM.

Registrar

Notice Inviting Tender (NIT)

for

Supply, Installation and Commissioning of Laboratory Equipment in

Electronics & Communication Department, Faculty of Engineering

at

Veer Bahadur Singh Purvanchal University, Jaunpur-222003, UP

S. No.	Particulars	Date	Time
1.	Publishing Date	14/08/2018	05.00 PM
2.	Document Download Start Date	15/08/2018	11.00 AM
3.	Pre-bid Clarification Start Date & Time	16/08/2018	11:00 AM
4.	Bid Submission Start Date	16/08/2018	11:00 AM
5.	Pre-bid Clarification End Date & Time	05/09/2018	04.00 PM
6.	Document Download End Date	10/09/2018	05.00 PM
7.	Bid Submission End Date	10/09/2018	05.00 PM
8.	Physical bid document Submission end date	14/09/2018	05.00 PM
9.	Opening of the Technical Bid	17/09/2018	11:00 AM
10.	Technical Evaluation of Bids	22/09/2018	11:00 AM
11.	Financial/Price Bid Opening Date	25/09/2018	02:00 PM

CRITICAL DATES SHEET

Terms & Conditions

<u>The supply of various equipments/instruments to Department of Electronics and</u> Communication Engineering, V.B.S. Purvanchal University, Jaunpur - 222003

Sealed bids are invited for the supply of the following instruments/equipment's for Department of Electronics and Communication Engineering, V.B.S. Purvanchal University, Jaunpur. List and details of the equipment their specification/their format of the tender and terms and conditions can be obtained from university website <u>www.vbspu.ac.in</u>. Tender must reach on or before 5:00 PM, 14/09/2018 to the office of Registrar, VBS Purvanchal University, Jaunpur by Registered post or by hand. Any tender received after the scheduled date will not be accepted at any cost even due to postal delay. The technical bids will be opened on 22/09/2018 at 11:00 AM in the office of Finance Officer, VBS Purvanchal University, Jaunpur before a committee approved by the Vice-Chancellor. It shall be opened before bidders or their authorized representative. University reserves the right to reject one or all bids without giving any reason at any stage.

Bids should be submitted or sent to the Registrar in two bid systems. First bid shall be known as "Technical bid" in which following certificate/documents must be kept. In case of lack of any certificate/registration/required document, the tender shall be liable to be rejected. The envelope of "Financial bid" in which only rates of equipments should be kept. Both of the envelopes (envelopment of technical bid & envelope of the financial bid which should be duly sealed) should be kept in one big envelope on which tenderer should quote "Technical bid for the supply of instruments/equipments for Department of Electronics and Communication Engineering, Veer Bahadur Singh Purvanchal University, Jaunpur" and should be addressed to "Registrar, Veer Bahadur Singh, Purvanchal University, Jaunpur – 222003.

Bid No. 1 Technical Bid

- 1. Tender should be provided equipment wise details in separate sealed envelope.
- 2. Photocopy of Registration certificate of GST No. of the firm should be kept in the envelope of technical bid.
- 3. Photo copy of PAN Card of the Firm/Proprietor should be in the envelope of technical bid.
- 4. Certificate of Central registration in which manufacturer of the said item should be quoted (In case of the proprietary items only) should be kept in the envelope of technical bid.
- EMD should be remitted in the form of DD/Banker's Cheque or RTGS/NEFT in favour of "Finance Officer", Veer Bahadur Singh Purvanchal University, Jaunpur (A/C 4539000100038627 IFSC – PUNB0453900) from any of the public sector or private bank. The certified copy of EMD should be kept in the envelope of technical bid.
- 6. Experience certificate of the supply of the equipments must be kept in technical bid, for support; bidder will have to attach the certified copy of the supply order of any **two reputed engineering/Scientific institutions/Universities.**
- 7. All the required certificate/documents/earnest money should be kept in technical bid envelop on which bidder will quote **"Technical bid for the supply of laboratory equipments in (Name of the Department)** *in capital letter*".

- 8. All the rates of the required items/equipments must be quoted Finance Officer, V.B.S. Purvanchal University, Jaunpur including packing charges and installation charges etc.
- 9. All the rates quoted in the tender will be valid for **one year** from the opening date of tender.
- 10. Firm must upload ISO Certificate for quality Standards.
- 11. Items/equipments required shall be supplied and installed in the lab of Department of Electronics and Communication Engineering.
- 12. A competent committee, constituted by the Hon'ble Vice-Chancellor shall examine the working and quality of supplied /installed items/equipments.
- 13. All the technical literature of the equipment shall be provided at the time of tender. The vender may be required to provide price justification of his quoted rates.
- 14. The tender will be rejected if it is not submitted in the manner as prescribed in technical bid stated above.
- 15. All the decisions will be reserved with the Vice-Chancellor of V.B.S. Purvanchal University, Jaunpur.
- 16. Any litigation will be subject to judicature at Hon'ble Civil Court Jaunpur and Hon'ble High Court Allahabad.
- 17. The bidder will deposit the tender fee of **Rs-500/-** (Five Hundred only) and earnest money mentioned against each equipment.
- 18. The payment will be made after satisfactory installation of the equipment.
- 19. Payment terms

a) 90% payment shall be released after receipt of goods in good order and condition and successful installation, thereafter certificate from the concerned head of the department and balance 10% payment shall be released after submission of performance bank guarantee (PBG) amounting to 10% of the purchase order value. The PBG will be drawn from any nationalize bank valid for the warranty period plus 60 (sixty) days.

- b) ensure mentioning
 - (i) Bank details of the beneficiary and pan number
 - (ii) Full name and address of the beneficiary on whom order has to be placed
- 20. Patent rights: the supplier shall **indemnify** the purchase against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof in India.
- 21. Clubbing of equipments in one envelop is prohibited and such tenders will be rejected.
- 22. bidders to enclose the following documents:
 - a) current income tax and sales tax clearance certificates and pan no.
 - b) banker's solvency certificate
 - c) summary of audited statement of accounts for the last three years

d) customer satisfaction certificate from two such organization is to be attached with the technical bid.

e) name and address of minimum fiveclients to whom such equipment has been supplied in the last Fiveyears should be mentioned.

23. Liquidated damages: the stores should be delivered/dispatched to destination and ready for operation not later than the delivery date specified. If the supplier fails to deliver any or all the stores or perform the service by the specified date, liquidated damages at 1% per Month or part thereof in respect of the value of stores will be deducted from the contract price subject to a maximum of 5%. Alternatively, the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of supplier.

- 24. Warranty / guarantee: this comprehensive onsite warranty / guarantee shall remain valid for 12 months after the goods (or any portion thereof as the case may be) have been delivered and commissioned to the final destination indicated in the contract.
- 25. Advanced training of the instrument performance and maintenance must be given to the department's representatives after the successfully installation of the instrument. The expenditure of above mentioned training will be borne by the company only.
- 26. Only those bidders whose bids have been technically found acceptable will be invited for participation in the price bid.
- 27. Those bidders who do not receive any communication for participation in price bid opening meeting may presume that their bid has not been accepted by the institute.
- 28. Conditional offer will not be accepted.
- 29. Late tenders i.e. tender received after the due date and time of submission as mentioned above shall not be accepted.
- 30. The institute does not bind itself to offer any explanation to those bidders whose technical bid has not been found acceptable by the evaluation committee of the institute.
- 31. Country of origin of the goods is to be mentioned.
- 32. Refund of EMD: The EMD will be returned to unsuccessful Bidder only after the Tenders are finalized. In case of successful Bidder, it will be retained till the successful and complete installation of the equipment.
- 33. Please Note that the University remains closed during Sundays and all specified University holidays.
- 34. Fax, e-mail Tender will not be accepted.

IMPORTANT

- (a) VBS Purvanchal University Jaunpur authority may accept or reject any or all the bids in part or in full without assigning any reason and does not bind itself to accept the lowest bid. The University at its discretion may change the quantity / upgrade the criteria/ drop any item or part thereof at any time before placing the Purchase Order.
- (b) Promptly makearrangements for repair and /or replacement of any damaged item(s) irrespective of settlement of claim.

Bid No. 2 Financial Bid

- 1. Financial bid will be opened only when technical bid is found to be qualified.
- 2. In the envelope of this bid only rates of items/equipments will be kept and envelop will be sealed.
- 3. Only those financial bids shall be treated as valid/qualified whose technical bid will qualify/fulfil the Terms & Conditions as prescribed.
- 4. No Conditional financial bid shall be entertained/accepted.

Price bid

- (a) Price bid in the form of BOQ_XXXX.xls
- (b) CMC Price Bid in the form of PDF.
- (c) Custom Tariff Chart

Technical Specification

List of various components with technical specification for the departments of ECE and EIE laboratory

S.No.	Name of Equipment	Specification	Quantity
1.	Microwave Benches	Gunn power supply, klystron power supply, SWR power meter, power meter, Gun oscillator, Isolator, PIN modulator, Variable attenuator, Detector mount, Frequency meter	05
2.	CRO	RO30MHZ Dual channel, X10 Magnification, 20ns Max SweepSpeed, Sharp display & Auto Focus	
3.	Function Generator	Pulse data generator with frequency counter, sine, square, triangular, Ramp, Pulse, TTL & Serial data outputs, 20Vpp output & DC offset,40Mhz frequency counter TTL output,500hm Impedance ,20,40,60 dB Attenuation, Rise & Fall time, RS232 interface	30
4.	Pulse Generator	Variable range upto 10Mhz, Fast Rise/fall time(20ns), Variable pulse width, Manual /External Triggering, output: Normal, Invert, Square, Pulse and Sync outputs, Light Weight	
5.	Digital Multimeter	3 ¹ ₂ Digital Multimeter,20000 Counts, Large LCD Backlight display with manual Range, Data Hold Maximum	40
6.	Power Supply	Dual and Mono 0-30v/2A, 15V/1A, Multiple DC power supply, Three floating, Independent DC supply voltages, constant voltage and constant current operation, short circuit protection, 5V for IC experiments	40
7.	Single core Connecting wire		
8.	CRO probe lead		10 Packets
9.	Si Diodes		100
10.	Ge Diodes		100
11.	Zener Diodes		100
12.	Various Transistors		100
<u>13.</u> 14.	741 Op Amp723Voltage		100 100
15.	Regulator 555 Timer		100
15.	78 XX Voltage Regulator		100
17.	79XX Voltage Regulator		100
18.	SCR		100
19.	DIAC		100
20.	TRIAC		100
21.	Monolithic regulators		100
22.	JFET		100
23.	MOSFET		100

24.	Switch Board			100
25.	Transformer	of	0-30 Volt, Step up/down	100
	various category			
26.	Capacitance	of	Electrolytic/Ceramic	100
	various ranges			
27.	TTL series IC		74XX IC	
				100
28.	Resistance	of		100
	Various ranges			

Annexure II

Photonics Lab Including Optical Bench (VibrationTable)

Sub system for communication lab

S.N.	Name of Equipment	Technical Specification	Qty
1.	Sub system for Photonic laboratory:	Sub system for photonic communication lab: Laser Diode sources at higher wavelength, Fiber bundle single mode, Detector, Mount and other accessories with controller and power supplies, other fiber bundle (Multi-mode glass /plastic). Optical Bread Board and mounts The equipment must have following capabilities to study: Laws of Geometrical optics, Thin lens equation, Expanding Laser Beams, Diffraction of Circular Apertures, Single Slit Diffraction and Double Slit Interference, The Michelson Interferometer, Laser and Coherence, Polarization of Light, Birefringence of Materials, The Abbe Theory of Light	01
2.	Sub system for Photonic sensor laboratory	The Abbe Theory of Light. He-Ne laser 552/632 nm, Bread board set of mount B/S , mirror ,Collimator screen , Gimbal Mount, Rotational Stage , XYZ Stage , Na/Hg Source and other accessories. Optical Bread Board and mounts. The equipment must have following capabilities to study : Semiconductor Diode Laser Characterization, Effects of Reflection on Diode Lasers, Zero path Length Difference Interferometer and Coherence properties of semiconductor Laser Sources, Characterization of Fiber 3 dB Couplers, Laser Velocimetric, Polarimetric Sensors, Fiber Optical Gyros, Single –Mode Interferometric Sensors, Coherent CommunicationsHandling Fibers, Numerical Aperture, Fiber Attenuation, Single mode Fiber-I, Single Mode Fiber –II, Coupling Fibers to Semiconductors Sources, Connectors and Splices, Components for Fiber Communication, Fiber optic Communication Link, Multimode Intensity Sensors, Single-mode Interferometric Sensors.	01
3.	Scattered optical photonic components	He-Ne laser 552/632 nm, Bread Board set of mounts B/S, Mirrors, Collimator screen ,Gimbal mount ,Rotational Stage ,XYZ stage ,Na/Hg Source and other accessories ,Fiber bundle all types LD source in multiple numbers(10) Optical Bread Board and mounts	01
4.	Vibration Table	Vibration Table width 1200mm, length 2400mm, thickness 305 mm damped working with precision damper.	01

Justification: Photonic systems are high band width system to deal with dense telecommunication traffic as well as sense the parameters in a multiple signal environment.

Students must be trained in this new field as a regular course to result out adequate innovations in the area and hence proposals to establish photonic system lab. These are high precision components involving state of art technology.