



Institute of Engineering & Technology, Lucknow, Sitapur Road, Lucknow,
Uttar Pradesh - 226021

INVITATION LETTER

Package Code: TEQIP-III/2019/UP/ietl/286
Package Name: IET-TEQIP-ECD-LAB-13

IET/TEQIP-III/2019-229-M
Current Date: 05-Jul-2019
Method: Shopping Goods

Sub: INVITATION LETTER FOR IET-TEQIP-ECD-LAB-13

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	Klystron Power Supply	8	Institute of Engineering and Technology, Lucknow	
2	KLYSTRON MOUNT	8	Institute of Engineering and Technology, Lucknow	
3	Klystron Tube	8	Institute of Engineering and Technology, Lucknow	
4	Frequency Meter, Direct Reading	4	Institute of Engineering and Technology, Lucknow	
5	WAVE GUIDE DETECTOR	8	Institute of Engineering and Technology, Lucknow	
6	Matched Termination	4	Institute of Engineering and Technology, Lucknow	

7	VSWR Meter, Solid State	4	Institute of Engineering and Technology, Lucknow
8	Dielectric Antenna	2	Institute of Engineering and Technology, Lucknow
9	Slotted Antenna Narrow Wall	2	Institute of Engineering and Technology, Lucknow
10	Slotted Antenna Broad Wall	2	Institute of Engineering and Technology, Lucknow
11	Digital Gunn Power Supply	2	Institute of Engineering and Technology, Lucknow
12	Gunn Oscillator	2	Institute of Engineering and Technology, Lucknow
13	Pin Diode Modulator	2	Institute of Engineering and Technology, Lucknow
14	Movable Shorts	4	Institute of Engineering and Technology, Lucknow
15	Microprocessor Based Turn Table with Software	2	Institute of Engineering and Technology, Lucknow
16	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow

17	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
18	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
19	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
20	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
21	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
22	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
23	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
24	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
25	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
26	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow
27	MICRO STRIP COMPONENTS	1	Institute of

	Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2		Engineering and Technology, Lucknow	
28	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	1	Institute of Engineering and Technology, Lucknow	
29	C-BAND SOURCE & DETECTOR (Freq. range 4-6 GHz)	1	Institute of Engineering and Technology, Lucknow	
30	C-BAND SOURCE & DETECTOR (Freq. range 4-6 GHz)	1	Institute of Engineering and Technology, Lucknow	
31	C-BAND SOURCE & DETECTOR (Freq. range 4-6 GHz)	1	Institute of Engineering and Technology, Lucknow	
32	C-BAND SOURCE & DETECTOR (Freq. range 4-6 GHz)	1	Institute of Engineering and Technology, Lucknow	
33	PART III : ACCESSORIES	1	Institute of Engineering and Technology, Lucknow	
34	PART III : ACCESSORIES	3	Institute of Engineering and Technology, Lucknow	
35	PART III : ACCESSORIES	2	Institute of Engineering and Technology, Lucknow	
36	PART III : ACCESSORIES	2	Institute of Engineering and Technology, Lucknow	
37	PART III : ACCESSORIES	3	Institute of Engineering and	

			Technology, Lucknow	
38	PART III : ACCESSORIES	1	Institute of Engineering and Technology, Lucknow	
39	PART III : ACCESSORIES	1	Institute of Engineering and Technology, Lucknow	
40	PART III : ACCESSORIES	1	Institute of Engineering and Technology, Lucknow	

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme [TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. **Quotation**
 - 3.1 The contract shall be for the full quantity as described above.
 - 3.2 Corrections, if any, shall be made by crossing out, initialling, dating and re writing.
 - 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit Price.
 - 3.4 Applicable taxes shall be quoted separately for all items.
 - 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
 - 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than 60days after the last date of quotation submission.
6. Evaluation of Quotations: The Purchaser will evaluate and compare the quotations determined to be Substantially responsive i.e. which
 - 6.1 are properly signed; and
 - 6.2 Confirm to the terms and conditions, and specifications.

7. The Quotations would be evaluated for all items together.
8. Award of contract The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
- 8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of Contract.
- 8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be Incorporated in the purchase order.
9. Payment shall be made in Indian Rupees as follows:
- Satisfactory Delivery & Installation and Acceptance - 100% of total cost**
10. Liquidated Damages will be applied as per the below:
Liquidated Damages Per Day Min % :0.50
Liquidated Damages Max % : 10
11. All supplied items are under warranty of 36 months from the date of successful acceptance of items and AMC/Others is .
12. You are requested to provide your offer latest by 14:00 hours on 22-Jul-2019.
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) YES
15. Testing/Installation Clause (if any) YES
16. Performance Security shall be applicable: 5%
17. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Sealed quotation to be submitted/ delivered at the address mentioned below, TEQIP-III
Institute of Engineering & Technology, Lucknow, Sitapur Road, Lucknow, Uttar
Pradesh - 226021
19. We look forward to receiving your quotation and thank you for your interest in this project.


(Authorized Signatory)

Name & Designation

COORDINATOR

TEQIP PHASE-III

**Institute of Engineering &
Technology, Lucknow-21**

Annexure I

Sr. No	Item Name	Specifications
1	Klystron Power Supply	Beam Supply 195-400 V continuously variable Current 45mA Max Regulation Better than 0.5% for \pm Variation in mains Supply Voltage Ripple Less than 5mV rms Repeller Supply -10 V to -300 DC continuously variable with respect to Klystron cathode 0-25% for \pm Variation in mains Supply Heater Supply 6.3V DC (regulated). Modulation: Square Wave Frequency 500Hz-1.7 KHz Max Amp.+ 110 V p-p, Saw tooth Frequency 50Hz-196 Hz Max Amp.- 60 V p-p. Operating Voltage 230V+10%, 50 Hz, A.C Short Circuit Protection.Toggle switch for Beam Voltage Variation Saw tooth wave output External Input. Should be single transformer 4 type different PCB for manufacture SKPS.
2	KLYSTRON MOUNT	Freq. Range (GHz) 8.2-12.4 Flange UG-39/U Waveguide RG-52/U
3	Klystron Tube	2k25 or equivalent
4	Frequency Meter, Direct Reading	Frequency Range (GHz) 8.2-12.4 Calibration Accuracy +2 Calibration Increment (MHz) 10 VSWR Max. 1.02
5	WAVE GUIDE DETECTOR	Frequency range 8.2-12.4(ghz)detector in-21 output connector BNC(f)
6	Matched Termination	Frequency Range (GHz) 8.2-12.4 Flange UG-39/U Waveguide RG-52/U VSWR Max. 1.02 Type fixed
7	VSWR Meter, Solid State	Range 70 dB in 10 dB and 2 dB steps. Meter scale SWR 1-4,SWR 3-10, expanded SWR1- 1.3, dB 0-10 expanded dB 0-2,4,6,8. Input Unbiased low and high impedance crystal, biased crystal (200 Ω & 200K) low and high current bolometer (4.5 & 8.7 mA) (200 ohms). Sensitivity 0.2 μ v for full scale deflection at maximum bandwidth on low impedance crystal input Input Frequency 1Khz adjustable + by front panel control Gain control Adjust the reference level, variable range 0-10db approx Amplifier Output 0.03 Vrms into at least 10K ohms, output connector BNC Recorder Output 0-1 V DC ,Output Connector, Banana Socket. Band Width-Variable 25 Hz to 110 Hz. Calibration Square law, meter indicate SWR, dB.
8	Dielectric Antenna	Material perfix Waveguide WR-90 Flange UG-39/U
9	Slotted Antenna Narrow Wall	Waveguide WR-90 Flange UG-39/U Length:220mm Slot length:14.56mm
10	Slotted Antenna Broad Wall	Waveguide WR-90 Flange UG-39/U Length:220mm
11	Digital Gunn Power Supply	Voltage Range 0 to 12 volts variable Current 1 Amp. Max Modulation Freq. 1 KHz + 20% (900-1100 Hz).Regulation 0.2 \pm 10% variation in the Mains Supply Voltage Ripple 1m Vrms
12	Gunn Oscillator	Frequency Range (GHz) 8.2-12.4 Flange UG-39/U Waveguide RG-52/U Pushing fac.(MHz/V)-8 Bias V. Max-10v Normal Power Output-10 Temperature Coeff. (MHZ)- \pm 0.2 Frequency Adjustment-

		by Micron meter
13	Pin Diode Modulator	Frequency Range (GHz) 8.2-12.4 Flange UG-39/U Waveguide RG-52/U Output Connector TNC
14	Movable Shorts	Frequency Range (GHz) 8.2-12.4 Flange UG-39/U Waveguide RG-52/U
15	Microprocessor Based Turn Table with Software	Step angle = 1° Variable gain = 10dB, Sensitivity = 5 mV PC software based on Visual Basic, Power readings in dB, Angle in degree. Readings saved in excel file as Angle V/S power. Online graph radial pattern, 0 to -70 dB. Connectivity through COM port as well as through USB to serial converter. Home and scan buttons on the screen. Automatically detects Home and Far limits. Facility to calibrate before the actual scan. Square wave input from the detector Motor used for rotation – Synchronous Motor
16	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Low Pass Filter- LPF-910C
17	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Band Pass Filter- BPF-915C
18	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Bandstop Filter- BSF-920C
19	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Ring Resonator- RR-925C
20	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Branch line Coupler- BLC-930C
21	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Hybrid Ring coupler- HRC-935C
22	MICRO STRIP	Parallel Coupled line Coupler- PCLC-940C

	COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	
23	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Power divider –I (without chip resistor)- PD-945C
24	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Power divider II with chip resistor PD950C
25	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Patch Antenna-I- PA-955C
26	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Patch antenna-II- PA-960C
27	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Microwave Amplifier- AMP-965C
28	MICRO STRIP COMPONENTS Freq. range 4- 6 GHz Substrate – Neltek Dielectric constant : 3.2	Microstrip Transmission line MTL 975
29	C-BAND SOURCE & DETECTOR (Freq. range 4-6 GHz)	C-band source with power supply- SSS-980C
30	C-BAND SOURCE & DETECTOR (Freq. range 4-6 GHz)	Detector- MD-985C
31	C-BAND SOURCE & DETECTOR (Freq. range	Coupler- MC-995C

	4-6 GHz)	
32	C-BAND SOURCE & DETECTOR (Freq. range 4-6 GHz)	Active Filter- AF-900C
33	PART III : ACCESSORIES	Universal Testing Jig- UTZ-970
34	PART III : ACCESSORIES	50 Ohm termination
35	PART III : ACCESSORIES	Attenuator – 6 dB
36	PART III : ACCESSORIES	Stand
37	PART III : ACCESSORIES	RF Cable SMA to SMA (9")
38	PART III : ACCESSORIES	SMA to BNC Cable
39	PART III : ACCESSORIES	V.S.W.R. Meter
40	PART III : ACCESSORIES	Source to Detector biasing cable

FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)

Date: _____
To: _____

Sl. No.	Description of goods \ (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex-Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (E)
Total Cost							

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.
Gross Total Cost (A+E) Rs. _____ (Amount in figures)

We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No. _____