INVITATION FOR QUOTATION

TEQIP-III/2018/ycma/Shopping/	/16	5
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12-May-2018

To,

Sub: Invitation for Quotations for supply of Goods

Dear Sir,

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

Sr. No	Brief Description	Quantity	Delivery Period(In days)	Place of Delivery	n Requireme nt (if any)
1	Electromagnetic Theory Lab(Specification: Annexure C)	1	30	TEQIP COORDINATOR, C/O DEPARTMENT OF ELECTRONICS ENGINEERING, YMCA UNIVERSITY OF SCI AND TECH FARIDABAD	YES
2	EMI – EMC Lab (Specification: Annexure B)	1	30	TEQIP COORDINATOR, C/O DEPARTMENT OF ELECTRONICS ENGINEERING, YMCA UNIVERSITY OF SCI AND TECH FARIDABAD	YES
3	Vector Network 1 30 Analyzer with Spectrum Analyzer (Specification: Annexure A)		30	TEQIP COORDINATOR, C/O DEPARTMENT OF ELECTRONICS ENGINEERING, YMCA UNIVERSITY OF SCI AND TECH FARIDABAD	YES

- 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, initialing, 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 **55** days 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:

Delivery and Installation - 0% of total cost

Satisfactory Acceptance - 100% of total cost

- 10. All supplied items are under warranty of **36** months from the date of successful acceptance of items.
- 11. You are requested to provide your offer latest by 13:00 hours on 28-May-2018.
- 12. Detailed specifications of the items are at Annexure I.
- 13. Training Clause (if any) YES
- 14. Testing/Installation Clause (if any) YES
- 15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
- 16. Sealed quotation to be submitted/ delivered at the address mentioned below,
 YMCA University of Science & Technology, NH-2, Sector-6, Delhi- Mathura Road, Faridabad 121006,
 Haryana

17. We look forward to receiving your quotation and thank you for your interest in this project

TEQIP-III Coordinator/Co-coordinator
YMCA University of Science & Technology
Faridabad-121006
Authorized Signatory

Name & Designation

Annexure: A

S. No	Parameter		Required Specification		
1	Frequency range		30 kHz to 4 GHz , full two Ports		
2	RF Connector		N type (female)		
3	Aging rate		± 1 ppm/yr		
4	Dynamic range		100 dB for upto 4 GHz		
5	S-parameter measuremen	nt	S11, S21, S12, S22 (both Magnitude and Phase)		
6	IF bandwidth		10 Hz to 100 kHz		
7	Data points or resolution		101, 201, 401, 601, 801, 1001, 1601, 4001, 10,001, Arbitrary number of points settable through SCPI		
8	Test port output power (n	ominal)	3dBm : > 625 MHz to 3 GHz		
9	Minimum Output Power L	evel	≤ -45 dBm, nominal Power settable in 1 dB steps across power range (Settable in High, Low and Manual)		
10	Trace Noise (-10 to 55 °C) at 300 Hz IF bandwidth		Magnitude: ± 0.004 dB (rms) from 300KHz to 6 GHz Phase: ± 0.07 degrees from 300KHz to 6 GHz		
11	Receiver compression at 9 GHz		+10 dBm, 0.10 dB compression		
12	Immunity to interfering signals		+16 dBm (nominal)		
13	Spectrum Analyzer		5 KHz to 4 GHz, resolution 1 Hz		
14	Resolution Bandwidth		1 Hz to 5 MHz		
15	Video Bandwidth		1 Hz to 5 MHz		
16	Maximum Input Voltage		+27 dBm		
17	Sweep Time		Zero Span: 1 μs to 1000 s		
18	Accessories		Necessary cable and mechanical cal kit should be supplied along with instrument & CalReady should be inbuilt and Quick Cal optional.		
19	Display		6.5" transflective color VGA LED-backlit		
20	PC Connectivity		USB, LAN, remote control capability with iPhone & iPad Optional.		
21	Warranty		Standard warranty – 3 Years. Manufacturer should have NABL Accredited Calibration Lab facility with more than 30 Parameter (as per NABL) in India.		
22	Future Upgradable Features	A III A III A T A N A B A V A R	strument should have following future upgradable features: Independent Source, Interference Analyzer Ime Domain Option Mixed Mode S-Parameter Measurement Inuit – in Power Meter and USB Power Sensor Support If ector Voltmeter It eal Time Spectrum Analyzer It ulse Measurement It is Variable DC Voltage		



Annexure: B

The EMI source module must include commonly found EMI sources such as:

- High speed digital pulses: 1 ns, 3 ns and 6 ns
- > 10 MHz sine wave oscillator
- > 50 MHz Square wave oscillator
- > DC brushed motor circuits

The electromagnetic coupling module must include at least the following types of transmission lines for EMI measurements:

- > Single microstrip
- > Couple microstrip with 0.56mm edge-to-edge spacing and coupled length of 100mm
- > Couple microstrip with 1.2 mm edge-to-edge spacing and coupled length of 100mm
- > Couple microstrip with 0.56mm edge-to-edge spacing and coupled length of 50mm
- > Coaxial line for transfer impedance measurement
- > Single co-planar line
- Coupled co-planar line with coupled length of 100mm

The kit must also come with a Near-field probe for H-fields measurements, and other accessories required to perform the lab experiments (such as terminators, attenuators, cables, etc.)

The training kit shall be certified with CE certification

The training kit should have lab exercises, reference materials related to theories and concepts of EMI and EMC must be provided in editable format for ease of customization and presentation. It shall cover a typical one full semester of undergraduate teaching with the following topics:

- > Introduction to EMI/EMC
- Basic Theories
- EMC Control and Design
- PCB Layout Design Issues
- > Filters, Cables, and Connectors
- Isolators, Transient, and Surge Protection, Shielding, Grounding and Bonding
- > EMC Measurement Review
- EMI/EMC Troubleshooting Techniques and Methodologies, System Integrity



	Electromagnetic Theory Lab Qty 1
>	Microwave source output power: ±1 dBm
>	Microwave source output frequency: 2400 – 2600 MHz
>	Microwave source output frequency Accuracy: ±2
>	Input Voltage: 5 V
>	Input Current: 30mA
>	EMC: IEC61326-1:2005 / EN61326-1:2006, CISPR11:2003/EN55011:2007, Group 1, Class A
>	Warranty: 3 – year
>	Accessories:
A	Microwave oscillator module, RF Coaxial Cable, N(m) – SMA Adaptor, N(f) – SMA Adaptor, Male – male SMA Adaptor, 50 Ohm coaxial termination, USB Cable, Power Adaptor



FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

	Date:
Го:	

SI.	Descripti	Qty.	Unit	Quoted Unit rate in Rs.	Total Price	Sales tax	and other
No.	on of		(Including Ex Factory price,	(A)	taxes payable		
	goods (with full Specifica tions)			excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty		%	In figures (B)
				commitments)			
			Total C	ost			

	Gross Total Cost (A+B): Rs
We agree to supply the above goods in accordance price of Rs. ———————————————————————————————————	with the technical specifications for a total contract (Rupees ——————amount in words) within
We confirm that the normal commercial warranty/ the offered items and we also confirm to agree with Letter.	guarantee of —————— months shall apply to terms and conditions as mentioned in the Invitation
We hereby certify that we have taken steps to ensuengage in bribery.	ure that no person acting for us or on our behalf will
Signature of Supplier	•
Name:	
Address:	
Contact No:	