

## संत लौगोवाल अभियांत्रिकी एवं प्रौद्योगिकी संस्थान, लौगोवाल, संगरुर, पंजाब - १४८ १०६

(मानव संसाधन मंत्रालय के अधीन समविश्वविदयालय)

Sant Longowal Institute of Engineering and Technology Longowal, Dist. Sangrur, Punjab – 148106

(Deemed to be University under MHRD)

Ref. No. SLIET/PUR/67/19/ 1573 -1578

Date: 20/02/2020

(Registered Post)

M/s

Incharge website

#### Sub: Notice inviting quotation for purchase of equipment to ECE dept.

This Institute intends to purchase equipment for ECE Dept. Please send quotation to the undersigned in a sealed cover duly super scribed on envelop "Quotation for purchase of equipments to ECE dept." so as to reach latest by closing date i.e. 11.03.2020. The specifications are as under:

S. No.	Detailed Specification	Qty.	EMD (Rs.)	Remarks
1.	Spectrum Analyzer (7.5 GHz)	01	11000.00	Detailed proof of specifications in the
2.	IoT Smart Server Trainer	02	1000.00	shape of leaflets for Make & Model no. of
3.	Smart IoT Training System	02	1000.00	item will be attached
vine, at	(Detailed technical specifications of all equipments are enclosed at Annexure-A)	Alian Al	e quotad in 1 Itul Instaliation	

The Terms & Conditions for submitting quotation are as under:-

- 1) It may be noted that quotation received only through registered/speed post shall be considered. The institute is located in a remote area and it takes 5 to 7 days to reach the mail, therefore, quotation be dispatched well in time to avoid any sort of delay.
- 2) Rate of GST/IGST, if extra must be mentioned clearly along with GST number.
- The other terms & conditions for submitting the quotation are given overleaf which must be read carefully before submitting the quotation.
- 4) The Price quoted must be FOR SLIET, Longowal.
- 5) Quotation must be valid for a period of 3 months.
- 6) Quotations received later than due date are liable to be rejected and returned as it is.
- 7) Quotation must be sent on the letter head of the party duly addressed to Deputy Registrar (Store & Purchase) along with a certificate that the firm/company is not blacklisted by any govt. organization/dept.
- 8) As per instructions if purpose of quotation is not super scribed and quotation is opened by mistake then it may be rejected.
- 9) EMD is required to be submitted in the form of Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the Commercial Banks in favour of Director, SLIET, Longowal.

12020

Deputy Registrar (Store & Purchase)

लौंगोवाल, जिला संगरूर - 148106 (पंजाब), भारत, दूरभाष सं:+91-1672-253533, 253534 फैकस स: +91-1672-253531 LONGOWAL, DISTRICT: SANGRUR-148106 (PUNJAB), INDIA PHONE No. :+91-1672-253533

## TERMS & CONDITIONS OF QUOTATION

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DELIVERY	The rate quoted must be free delivery/F.O.R. Longowal after allowing the
	discount, if any. Where quoted extra ad-valorem rate payable should clearly be indicated. Supply should be made within the specified delivery period.
TERMS OF PAYMENT	Our normal term of payment is within 45 days after receipt of stores in good condition by means of cheque/draft/RTGS.
PERFORMANCE	Performance Security @ 5% of order value in the shape of DD, FDR or BG valid
SECURITY	for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations, as per GFR-2017 rules, is also required.
Concessional GST	The Institute is registered with the department of Scientific & Industrial Research (DSIR) for purposes of availing customs duty exemption in terms of Govt. notification No. 51/96-customs dated 23.07.1996 and central excise duty exemption in terms of Govt. notification No. 10/97-central excise dated 01.03.1997 and 45/2017 & 47/2017 dated 14/11/2017 regarding GST as amended from time to time. The relevant exemption certificate will be issued to the successful bidder only if the excise duty/customs duty/GST are exclusively mentioned in the commercial bid of e-Tender/NIQ. NO ADVANCE PAYMENT WILL BE MADE.
EXEMPTIONS	Excise and customs duties are exempted to the institute. The relevant
n de sentideur 10 2020 - Tra 10 2020 - Tra	exemption certificate will be issued to the successful bidder only if the excise duty/custom duty is exclusively mentioned in the Quotation. In case the offered items are to be imported, the rates should be quoted in foreign currency on FOB basis. Basic duty as applicable under notification No. 51/96 customs dated
ter de la com entre ancon entre ancon terra de la com terra M	23.07.1996 as applicable shall be borne by the institute. If the price quoted is in foreign currency then payment shall be made through letter of credit against submission of B.G. of Min. 25% value of supply order, if the order value is more than US\$ 10,000 or through Telegraphic Transfer (TT) if the order value is less than US\$ 10,000 though Nationalized banks. The bank charges outside India should be borne by the Beneficiary. Clearance at customs will be arranged by
	us but you will assist our clearance agent. In case of indigenous item the price must be quoted in Indian Rupees and 100% payment will be made only after successful installation, testing and commissioning of equipment.
DIRECTOR'S RIGHTS	Director, SLIET, reserves the rights of acceptance or rejection of any or all quotations. The discretion for increasing or decreasing of the quantities also rests with him. SLIET also does not bind itself to accept the lowest price. In
VALIDITY OF	case of any dispute, the decision of Director SLIET will be final & binding. Quotations must remain valid for period of at least 03 months.
QUOTATIONS	THE REPORT OF THE PROPERTY AND THE PROPERTY
SAMPLE/BRAND/ MAKE/WEIGHT	Sample, where asked for, will invariably be made available and sent along with the quotations. However, Brand/Make/Weight etc. must be mentioned clearly in the quotations. Technical literature/pamphlet should also be enclosed.
REJECTION	Quotation not confirming to the set procedure as above will be rejected. Conditional, telegraphic quotation shall be rejected out rightly.
DISCOUNT/REBATES	A special discount/rebate wherever admissible keeping in view that the supply is being made for education purpose in respect of Public Institution of national importance may please be indicated.
GENERAL TERMS	SLIET shall not be held responsible for any postal delay in sending or late receipt of quotation. Quotation should be free from corrections & erasures.
	Other terms & Conditions will be applicable as per GFR-2017.
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	Deputy Registrar
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Spectrum Analyzer (7.5GHz)	orty	PRICE (RS.)
All-Digital IF Technology		
• Frequency Range from 9 kHz up to 7.5 GHz	01	
<ul> <li>Min161 dBm Displayed Average Noise</li> </ul>		
Level (Typ.)		
<ul> <li>Min. &lt; -98 dBc/Hz @ 10 kHz Offset Phase</li> </ul>		
Noise		
<ul> <li>Level Measurement Uncertainty &lt; 0.8 dB</li> </ul>		
<ul> <li>10 Hz Minimum Resolution Bandwidth (DSA832/875)</li> </ul>		
• Up to 7.5 GHz Tracking Generator		
(DSA8XX-TG)		
Complete Connectivity: LAN (LXI), USB		
Host & Device, GPIB (Opt.)		
• 8 Inch WVGA (800x480) Display		
• Logarithmic level axis (1 dB to 200 dB)		
• Linear level axis (0 to reference level)		
<ul> <li>Number of display : 601</li> <li>Trace detectors</li> </ul>		
<ul> <li>Trace detectors</li> <li>Normal, Positive-peak, Negative-peak,</li> </ul>		
Sample, RMS, Voltage average		
<ul> <li>Quasi-peak (with EMI-DSA800 option)</li> </ul>		
<ul> <li>Trace functions clear write, max hold, min</li> </ul>		
hold, average, view, blank		
• Units of level axis (dBm,dBmV, dBµV, nV,		
$\mu$ V, mV, V, nW, $\mu$ W, mW, W)		
IoT Smart Server Trainer	02	
<ul> <li>Provides about 120 examples and programs</li> </ul>		
<ul> <li>Control and experience about 30 kinds of sensors</li> </ul>	,	)
used in real life     Experience server building required in IoT		(
<ul> <li>Experience server building required in for</li> <li>Experience Raspberry Pi and Linux</li> </ul>		
Learn about Bluetooth communication		
Experience HTTP protocol and server/client		
communication		
<ul> <li>Learn the interface between programs through CGI</li> </ul>		,
Experience a wide range of programming		
language such as C, HTML, PHP, and JavaScript,		A
etc.		
<ul> <li>Provides training on web page composition via</li> </ul>		
<ul> <li>JavaScript</li> <li>Provides Android-based HTTP interlocking</li> </ul>		
application		
Provides Android-based Bluetooth interlocking		
application		
Respberry Pi3B     Resp Shalld		
<ul> <li>RSP Sheild</li> <li>Sensor Modules (PIR, Sound, Humidity,</li> </ul>		
• Sensor Modules (PIR, Sound, Humilaity, Ultrasonic, Light Sensor, Variable resistor, Tilt,		
Mercury, Reed, IR Obstacle, Flame, Touch,		
Photo, Dust, Soil, IR and Gas)		
Actuator Modules (LED, DC Motor, Step Motor, Switch Module, Durger, Lacon and BCD LED)		
<ul> <li>Actuator Modules (LED, DC Motor, Step Motor, Switch Module, Buzzer, Laser and RGB LED)</li> <li>Server Software (Lighttpd, PHP and</li> </ul>		

Smart IoT Training System	aty.	PRICE(R)
Hardware platform should have facility of Sensor data collection implemented around Open Hardware platform, it should easily experience IoT service. Specifications	02	
<ul> <li>It should have 10 basic sensor data bases and application examples.</li> <li>Should support various projects such as sensor collection and indoor map service using BEACON.</li> <li>Should support Wi-Fi, Zigbee, and Bluetooth communication for inter-object communication, which is an early stage of IoT service.</li> </ul>		
<ul> <li>Should support module training function using firmware and it is possible to collect sensor information and practice actuator control to acquire IoT basic skills by module.</li> </ul>		
• Raspberry Pi 3, ADK-2560 based IoT sensor		
test		
• Interworked on smartphone or tablet PC		
<ul><li>Arduino progarmming by BLE module</li><li>Included Sensors Include</li></ul>		
<ul><li>Ultrasonic Sensor</li><li>3X-Gyro Sensor</li></ul>		
<ul> <li>Dust Sensor</li> <li>Rain/Steam Sensor</li> <li>Soil Moisture Sensor</li> </ul>		.7
<ul> <li>Tilt Sensor</li> <li>HT/CdS Module Photo Sensor</li> <li>Temperature/Humidity Sensor</li> </ul>		(
<ul> <li>PIR Module Infrared Sensor</li> <li>Pulse Module</li> </ul>		
<ul> <li>Sound Module</li> <li>Gas Module</li> </ul>		1
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# संत लौगोवाल अभियांत्रिकी एवं प्रौद्योगिकी संस्थान,

लौगोवाल, संगरुर, पंजाब - १४८ १०६

(मानव संसाधन मंत्रालय के अधीन समविश्वविद्यालय) Sant Longowal Institute of Engineering and Technology Longowal, Dist. Sangrur, Punjab – 148106

(Deemed to be University under MHRD)

Ref. No. SLIET/PUR/67/19/1579 - 1584

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S. No.	Detailed Specification	Qty.	EMD (Rs.)	Remarks
1.	FPGA Evaluation Kit (Detailed technical specifications of equipment are enclosed at Annexure-A)	01	4000.00	Detailed proof of specifications in the shape of leaflets for Make & Model no. of item will be attached

The Terms & Conditions for submitting quotation are as under:-

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PERFORMANCE	Performance Security @ 5% of order value in the shape of DD, FDR or BG valid
SECURITY	for a period of sixty days beyond the date of completion of all contractua
2792/201	obligations of the supplier including warranty obligations, as per GFR-2017 rules, is also required.
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	items are to be imported, the rates should be quoted in foreign currency on FOE
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20	23.07.1996 as applicable shall be borne by the institute. If the price quoted is in
	foreign currency then payment shall be made through letter of credit agains
	submission of B.G. of Min. 25% value of supply order, if the order value is more than US\$ 10,000 or through Telegraphic Transfer (TT) if the order value is less
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and white	Deputy Registra

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# Anneaure - A.

Sr. No.	Description with complete specification		
		Sty	PRICEC
-			FRIEd
1.	FPGA Evaluation kit	01	
		QI	
	<ul> <li>Quad-core Arm Cortex-A53 applications</li> </ul>		
	processor		
	<ul> <li>Dual-core Cortex-R5 real-time processor,</li> </ul>		
	<ul> <li>4KP60 capable H.264/H.265 video codec</li> </ul>	1	
	<ul> <li>16nm FinFET+ programmable logic.</li> </ul>		
	<ul> <li>UltraScale+ MPSoC</li> </ul>		
	<ul> <li>HDMI video input and output</li> </ul>	1 12	
	<ul> <li>PCI Endpoint Gen3x4, USB3</li> </ul>		
	<ul> <li>DisplayPort &amp; SATA</li> </ul>		
	<ul> <li>DDR4 SODIMM – 72-bit</li> </ul>		
	<ul> <li>DDR4 Component – 64-bit</li> </ul>		- Xerales and
	• 2x SFP+ cages		
	<ul> <li>2x FPGA mezzanine card (FMC) interfaces</li> </ul>		
	for I/O expansion		
	<ul> <li>504K System Logic Cells</li> </ul>		
	38Mb Memory		
	Onboard JTAG circuitry to enable		
	configuration over USB		
	Dual quad-SPI flash memory		
	Boot from SD card		
	Quad-SPI flash		
	SD card slot		
	<ul> <li>PMBUS &amp; System Controller MSP430 for</li> </ul>	-	
	<ul> <li>power, clocks, and I2C bus switching</li> <li>USB2/3</li> </ul>	1	
	<ul> <li>USB2/3</li> <li>2x FMC-HPC connectors</li> </ul>		
	<ul> <li>2x FMC-FIPC connectors</li> <li>2 PMod headers</li> </ul>		
	<ul> <li>SDI (x1 GTH)</li> <li>AES3 audio connector</li> </ul>	1	
	• SFP+ cage (2x 2GTH)		)
	• SMA (x1 GTH)		1
	UART to USB bridge		
	<ul> <li>RJ-45 Ethernet connector</li> </ul>		
	SATA (1x GTR)	1	
	<ul> <li>PCIe Gen3 Endpoint (x4 GTH)</li> </ul>		
	<ul> <li>HDMI video input and output (x3 GTH)</li> </ul>		
	<ul> <li>DisplayPort (2x GTR)</li> </ul>		