

INVITATION FOR QUOTATION

TEQIP-III/2018/gwec/Shopping/18

09-May-2018

To,

Sub: Invitation for Quotations for supply of Goods for EED Lab(ECE)

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	Brief Description	Quantity	Delivery Period(In days)	Place of Delivery	Installation Requirement (if any)
1	Analog Development Board	2	30	ECE Department	Yes
2	Digital Storage Oscilloscope	1	30	ECE Department	Yes
3	FPAA Board (Field Programmable Analogic Design Board)	2	30	ECE Department	Yes

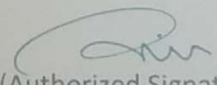
2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for 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 45 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 - 90% of total cost**
- Satisfactory Acceptance - 10% 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 02:00 hours on 18-Jun-2018 .
12. Detailed specifications of the items are at Annexure I.
13. Training Clause (if any) **Yes. Required in the department.**
14. Testing/Installation Clause (if any) **Yes. Required in the department.**
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,
Makhupura, Nasirabad Road, Ajmer -305002
17. We look forward to receiving your quotation and thank you for your interest in this project.
18. Please write lab name and package name on envelope.


(Authorized Signatory) ICSC
Govt. Women Engg. Coll. Ajmer
Name **Amer** Designation



Annexure I

Sr. No	Item Name	Specifications
1	Analog Development Board	<p>Analog Development Boards are used to provide student and engineers the platform for creating analog systems using modules such as OP-Amps, analog multipliers, Digital-to-analog converters, Low-dropout Voltage regulators, transistors, diodes and more.</p> <p>It is used to perform analog lab experiments and provides a cost efficient platform for students to realize almost any analog system using general purpose ICs such as OP-Amps and analog multipliers.</p> <p>Main Power</p> <p>The kit has screw terminals to connect +/-10V power supply. All the ICs on the board are internally</p> <p>Connected to power supply.</p> <p>DC-DC converter</p> <p>It is a non-synchronous buck converter which can be used to provide a resistor-selected 3.3V or 5V output, that delivers up to 2.5A from up to 16V input bus.</p> <p>LDO regulator</p> <p>Low dropout linear voltage regulator is capable of 200mA output current at 5V fixed output voltage level. It is a low quiescent current, low noise, high PSSR, fast start-up LDO.</p>



Transistor sockets

Board comes with PNP and NPN general-purpose bipolar transistors as well as P-channel MOSFET transistor.

Breadboard area

General Purpose Area with 2.54mm/100mil pad spacing can be used to place additional components

And expand set of exercises with new experiments.

Analog Multipliers

Three analog multipliers are included in the kit. These are wide-bandwidth. Each multiplier is a 14-pin IC and operates on internally provided $\pm 10V$ supply.

Diodes

It includes two diode sockets on the board, which can be used as rectifiers in custom laboratory

Experiments. Two small signal diodes are delivered with the board

OP-Amps Type I

Three OP-Amps are available on the board. Each IC has two amplifiers which are labeled A and B. OP-Amps Type I can be connected in the inverting configuration only.

D/A converter

There are two digital-to-analog converters (DAC) provided in the



		<p>kit. They are 12-bit, parallel-input multiplying DACs.</p> <p>OP-Amps Type III</p> <p>Three OP-Amps are available on the board. Each IC has two amplifiers which are labeled A and B. OP-Amps Type III can be used as voltage buffers</p> <p>OP-Amps Type II</p> <p>Three OP-Amps are available on the board. Each IC has two amplifiers which are labeled A and B.</p> <p>OP-Amps Type II can be configured to act as inverting or non-inverting</p> <p>Trimmers</p> <p>There are two 1k_Ω trimmers in the kit to enable the designer to obtain a variable voltage if needed for a circuit. These operate respectively in range from 0V to +10V, and -10V to 0V</p>
2	Digital Storage Oscilloscope	<p>Should be capable to obtain the waveform on Digital Storage Oscilloscope having Technical Specification- Bandwidth :50 MHz Number of Channel :2 Analog Channel Sampling Rate :1 GS/s all Channels Time Base Range :5ns/div to 50 sec/div Memory Depth :100kpts Acquisition Rate : = 50,000 per second Coupling : AC, DC Input Impedance :1 MO \pm 2%/16 pF \pm 3 pF Vertical Sensitivity :500μV/Div to 10 V/div Vertical Resolution :8 Bits Display : =7 inch Trigger ion : Edge, pulse width, video, pattern/state Digital Voltmeter and Frequency Counter : Digital voltmeter and 5 – digit frequency counter upto scope bandwidth should be available Automatic Measurement : More than 20+ automatic measurement function should be available alongwith math function, FFT plot with dBV Vs frequency should be available</p>



		<p>Training Signal : Different types of training signal should be available built – in with lab guide, tutorials and content on Oscilloscope fundamentals Operating Temperature : Operating: 0 to 50° C Passive Probes :2 Passive Probe should be provided with oscilloscope and have able 10:1 and 1:1 attenuation. Serial Decodes (Optional) : I²C and UART Option should be available for future upgradable(Optional) PC Connectivity and Software : USB connectivity and software should have feature to control & visualize multiple measurement simultaneously and data logging upto 1-hour.</p>
3	FPAAB Board (Field Programmable Analogic Design Board)	<ul style="list-style-type: none"> • Analog design development board. • Dynamically reconfigurable through plug & play USB port • Compatible to Designer software with USB interface for downloading of design. • Static reconfiguration with SPI EPROM. • Directly programs SPI PROM from USB port. • Analog interface blocks (7 nos) for level-shifting, attenuating, filtering, etc. <ul style="list-style-type: none"> ○ 4 dedicated input or output blocks with separate input & output ports. ○ 3 pairs of input or output blocks with jumper ion for direction. ○ High speed/precision OPAMPs used for signal conversion for every input/output block. ○ Terminal screw headers for easy interface. • Onboard microphone with amplifier. • Microphone output header for amplified output. • Onboard analog function generator • Sine wave @ 1Vpp Onboard potentiometer to vary frequency from Hz to KHz range • Facility to change passive components for varying frequency ranges. • Configuration reset button. • Onboard PIC microcontroller for programming and PC interface. • LED indication for successful programming & error. • LED indication for power supply. • On-board 16-MHz oscillator module. Facility to change frequency ranges easily. • USB powered with optional ion for external power supply. • On board regulators for 3.3V and 5V supply with PCB as



		<p>heat sink.</p> <ul style="list-style-type: none"> • Small & ergonomic design of board. • Comes in attractive enclosure. • Printed user manual oComplete reference manual for using board with chapters on getting started, installing USB drivers, using design software, developing VC++ prototypes, etc CD-ROM with drivers, software, PROM programmer and lots of ready to use examples.
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(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 (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

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

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: _____

