### **INVITATION FOR QUOTATION**

# TEQIP-III/2018/geca/Shopping/15

25-Jul-2018

To,

M/s

## **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 I,

Sr. No	Brief Description	Quantity	Delivery Period (In days)	Place of Delivery	Installation Requirement (if any)
1	"i) Study single-phase dual converter.	2			
2	AC volt meter	1			
3	Auto transformer	2			
4	Bread Board with Power supply	6		Court	
5	connectin g leads	110		Govt.	Tosting and
6	connecting leads	50		Engineering College	Testing and installation
7	DC Volt (96x48)	2		Ajmer NH-8	required cost
8	Digital Multimeter	5	45	Barliya	must be
9	Function Generator	3		Choraha	included in
10	Perform experiment on single phase PWM inverter	2		Ajmer- 305025	quotation
11	Perform experiment on triggering circuits for SCR. i.e. R-triggering, R-C triggering and UJT triggering circuit.	2		303023	
12	Study and obtain the waveforms	2			

	for single-phase bridge converter.			
13	Study single-phase cycloconverter.	2		
	Study the characteristics of SCR			
	and observe the terminal			
1.4	configuration, Measure the	2		
14	breakdown voltage, latching and	2		
	holding current. Plot V-I			
	characteristics.			

- 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 **12** months from the date of successful acceptance of items.
- 11. You are requested to provide your offer latest by 10:00 hours on 13-Aug-2018.
- 12. Detailed specifications of the items are at Annexure I.
- 13. Training Clause (if any) Training required cost must be included in quotation
- 14. Testing/Installation Clause (if any) **Training testing and installation required cost must be**included in quotation
- 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, N.H.8, BARLIYA CIRCLE, NEAR NARELI TEMPLE, AJMER
- 17. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)

Name & Designation

### **Annexure I**

Sr.	Item Name	Specifications
No		
1	"i) Study single-phase dual converter.	"• Box Size: 345 x 200 x 50 mm (With 3 meters). • 3/4 Input Power Supply: 230Vac, 50Hz AC Mains. • 3/4 Trainer consists of two variable DC Power supplies: 0-50Vdc & 0-12Vdc each. • 3/4 Trainer consists of 3 digital meters of 0-200Vdc, 0-200mAdc & 0-200μA each . "
2	AC volt meter	Digital Volt Meter (Multi Range - 5 Range) Model No 09362 AC Voltmeter (200mV, 2, 20, 200, 700V)
3	Auto transformer	Range: 0 volt to 270 volt
4	Bread Board with Power supply	"Locking On/Off Switch LED Power Indicator Input voltage: 6.5-9v (DC) via 5.5mm x 2.1mm plug Output voltage: 3.3V/5v Maximum output current: 700 mA Independent control rail output. 0v, 3.3v, 5v to breadboard Output header pins for convenient external use Size: 2.1 in x 1.4 in USB device connector onboard to power external device "
5	connectin g leads	4mm
6	connecting leads	2 mm
7	DC Volt (96x48)	"• Options A. 240VAC (+/-20%) B. 85-265 AC/DC • Accuracy Class 0.5 • Display 3 ½ / 4 Digits 0.56"" Height RED • Dimensions • 96x48 Cutout 92x44 • 96x96 Cutout 92x92 • Mounting panel dore "
8	Digital Multimeter	"SPECIFICATIONS OF DIGITAL MULTIMETER 1. Make: "CIE" 2.Model: 5175xL 3.Jack protection system 4.Multi angle stand function 5.Data hold 6.Back light 7. Display: 3 ½ Digits with max. reading 1999. 8.DC Voltage: 200m/2/20/200V ±0.5%,1000V±0.8% 9. AC Voltage: 2/20/200V±1%,700V±1.2% 10. DC current: 2m/20mA±1%, 20mA±1.5%, 10A±2% 11 AC current : 2mA±1.2%, 200mA±2%, 10A ±2% 12. Resistance : 200/2K/20K/200K/2M/20M(±1, 200M(±5% 13.

		Capacitance: 2n/20n/200n/2+/20+F±4.0% 14. Temperature: /20°c 1000°c±3%(optional) 15. Frequency: 20KHz±1.5%(optional) 16.Continuity Test 17.Diode T "
9	Function Generator	Range: 2 MHz; 40 dB Attunation
10	Perform experiment on single phase PWM inverter	"• Power supply requirement : 230V AC, 3 Phase. • Following parts provided on Single PCB with connecting terminals. • MOSFET IRF360: 2 Nos. • Power Diode: 8 Nos. • Two mains Transformer with step down AC Voltages: 12 V / 250 mA. • Built-in Digital PWM Control circuit. • PWM Frequency: 2KHz to 200KHz. • PWM Duty cycle: Variable from 0 to 100% • Accessories: Training Manual Patch cords "
11	Perform experiment on triggering circuits for SCR. i.e. R-triggering, R-C triggering and UJT triggering circuit.	"• Box Size: 345 x 240 x 50 mm. • Input Power Supply: 230Vac, 50Hz AC Mains. • Trainer consists of AC Power supply: 50Vac. • Variable Potentiometer is provided to change the firing / triggering angle of SCR. • Trainer consists of "R", "RC" and "UJT" firing circuits for SCR. • Extra Instruments required are as: CRO & Digital multimeter. "
12	Study and obtain the waveforms for single-phase bridge converter.	"1 Phase Half Bridge Inverter by MOSFET • Box Size: 250 x 200 x 50 mm. • Input Power Supply: 1 Phase, 240Vac, 50Hz AC Mains. • Trainer consists of DC Power supplies: +15Vdc-0-(-) 15Vdc. • MOSFET based Bridge Inverter. • Potentiometers for varying duty cycle and frequency. IC based circuit to drive MOSFET. • Extra Instruments required: CRO & Digital multimete. 1 Phase Bridge Inverter by MOSFET: • Box Size: 250 x 200 x 50 mm. • Input Power Supply: 1 Phase, 240Vac, 50Hz AC Mains. • Trainer consists of DC Power supplies: 15Vdc. • MOSFET based Bridge Inverter. • Potentiometers for varying duty cycle and frequency. • IC based circuit to drive MOSFET. • Extra Instruments required: CRO & Digital multimeter. "
13	Study single-phase cycloconverter.	"• Box Size: 250 x 200 x 50 mm. • Input Power Supply: 230Vac, 50Hz AC Mains. • Trainer consists of AC Power supply: 50Vac - 0 - 50Vac and 12Vac. • Variable Potentiometer is provided to change the firing / triggering

		angle of SCR. • Trainer "P" group and "N" group of SCRs. •
		UJT synchronized triggering circuit is used. • Output
		frequency is $\frac{1}{2}$ of the input frequency, i.e. fo = 0.5 * fin. •
		Other logical circuits are provided for controlling the firing
		angle of SCRs and • generating output frequency is equal
		to half of the input frequency. • Extra Instruments
		required are as: "
14	Study the characteristics of	"• Box Size: 345 x 200 x 50 mm (With 3 meters). • 3/4
	SCR and observe the	Input Power Supply: 230Vac, 50Hz AC Mains. • 3/4 Trainer
	terminal configuration,	consists of two variable DC Power supplies: 0-50Vdc & 0-
	Measure the breakdown	12Vdc each. • 3/4 Trainer consists of 3 digital meters of 0-
	voltage, latching and holding	200Vdc, 0-200mAdc & 0-200μA each . "
	current. Plot V-I	
	characteristics.	
	Characteristics.	

## FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

	Date:
To:	

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

Gross Total Cost (A+B): Rs.	
Ve agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. $$	(Amount in
gures) (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: