

# Government College of Engineering

Station Road, Osmanpura, Aurangabad – 431 005
"In Pursuit of Global Competitiveness"

Phone: (0240) 2366101 E-Mail – principalgeca@yahoo.com, Fax: (0240) 2332835 Web – http://www.geca.ac.in

#### INVITATION FOR QUOTATION

GECA/E&TC/Purchase/2016-17/ 784

Date: 03/03/17

To.

GECA Website & notice Board

## Sub: Invitation for Quotations for supply of following 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	DSB/SSB AM Transmitter	2	Govt. College Engineering,	E&TC	YES
2	DSB/SSB AM Receiver	2		Department	
3	Frequency Modulation / Demodulation	2		Engineering, Aurangabad	
4	Four Channel Analog TDM System			Aurangabau	
5	rmstrong Frequency 2 fodulator & Demodulator				
6	Frequency Division Multiplexer /Demultiplexer	1			

### 2. Quotation,

- a. The contract shall be for the full quantity as described above.
- b. Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
- c. All duties and other levies payable by the supplier under the contract shall be included in the unit price.
- d. Applicable taxes shall be quoted separately for all items.
- e. 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.
- f. The Prices should be quoted in Indian Rupees only.
- g. Rates Quoted should be FOR Aurangabad or free delivery at the institution
- 3. Each bidder shall submit only one quotation.
- Quotation shall remain valid for a period not less than 06 months after the last date of quotation submission.

The Purchaser will evaluate and compare the quotations determined to be substantially Evaluation of Quotations, responsive i.e. which

are properly signed; and

confirm to the terms and conditions, and specifications.

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.

- 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.
- 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.
- . Payment shall be made in Indian Rupees as follows:

Delivery and Installation And Training - 100%

- . All supplied items are under warranty of 12 months from the date of successful acceptance of
- You are requested to provide your offer latest by 16:00 hours on 10/03/17

Detailed specifications of the items are at Annexure I.

- 1. Training Clause (if any) 1 Days Training for Faculty members and related student
- 2. Testing/Installation Clause (if any) Asper Satisfaction of Expert Faculty member
- 3. Information brochures/ Product catalogue should be enclosed with the quotations clearly indicating the model quoted for.
- 4. Sealed quotation to be submitted/ delivered at the address mentioned below, The Principal Government College Of Engineering, Railway Station Road, Osmanpura Aurangabad. Aurangabad Maharashtra, India 431005 .Subscribed as Quotation for E&TC. Dept. Due 01-10/03/17

GECA/E&TC/Purchase/2016-17/ 784 Date: 03/03/17 5. We look forward to receiving your quotation and thank you for your interest in this project.

> Govt. College of Engineering, Aurangabad

## Annexure I

Sr. No	Item Name	• Audio Oscillator with adjustable Amplitude &Frequency (300 Hz -
1	DSB/SSB AM Transmitter	<ul> <li>3.4 KHz)</li> <li>Audio Output: Amplifier with speaker</li> <li>Modulators: Balanced Modulator with Band pass Filter (1 MHz) - 2 Nos. Balanced Modulator (455 KHz) - 1 No. </li> <li>Ceramic Bandpass Filter - 1 No.</li> <li>Carrier Frequency: 1 MHz (Crystal controlled)</li> <li>Transmitter Amplifier Output: DSB (1 MHz), SSB (1.445 MHz)</li> <li>connected to Antenna/cable</li> </ul>
	DSB/SSB AM Receiver	<ul> <li>Construction: Superhetrodyne</li> <li>Freq. Range: 980 KHz to 2060 KHz</li> <li>Intermediate Frequency: 455 KHz</li> <li>Tuning with Variable Capacitor (ganged) Dial marking on Board</li> <li>Receiving media: Telescopic Antenna / Cable</li> <li>Detectors: 1) Diode Detector (For DSB)</li> <li>2) Product Detector (SSB)</li> </ul>
	Frequency Modulation / Demodulation	<ul> <li>Audio Oscillator with adjustable Amplitude &amp; Frequency (300 Hz - 3.4 KHz)</li> <li>FM Modulator: 2 Nos.         <ol> <li>1)Reactance Modulator (with carrier Frequency adjustment)</li> <li>2)Varactor Modulator (with carrier Frequency adjustment)</li> <li>Mixer / Amplifier: 1 No. (With Gain adjustment) Allows FM input signal to be amplitude modulated by a noise input prior to demodulation.</li> </ol> </li> <li>Transmitter output Frequency: 455 KHz</li> </ul>
		<ul> <li>FM Demodulator: 5 Nos.</li> <li>1)Detuned Resonant Detector</li> <li>2)Quadrature Detector</li> <li>3)Foster -Seeley Detector</li> <li>4)Ratio - Detector</li> <li>5)Phase Locked Loop Detector</li> <li>Low Pass Filter: 3.4 KHz Cut off Frequency Amplifier (with adjustable gain)</li> </ul>
	Four Channel Analog TDM System	<ul> <li>Crystal frequency: 1 MHz</li> <li>On-board generators: Four Adjustable amplitude sine wave generators of 250 Hz, 500 Hz, 1 KHz and 2 KHz</li> <li>Input channels: 4 nos.</li> <li>Multiplexing: Time division multiplexing</li> <li>Modulation: DSB / DSBSC modulation On-board control</li> <li>signal frequency: 8 KHz, 16 KHz</li> </ul>

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		Test points : 29 (Gold plated)
	Armstrong	Audio Oscillator (Message Signal):
	Frequency	Function: Sine
	Modulator &	Output: 0-10 VPP
	Demodulator	Frequency: 200Hz - 10 KHz
		• Carrier Output Frequency :
		Function: Sine & Cosine
		Output: 0-10 VPP
		Frequency: 2KHz- 100 KHz
		FM Modulator: Armstrong Frequency Modulator
		FM Demodulator: Phase Locked Loop detector
		Low Pass Filter: 10 KHz cut off frequency.
		Output Amplifier: 1 No. with adjustable Gain
		Test Points: 7 nos (Gold plated)
	Frequency	Crystal Frequency: 4.096 MHz
	Division	Carrier Generator: Sine wave 100 KHz & 200 KHz
	Multiplexer	Modulating Input Frequency: Sine wave 200 Hz -10 KHz (variable)
	/Demultiplexer	Audio Input Amplifier Gain of 100 (approx.)
		Modulator / Demodulator: DSBSC Modulator/Demodulator
		Low Pass Filters: Second Order Butterworth filters with a cut off
		frequency of 10 KHz
		<ul> <li>Audio Output Amplifier: Output Amplifier with a gain of 20</li> </ul>
		Test points: 30 Nos (Gold plated)