

BID DOCUMENT

Open Competitive Bid (OCB)

For

**Procurement of Electronics Lab
Equipment's**

For

**Campuses at Constituent Institutes of
Rajiv Gandhi University of Knowledge
Technologies**

Proprietary & Confidential

**RAJIV GANDHI UNIVERSITY OF KNOWLEDGE
TECHNOLOGIES**

**Ground Floor, Vindhya C4 Building, IIIT-H,
Gachibowli, HYDERABAD- 500 032**

Phone: 040-23001830

Proprietary & Confidential

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News paper advertisement

Tender Notice

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES

Ground Floor, Vindhya C4 Building, IIIT-H,

Gachibowli, HYDERABAD- 500 032

Phone: 040-23001830

Sealed Tenders are hereby invited from reputed manufacturers and authorized dealers for Supply, Installation & Commissioning of Equipment's for Electronics Labs to three RGUKT IITs located at Basara (Adilabad District), Nuzvid (Krishna District) and R.K. Valley (Kadapa District).

Last date for submission of tender document along with EMD as specified in the bid document is on 30-03-2011 before 4.00 pm.

Interested parties can collect the Tender document from the office of the RGUKT from 31-03-2011 to 16-04-2011 against payment of Rs. 5,000/- towards the cost of Tender document fee (non-refundable) through D.D. payable to REGISTRAR, RGUKT at Hyderabad. Further details visit our website www.rgukt.in

Date: 30-03-2011

**/sd/-
Registrar,
RGUKT**

Time schedule of various tender related events

Bid calling date	30-03-2011
Last date for sale of document	16-04-2011 at 02:00 P.M.
Bid closing date/time	16-04-2011 at 04:00 P.M.
Technical Bid Opening date/time	16-04-2011 at 04:30 P.M.
Price Bid opening date/time	19-04-2011 at 4:30 P.M.
Bid Document fee	Rs.5,000/-
Contact person	Registrar, RGUKT
Reference No	RGUKT/Tender/ELE/P1/005/2011

Registrar,
RGUKT

TENDER FORM

Not transferable

Reference: No. RGUKT/Tender/ELE/P1/005 /2011

Dated: 30-03-2011

Subject:- Tender for Supply & installation and commissioning of Electronic Lab Equipment's for three RGU KT IIITs located at Basara (Adilabad Dist), Nuzvid (Krishna Dist) and RK Valley (Kadapa Dist).

Last date for submission of the TENDER AT HYDERABAD is **16-04-2011 up to 04:00 P.M.**

Dear Sir/Madam,

- A. RGUKT invites sealed tenders comprising technical bid and price bid separately from reputed manufacturers (or) authorized dealers for three RGUKT IIITs located at Basara (Adilabad Dist), Nuzvid (Krishna Dist) and R K Valley (Kadapa Dist).
- B. The Tender form consists of 31 pages of which pages from 6 to 20 are instructions and page No.21 is financial bid. The duly completed Technical Bid together with a copy of the bid document (this tender) signed on all pages and the Price Bid should be kept in separate sealed covers and these sealed covers may be submitted in a sealed master envelope superscripted with "Tender for Supply , Install & Commissioning of Electronics Lab Equipment's to the students of IIITs under the RGUKT. The last date for submission of TENDER is **16-04-2011 before 04:00 P.M.**
- C. The Sealed Tenders shall be deposited in the Tender box kept in the office of Registrar, RGUKT up to **04:00 P.M. on 16-04-2011.**

For any clarification and further details on the above tender please contact Telephone No: 23001830 or Contact Person during office hours.

Thanking you

Yours faithfully,

Registrar,
RGUKT

STATEMENT OF IMPORTANT LIMITS/VALUES RELATED TO BID

Item	Description
EMD	For quoted amounts i) less than 50 Lakhs, ii) less than One crore and iii) more than one crore the EMD value is i) 50,000/-, ii) 1.00 lakhs, and iii) 1.50 lakhs respectively.
Bid Validity Period	60 days from the date of opening of commercial bid
EMD Validity Period	60 days from the date of opening of commercial bid
Warranty Period	3 years
Variation in quantities/number of residents	<u>± 30 %</u>
Period for furnishing performance Security	Within 10 days from date of receipt of award
Delivery Schedule	Bidder must be prepared to deliver and install the enclosed list of Equipment within 30 days from the date of award of the contract.
Performance security value	5% of contract value
Performance security validity period	38 months from award of contract (including 30 days of installation period)
Period for signing the order Acceptance	Within 7 days from date of receipt of notification of award

Payment terms	
On delivery at user site	<p>Payment for goods and services shall be made in Indian rupees as follows.</p> <ol style="list-style-type: none"> 1. 80% of payment will be paid after installation, commissioning 2. Balance 20% will be paid after 3 months after obtaining the satisfactory certificate from the Director, RGUKT IIITs.
Maximum Liquidated Damages for late deliveries	<p>For delays:- If the supplier fails to deliver any (or) all of the goods or perform the services within the time period specified in the contract the purchaser shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damages a sum equivalent to 0.25% of the contract value per day until actual delivery or performance up to a maximum deduction of 10% of the delayed goods or services contract price. Once the maximum deduction is reached, the purchaser may consider the termination of the contract duly forfeiting the performance security etc.,</p>

ELIGIBILITY CRITERIA:-

1. This bid is open to all firms within India and other firms which have agencies in India are eligible to do business under relevant Indian Laws as in force at the time of bidding, subject to meeting the pre-qualifications criterion and provide List of customers of previous supply of similar items to universities, Institutes or Government Departments/Undertaking/ public sectors with contact details.
2. The bidder should have Services facility or work shop with in India and ability to provide service at a short notice and short time.
3. The Bidder should have minimum turnover, the bidder quoting less than Rs. 50.00 Lakhs their turn over should be Rs. 75.00 Lakhs, less than One Crore their turn over should be 1.00 Crore and more than Rs. 1.00 Crore their turn over is Rs. 1.50 Crore in last financial year ending march 2010.
4. He should furnish satisfactory performance certificate from the parties concerned to whom bulk supplies were affected, in case such supplies were made. RGUKT may contact any such parties to elicit details.
5. Bidder should be registered under VAT Act/CST Act with the relevant State Sales Tax Authorities. He should furnish along with the bid document, the Relevant VAT/CST Registration Document and PAN / TAN Card copies. Latest VAT return copy should be submitted.
6. Each and Every equipment's supplied should be ISI Mark Equipments.
All bidders shall also include the following information and documents with their tenders (in the Technical bid cover)
 - 6.1 Copies of original documents defining the constitution or legal statues, place of registration, and principal place of business of the bidding firm/entity; written power of attorney of the signatory of the firm to commit the Bidder.
 - 6.2.Machinery/equipment owned by the bidder and number of employees.
 - 6.3 Latest Income Tax Saral form / Returns filed
 - 6.4. List of Present Clientele with contact address & telephone numbers
7. All the certificates furnished along with technical bids should be attested by a Gazetted Officer, counter signed by bidder along with seal.

The bidders must submit all relevant documentary evidence to demonstrate their eligibility for considering their bid. **The tenders received without the above documents will be rejected.**

Electronics Lab Specifications:-

SL. No	Item	Specifications	Qty for each centre	Total Qty for three centres
1	Analog Oscilloscopes (CRO)	<p>Bandwidth: 30MHz</p> <p>No. of Channels: 2</p> <p>Sensitivity: 1mV/Sec on both channels</p> <p>operating modes: Ch1, Ch2, Ch1&Ch2 alternate or chopped, XY operation</p> <p>Rise time: <=12nSec</p> <p>Accuracy: ±2%</p> <p>Time Base: 40ns/div-0.2s/div</p> <p>Trigger bandwidth: 40MHz</p> <p>Triggering Modes: Auto/Variable Level, CRT: 140mm rectangular tube with internal graticule</p> <p>Display: 8X10 cm</p> <p>Input Impedance: 1MΩ 25pF</p> <p>Calibration: Square wave generator 1kHz, 0.2V and 2V±1% for probe compensation</p> <p>Operating Temp.: 0-40°, 85%RH</p> <p>Power Supply: 230V±15%, 50Hz±2Hz, 40VA</p> <p>Accessories: instruction manual, oscilloscope probes</p>	55	165
2	Digital Oscilloscopes	<p>Bandwidth: 60MHz</p> <p>No of Channels: 2</p> <p>Sampling Rate: 500MSa/s per channel(1GSa/sec is highly desirable)</p> <p>Vertical Resolution: 8 bits or higher</p> <p>Vertical Sensitivity: 2mV/div to 10V/div or better</p> <p>Calibration: Auto Calibration</p> <p>Time Base: 5ns/div. to 50s/div. with 50PPM accuracy</p> <p>Input Impedance: 1MΩ±2% 17pF±3pF</p> <p>Rise time: <5.8nSec</p> <p>Acquisition modes: Peak detect, average, sample, single sequence</p> <p>Display: Color TFT (XY & YT) display with sin(x)/x</p> <p>Triggering Types: Auto, Normal, Single Sequence with Pulse width, Edge, Video</p> <p>Trigger Source: CH1, CH2, Ext</p> <p>Automatic measurement of parameters like Period, frequency, +width, -width, peak-to-peak, mean, phase,FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, rise time, fall time</p>	55	165

		<p>Mathematical Analysis: +, -,*,/, Invert</p> <p>FFT Analysis: window types: Hanning, Hamming, Blackman, Rectangular.</p> <p>Device Port USB along with standard software for the fast and easy communication to transfer and save settings, waveforms, measurements, Save waves in .bmp, files as .txt or .xls format</p> <p>Vertically or horizontally expand or compress a live or stopped waveform</p> <p>Host Port USB for easy storage of the waveforms on the USB pen drives</p> <p>Accessories: Oscilloscope probes, user manuals, power cord, software CD</p>		
3	Function Generators	<p>Frequency Range: 0.3Hz-3MHz or better</p> <p>Output Waveforms: Sine, Square, Triangle, Ramp, Pulse, TTL</p> <p>Range Selection: Micro controller based</p> <p>Output Impedance: 50Ω±1%</p> <p>Output Amplitude: 20V_{pp}</p> <p>Sine Wave Distortion: ≤ 1%</p> <p>Square Wave Rise time & Fall time: ≤30ns</p> <p>Triangle Nonlinearity: ≤1%</p> <p>Attenuation: 20 dB, 40dB, & 20dB (variable)</p> <p>DC offset: ±5V adjustable</p> <p>Power Source: 230V±10%, 50Hz±2Hz, 12VA</p> <p>Accessories: Instruction Manual, BNC Cables</p>	110	330
4	Function Generators	<p>Frequency Range: 0.3Hz-3MHz or better</p> <p>Output Waveforms: Sine, Square, Triangle, Ramp, Pulse, TTL</p> <p>Range Selection: Micro controller based</p> <p>Output Impedance: 50Ω±1%</p> <p>Output Amplitude: 20V_{pp}</p> <p>Sine Wave Distortion: ≤ 1%</p> <p>Square Wave Rise time & Fall time: ≤30ns</p> <p>Triangle Nonlinearity: ≤1%</p> <p>Attenuation: 20 dB, 40dB, & 20dB (variable)</p> <p>DC offset: ±5V adjustable</p> <p>Modulation: FM, PWM, AM</p> <p>Power Source: 230V±10%, 50Hz±2Hz, 12VA</p> <p>Accessories: Instruction Manual, BNC Cables</p>	110	330
5	DC Power Supply	<p>Output Voltage: ±12V, +5V</p> <p>Current: 5A</p> <p>Ripple: <1mV_{rms}</p> <p>Power Source: 220V±10%, 50Hz</p> <p>Built-in overheat, overvoltage protection</p>	20	60

		Insulation: between chasis & output terminals >10M Ω at 100V _{dc} , Chasis and voltage plug >50M Ω at 500V _{dc}		
6	Dual Channel Regulated Power Supply	Output: 2*(0-30V)/500mA Load Regulation: $\leq \pm(0.05\%+10\text{mV})$ Line Regulation: $\leq \pm(0.05\%+10\text{mV})$ Ripple : $<1\text{mV}_{\text{rms}}$ Internal resistance: $\leq 10\text{m}\Omega$ Stability : $\leq 2.5\text{mV}$ at full load Recovery time: $\leq 50\mu\text{s}$ Temperature Coefficient: $\leq \pm(0.05\%+10\text{mV}/^\circ\text{C})$ Built-in overheat, overvoltage protection, short-circuit protection Power Source: 220V $\pm 10\%$, 50Hz Insulation: between chasis & output terminals >10M Ω at 100V _{dc} , Chasis and voltage plug >50M Ω at 500V _{dc} Operating Condition: 0-40 $^\circ\text{C}$ RH95%	55	165
7	Linear cum Digital IC tester	Test Family: Analog ICs ADCs, DACs, Op-Amps, Analog Switches, Comparators, voltage followers, sample & holds, Timers, Line Drivers, Receivers, Transistor Arrays, DPM ICs, Voltage Regulators, PWM Generators, OPTO-Couplers, Waveform Generators etc Digital ICs TTL, LTTL, LSTTL, HTTL, STTL, HC-TTL, HCT-TTL, ALS-TTL, CMOS, Peripherals, CPUS, Display Drivers, RAMs Etc Test Sockets: Two 40 pin Universal ZIF sockets for testing digital and linear ICs (mark separately as Linear and Digital) Packages: DIP 4, 6, 8, 14, 16, 18, 20, 22, 24, 28, 32, and 40 pins Display: 16- character by 2-row LCD Display Keyboard: 54 Keys sealed membrane type Power Source: 230V $\pm 10\%$, 1phase, 50Hz $\pm 2\%$	1	3
8	LCR Meter	Accuracy: 0.1% High-speed measurement: 25mS DC and six frequencies: 100/120/1K/10K/20K/100KHz Measurement Parameters: Z, Y, Theta, R, X, G, B, C, L, D, Q, Rdc, N, M Open/Short/Load Correction High-speed contact check Test signal level monitor function	1	3
9	Hall Effect Kit	Electromagnet: Pole Diameter : 30mm Pole Gap : 0-50 mm adjustable Magnetic Field: 5000 in 10mm pole gap Energising Current: 2000 mA DC max Hall Probe : Material: Indium Arsenide Crystal Size: 5mm X 2mm X 0.1 mm	3	9

		<p>Sensitivity: 5mV/ 100mA/ KO e</p> <p>Control Unit : Mains Supply: 230V 50Hz 1ph Output: 0-2000mA DC for magnet 40-100mA DC for Hall Probe Indication: 2000 mA DC for current 20mV DC for probe output</p> <p>Gaussmeter : Sensor: 1mm thick Hall Probe Ranges: 20 KOE & 2 KOE on 31/2 digit</p>		
10	CRO Demonstration Kit	<p>Bandwidth: 20MHz No. of Channels: 2 Rise time: 17.5nSec Accuracy: ±3% Input Impedance: 1MΩ 30pF Pre-Amp, Final Amp Outputs at test points TB generation at test points Sweep Output: 5V_{pp} Triggering Modes: Automatic and variable Trigger Bandwidth: 30MHz CRT: 140mm Rectangular medium short persistence Fault Simulation</p>	4	12
11	Function Generator trainer	<p>Frequency Ranges: Selectable 1Hz to 10 Hz 10Hz to 100Hz 100 Hz to 1kHz 1 kHz to 10 kHz 10kHz to 100KHz Sine Wave Generation: By wave shaping circuit Switched Faults: 4 Nos. Fuse: 350mA, slow blow Power Supply: Max 230V AC, 50Hz±10%</p>	3	9
12	Power Supply trainer	<p>Input: 230V±10%, 50Hz Outputs Zener Diode Output: 10V, 5.6V regulated Regulators Outputs: ±12V regulated, 1.8 to 17V adjustable Load: 5k variable with 1k fixed resistance Bleeder Resistor: 5k variable with 1k fixed Astable Multivibrator: 1Hz, 14V_{pp} Transformer: primary 0 to 220V secondary 18-0-18, 6-0-6 (500mA) Fuse: 500mA</p>	3	9

Note:

- All the items listed in the above table should be with ISI mark.
- Including installation and commissioning.

NOTE

A complete set of bidding documents may be purchased by interested bidders from the RGUKT contact person upon payment of the bid document price which is non-refundable. Payment of bid document price should be by demand draft / cashier's cheque or certified cheque drawn in favor of "Registrar , Rajiv Gandhi University of Knowledge Technologies " and payable at Hyderabad (India).