

BID DOCUMENT
Open Competitive Bid (OCB)
(e – Procurement)
Tender
For
Supply and Installation of
‘Control Systems & Power Electronics Lab Equipment’
at
RGUKT-AP, Srikakulam Campus

Proprietary & Confidential

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NEWS PAPER ADVERTISEMENT

(e-Procurement Tender Notice)



**RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES
SRIKAKULAM CAMPUS**

S.M.Puram (V), Etcherla (M), Srikakulam District, Andhra Pradesh - 532 402

e-Procurement - Tender Notice

Sealed quotations are hereby invited from the registered firms/Authorized Dealers for the Supply of 1000 nos Mattresses and supply & Installation of the Power Electronics and Control Systems Laboratory Equipment at RGUKT-AP, Srikakulam Campus, Andhra Pradesh-532402.

Interested bidders can download the relevant tender documents from 14.11.2024, 11.00AM onwards and submit the bids online through **<https://tender.apecurement.gov.in>** (Andhra Pradesh e-procurement Portal) on or before 05:00 PM on 27.11.2024 for Laboratory Equipment and 04.12.2024 for Mattresses. For more details, please visit **<http://rguktsklm.ac.in/tenders>**

Date:13.11.2024

Sd/- **Administrative Officer**

SECTION-1: TENDER SCHEDULE

Reference No	Ref. No.: RGUKT/AP/SKLM/e-Proc/Control Systems & Power Electronics Lab Equipment/ ET05/2024, dt.14.11.2024
Bid Calling Date	14.11.2024
Processing Fee (Non-refundable)	Rs. 5,000/-
Earnest Money Deposit (EMD)	Rs. 27,000/-
Bid Documents Downloading Start Date	14.11.2024, 11:00 AM
Bid Document Downloading End Date	27.11.2024, 04:30PM
Last date for uploading of documents online	27.11.2024, 05:00PM
Last date for submission of Hard Copies of EMD, Tender Processing Fee and other necessary documents (scanned copies)	30.11.2024, 05:00PM
Technical Bid opening date/time	01.12.2024, 10:00AM
Price Bid opening date/time	01.12.2024, 2.00 PM
Contact Number	+91 7989399056
Address to which hard copies of tender to be sent	The Administrative Officer, RGUKT-AP, Srikakulam, S.M. Puram (V), Etcherla (M), Srikakulam Dt. Andhra Pradesh. PIN – 532402

CLARIFICATIONS:

- i. Queries (if any) can be made through e-mail only to ao.sklm@rgukt.in on or before 19.11.2024, 05:00PM. Queries received via any mode other than e-mail ID mentioned above will not be entertained. The queries should only be sent in following format on the official letter head of the company.

S. No.	Page No. (Tender Ref.)	Clause	Description	Query

- ii. The addendum/corrigendum (if any) shall be published on the website of RGUKT-AP, Srikakulam i.e. www.rguktsklm.ac.in and on e-procurement platform as well.
i.e. <https://tender.apecurement.gov.in>.
- iii. The participants are requested to submit the bids after receiving the clarifications to the queries if any and also duly considering the changes made in the tender document based on the queries received from the various vendors, if any. Bidders are totally responsible for incorporating/complying the changes/ amendments made by RGUKT-AP, Srikakulam Campus..

PREAMBLE:

The Government of Andhra Pradesh has established Rajiv Gandhi University of Knowledge Technologies (RGUKT) in 2008 to cater to the educational needs of the meritorious rural youth of Andhra Pradesh state. RGUKT-AP, Srikakulam is one of its autonomous campuses started in 2016. The Institute provides an ambiance of excellence for the pursuit of knowledge leading to B.Tech degree in different branches of Technology.

Rajiv Gandhi University of Knowledge Technologies-AP, Srikakulam invites online tenders for Supply and Installation of ‘**Control Systems & Power Electronics**’ Lab Equipment at RGUKT-AP, Srikakulam, from reputed Original Equipment Manufacturers (OEM) / Authorized distributors through e-procurement platform (i.e. www.apecurement.gov.in).

SCOPE OF WORK:

Supply and Installation of ‘**Control Systems & Power Electronics Lab Equipment**’ at RGUKT-AP, Srikakulam Campus.

I. LAB EQUIPMENT AND SPECIFICATIONS:

Control System Lab

S.NO	ITEMS	SPECIFICATION	ITEM DESCRIPTION	MAKER	QUANTITY
1	TIME RESPONSE OF SECOND ORDER SYSTEMS KIT	System is basically RLC network. Square wave output with variable amplitude and frequency provision. Variable resistor (Potentiometer) need to be provided on the front panel apart from fixed resistances for under damped, critically damped and over damped conditions.		Power labs (or) Powertronics	1
2	Characteristics of Synchros, Synchro Transmitter and ReceiverSynchros, (Synchro transmitter,receiver kit)	The input and Output angular displacement displayed on dials. Two terminals (R1 & R2) and stator terminals (S1,S2,& S3) are brought out on the front panel. AC panel meter is provided to measure the Voltage of stator and rotor points.		Power labs (or) Powertronics	1

3	Programmable Logic controller- Study and verification of truth tables of logic gates, simple Boolean expressions and application of speed control of motor (PLC Trainer kit with DELTA make PLC)	DELTA make PLC 8 Input, 6 Output with built in relays, ON –OFF, phase indication lamps, over load protection, Control panel with indicating lamps, toggle switches. Downloading Cable : RS – 232/USB Ladder programming software In built Power supply- 24 V DC/2A PMDC motor - 24V	Downloading cable for downloading ladder program Total setup can Study of ladder logic programmes. Verification of truth table of logic gates and simple Boolean expressions Can able to do Speed control of PMDC motor	Power labs (or) Powertronics	1
4	Desk top	Make : Dell/HP Monitor : 17 inches Processor : Intel core i5 12th Generation Clock speed : 3.0Ghz or Higher Chipset : system on chip/OEM CACHE Memory : 4 MB or Higher RAM : 8 GB DDR4 and extendable slot up to 16 GB RAM or higher Display : 21.5 FHD high brightness anti –Glare LED backlight display with 1920 X 1080 pixel resolution or more Audio : Two Built- in stereo speakers with high – definition audio support. Built in digital microphone Hard Disk : 512 GB SSD Ethernet Controllers : RJ 45 Gigabit Ethernet 10/100/1000 Wireless Device Enabled : Integrated wireless 802.11 ac/b/g/n + BT 4.0 Interfaces : Bluetooth, Audio in & audio out port, HDMI port, RJ-45 Ethernet, Min USB 3.0 Gen			1

		<p>1 Type-A, USB-C, USB2.0 Gen 1 Type A Keyboard & Mouse : Wired keyboard and mouse Operating System : Pre-loaded Microsoft Windows 10/11 Home SL 64 bit with recovery media or image in the machine (Licensed version & lifetime validity) Power supply : 180W internal power supply unit (PSU), 90% HE Power Supply Graphics Card : NVIDIA Geforce GT 710 2GB DDR3 MS Office : Pre-loaded MS Office 2019 H&S/2021 H & S (Licensed version) UPS : 230V & 600VA/360W Uninterrupted Power Supply Warranty : As per the Manufacturer/ Manufacturer warranty</p>			
5	Effect of feedback on DC servomotor kit:-	<p>Voltage : 24V Rating : 35 watts Speed : 1500 RPM Load : Mechanical loading arrangement. PMDC Servo Motor</p>	<p>Using this kit effect of feed back on 24V, 1500 rpm DC servo motor need to be studied. Provision is to be made to load the motor mechanically. Using this kit effect of feed back on DC servomotor to be studied for different loads. That means speed can be maintained constant for different loads using closed loop feedback control system. Consists of P, I & D controller. Proportional controller gain can</p>	Power labs (or) Powertronics	1

			be varied Integral controller gain can be varied. Derivative controller gain can be varied.		
6	i) DC motor	Voltage : 180V Rating : 0.5HP Speed : 1500 RPM Load : Mechanical loading arrangement.		Power labs (or) Powertronics	1
7	ii) Controller unit	Suitable for the above DC motor to vary the armature voltage and field voltage with digital meter			1
8	iii) Tachometer	Digital			1
9	Effect of P,PD,PI,PID controller on a second order system (PID Controller trainer (Analog circuit based)	<p>Signals sources-Variable low frequency Square wave and triangle wave generator with variable amplitude. A variable DC voltage(0-12V) A 3 ½ digit digital voltmeter of + 19.99 volt The triangular wave is used for external x-deflection in the CRO The Controller is an analog proportional, Integral Derivative (PID) in which the PID parameters are adjustable 10 turn calibrated potentiometers with dial The values can be set with in the following range through 10 turn calibrated potentiometers with dial. Proportional gain – Kc - 0 to 20 Integral gain – Ki - 0 – 1000 Derivative gain – Kd - 0 – 0.01. First Order system : First order system with time constant of 3msec Second Order system : Second order system using</p>	<p>A variable DC 0-12V is available on the panel and be used as a dc input or set voltage A 3 ½ digit digital voltmeter of + 19.99 volt is provided on the panel to measure different steady state voltages like set voltage, feedback voltage and output voltage.</p>	Power labs (or) Powertronics	1

		<p>RLC With variable damping factor. Time constant : 1 msec – suitable for – square wave input. Integrator : 2 msec time with 180° phase shift.</p>			
10	<p>Lag and Lead compensation – magnitude and phase plot (Lead-Lag network study unit):</p>	<p>Sine wave generator – 50Hz – 1.0KHz Microcontroller based LCD display A digital voltmeter Different values of resistors & capacitors supplied along with this unit to connect in Lead – Lag Network.</p>	<p>Microcontroller based LCD display to display the frequency/phase angle meter with lead/lag indication. A digital voltmeter is provided to measure the V_{peak} of Network input & Network output to calculate gain.</p>	<p>Power labs (or) Powertronics</p>	1
11	<p>DC position control system kit</p>	<p>a) Provision for positive and negative feed back of tacho generator output. 12V PMDC motor gear train Servo potentiometer with full 360 degree rotation Calibrated dials for reference and output position –1degree resolution. Analog voltmeter for deviation measurement Provision for variable tacho gain and amplifier gain. Different test points facilitate to clear understanding of entire system Instrument with transparent acrylic on top . Provision for study of open loop and closed loop. 230V ,50Hz Ac operation.</p>		<p>Power labs (or) Powertronics</p>	1

12	Temperature controller by using PID kit	Provision to adjust the gain of P,I,& D. Heating source DHT11 Digital sensor A Solid state relay A DHT11 temperature sensor An LCD display heater/oven	This is used as temperature sensor to conduct the experiments. This relay is provided to control the temperature of the oven A DHT11 temperature sensor is attached to the oven. An LCD display is provided to display set value (SV) and to read the process temperature. This setup consists of a heater/oven whose temperature has to be controlled in closed loop control using PID	Power labs (or) Powertronics	1
13	Characteristics of AC servomotor kit	Two phase AC servomotor – 230Volts Auto transformer Digital ammeter Microcontroller based digital speed indicator using Photo electric sensor Indirect loading using PMDC motor	Auto transformer to vary the control voltage to vary the speed	Power labs (or) Powertronics	1
14	Work Bench	Dimension & Size Length: 4ft Width: 3ft Height: 3 ft Material: Powder coated steel frame with 18 gauge and wooden top (25mm pre laminated particle board)	A workstation table will be provided by to which the Wiring of various parts of the machine along with accessories like starters, load terminals, measurement modules is to be done.		20

Power Electronics Lab

S.NO	ITEMS	SPECIFICATION	ITEM DESCRIPTION	MAKER	QUANTITY
1	VI characteristics of SCR study unit	a)One potentiometer to vary VGK from 1.5V to 15V@100mA One potentiometer to vary VAK from 3.5V to 30V @500mA 2 SCRs with heat sink One no. 25 Watts Variable load Resistance 3Nos Digital meters This unit is enclosed in a powder coated MS box with screen printed front panel PVC striker Works directly on 230V AC mains	V-I characteristics study trainer and to find out holding and latching current of SCR	Power labs (or) Powertronics	1
2	Switching characteristics of a IGBT kit	IGBT(CT60) with heat sink. One number of Fixed load Resister. One number of fixed loading inductor. One number 3.5V to 30v@500mA variable DC SUPPLY. IC 555 based square wave generator with transistor drive circuit. Works directly on 230V AC mains		Power labs (or) Powertronics	1
3	Switching characteristics of a FET kit	FET with heat sink. One number of Fixed load Resister. One number of fixed loading inductor. One number 3.5V to 30V @ 500mA variable DC supply. IC 555 based square wave generator with transistor drive circuit		Power labs (or) Powertronics	1

4	Single phase controlled bridge rectifier-48V/1A	<p>Microcontroller based firing circuit with LCD display keyboard to trigger 4 nos. of SCR's with pulse transformer isolation connected in single phase half controlled bridge and fully controlled bridge converter power circuit.</p> <p>Power Circuit consists of 4nos. SCR's and 3no. Diodes with fuse & snubber protection. A 24-0-24V/1A AC source as input (Low Voltage operation) to bridge.</p> <p>Works directly on 230V AC Mains. This unit is enclosed in a powder coated MS box with Screen printed front panel PVC striker.</p> <p>Built in Digital Voltmeter and Digital Ammeter.</p> <p>Built in R-load 25Watts and L-load (1Amp).</p>		Power labs (or) Powertronics	1
5	Single phase Parallel Bridge Inverter (SCR based) - 30V/2A	<p>Built in Bridge inverter Firing circuit. Potentiometer to vary the frequency from 50hz to 100hz.</p> <p>Power circuit consists of 4SCRs, 4 diodes and LC commutation components interconnected to form 1-ph parallel full Bridge inverter.</p> <p>All the devices are mounted on suitable</p>	Built in Bridge inverter Firing circuit generates 4 isolated trigger outputs to trigger 4SCR's connected in 1-ph Parallel full Bridge inverter	Power labs (or) Powertronics	1

		heat sink and protected by snubber circuit and fuse.			
6	Rheostat	100 Ohms/2Amps			1
7	DC Regulated Power supply	30V/2A(single output)			1
8	3ph.Bridge inverter with 120° and 180 ° mode-30V/2A	<p>Control circuit is microcontroller based for 120° and 180° operation. Control circuit generates six firing pulses for six IGBTs. Firing circuit frequency can be varied from 10 Hz to 50 Hz.</p> <p>Keyboard with LCD display to set and display frequency. Consists of six IGBT's of 30A/1200V mounted on heat sink protected by fuse. All the components are enclosed in a powder coated MS box. Terminals of each component are brought out to front panel with printed.</p>	Experiment will be conducted by interconnecting each component externally	Power labs (or) Powertronics	1
9	Regulated DC power supply .	30V/2Amps			1
10	Rheostat	100 Ohms/2Amps			3

11	<p>To study Sinusoidal pulse width modulation (Single phase IGBT based PWM inverter -30V/2Amps setup)</p>	<p>Microcontroller based control circuit to accurately vary the pulse width. LCD display (2line x 16 characters) to indicate the parameters and type of modulation. Key board consists of 5 keys – SET, INC, DEC, FREQ/D.CY and RUN/STOP to vary and set the parameters. The frequency can be varied from 20Hz to 100Hz. Opto coupler based isolation/driver circuit to drive 4 IGBT's connected as 1 – phase full bridge inverter. The power circuit consists of 4 IGBT's with built in reverse diodes of rating 19A/600V. All the devices are mounted on proper heat sinks and protected by snubber circuit and fuses. Neatly designed screen printed front panel. Enclosed in a powder coated MS box</p>	<p>The following PWM technique can be studied :- i) Single pulse modulation.ii) Multiple pulse modulation.iii) Sinusoidal modulation. iv) Trapezoidal modulation. v) Staircase modulation. The duty cycle can be varied from 0 to 100%. Carrier frequency – 9 pulses per each half cycle.</p>	<p>Power labs (or) Powertronics</p>	<p>1</p>
12	<p>Regulated DC power supply</p>	<p>30V/2Amps.</p>			<p>1</p>
13	<p>Rheostat</p>	<p>100 Ohms/2Amps.</p>			<p>1</p>
14	<p>To study the performance of DC-DC buck converter at different duty ratios</p>				

15	MOSFET based DC-DC Buck converter-30V/2A	DC chopper control circuit with variable duty cycle and variable frequency. LCD display and keyboard to vary the duty cycle from 10-70%. and to vary the frequency from 2KHz – 5KHz. One number of IRF 460 MOSFET as power switch. Inductor and power diode and capacitor for power circuit.		Power labs (or) Powertronics	1
16	DC power supply	30V/2A(single)			1
17	R-Load: Rheostat	100 ohm/2A			1
18	Single phase square wave bridge inverter using MOSFET-30V/2A	Microcontroller based driver circuit with provision for variable frequency using keys. LCD display to indicate the frequency of the inverter. Opto coupler based driver circuits to drive 4 MOSFETs This unit consists of power circuit using 4MOSFETs mounted on heat sinks and snubber circuit with glass fuse protection for each devices. All the device terminals are brought out on the front panel for interconnections for full bridge inverter circuit		Power labs (or) Powertronics	1
19	Rheostat	100 ohm /2A			1
20	DC regulated power supply	0-30V/2A			1

21	MOSFET based DC-DC Boost converter-30V/2A	Boost converter control circuit using microcontroller with variable duty cycle and variable frequency with optocoupler based driver circuit. LCD display and keyboard to vary the duty cycle from 10-70% and to vary the frequency from 2KHz – 5Khz. One number of IRF 460 MOSFET as power switch. Inductor ,power diodes and capacitor for power circuit. Built in digital voltmeter and digital ammeter.		Power labs (or) Powertronics	1
22	DC power supply	30V/2A			1
23	R-Load: Rheostat	700 ohm/2A			1
24	CRO	Analog 20MHz			6
25	Steel Almirah(Office Wardrobe)	2 Door Steel Almirah. Make & Colour : Any. Height: 1.70m. Width: 0.90m. Depth: 0.45m. No of Shelves: 5	A Steel Almirah will be provided by to which various meters, lab files and lab manuals need to be secured		3

Important Note: A Minimum of 3 years warranty should be given for all lab equipment.

SECTION-2: INSTRUCTION TO BIDDERS

- 1) Bids are invited on the e-procurement platform from the Original Equipment Manufacturers (OEM) /Authorized Dealers (as certified by the OEM on their letterheads) for the Supply and Installation of ‘Control Systems & Power Systems’ Lab Equipment at RGUKT–AP, Srikakulam Campus. The details of bidding conditions and other terms can be downloaded from the electronic procurement platform of the Govt. of Andhra Pradesh i.e. <http://tender.apecurement.gov.in>

2) Bidders would be required to register on the e-Procurement market place <http://tender.apeprocurement.gov.in> and submit their bids online. On registration with the e-Procurement marketplace, they will be provided with a user ID and password by the system through which they can submit their bids online.

3) **TRANSACTION FEE:**

All the vendors who wish to submit their bid(s) have to pay online, an amount equivalent to 0.03% of their final bid value towards transaction fee, with a cap of Rs.10,000/- or Rs. 25,000/-, if the quoted value of the purchase is up to Rs. 50 crores or above Rs.50 crores respectively plus applicable GST levied by Govt. of India, in favour of “The Managing Director, AP Technology Services Ltd, Hyderabad”. The amount payable to APTS is non-refundable.

4) **TENDER PROCESSING FEE:**

The bidders should pay **Rs 5,000/-** (*Rupees Five Thousand only*) in online mode at ap e-procurement portal as a tender fee. All applicable additional charges shall be borne by the applicant and he shall not have any claim what so ever on this account on Government. The paid amount of tender fee is non-refundable.

5) **EMD PAYMENT:**

The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs.27,000/-** (*Rupees Twenty Seven Thousand only*) in online mode at ap e-procurement portal or Bank Guarantee only. The Bank Guarantee shall be drawn in favor of ‘**The Director, RGUKT–AP, Srikakulam**’ payable at Etcherla, Srikakulam. The EMD of the successful bidder shall be returned after the award of the contract and for unsuccessful bidder(s) it would be returned after finalization of the tender.

- a) The bidders shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the bidders fail to observe and comply with the stipulation made herein or backs out after quoting the rates, the amount of earnest money will be forfeited.
- b) The firm(s) who is/are registered with National Small Industries Corporation (NSIC) / and Micro, Small and Medium Enterprises (MSME) Act 2006 with current validity is/are exempted to submit the EMD. (Copy of registration must be provided along with the technical bid)
- c) The EMD, in case of unsuccessful Bidders shall be retained by RGUKT, till the finalization of the tender. No interest will be payable by institute on the EMD.

6) **SUBMISSION OF TENDER:**

The tender shall be submitted online in two parts, viz., Technical bid and Financial bid. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

- a) The bidders need to scan and upload the required documents pertaining to technical bid. The attested copies of all these uploaded documents of technical bid, signed undertaking of tenderer are to be submitted offline to ‘**The Administrative Officer, RGUKT–AP, Srikakulam Campus, S.M. Puram (V), Etcherla (M), Srikakulam (Dt), Andhra Pradesh, PIN–532402**’ on or before **10.05.2023, 05:00PM**. RGUKT–AP, Srikakulam, will consider only the bids submitted online

using the electronic procurement platform of the Govt. of Andhra Pradesh, i.e. <http://tender.apecprocurement.gov.in>.

- b) The price bid has to be submitted online only. Physical submission of the price bid will not be accepted.

SECTION – 3: TERMS AND CONDITIONS

NOTE: Read all the following terms and conditions and sign the acceptance clause following it.

1) PRICE :

Price should be quoted in Indian Rupees (INR) on Door Delivery Basis at RGUKT–AP, Srikakulam inclusive of all the Charges, with break-ups as:

- Basic Cost
- GST
- Total Cost (f.o.r. at RGUKT–AP, Srikakulam)

2) OPENING OF TENDER:

The bidder is at liberty to present either personally or nominate not more than one representative during the opening of the tender. The representative present at the opening of the tender on behalf of the bidder should bring with him a letter of authority from the bidder and proof of identification.

3) VALIDITY OF THE BIDS:

The bids shall be valid for a period of 180 days from the date of opening of the tender. This has to be so specified by the bidder in the commercial bid.

4) AMENDMENT OF TENDER DOCUMENT:

At any time prior to the last date of receipt of bids, Institute may for any reason, whether at its own initiative or in response to the clarifications requested by prospective bidder, can modify the Tender document by an amendment. RGUKT–AP, Srikakulam may at its own discretion extend the last date for the receipt of bids.

5) RIGHT OF ACCEPTANCE:

RGUKT–AP, Srikakulam reserve the right to accept or reject any or all tenders /quotations without assigning any reason thereof and also does not bind itself to accept the lowest quotation or any tender. Any failure on the part of the contractor to observe the prescribed procedure and any attempt to canvass for the work will prejudice the contractor’s quotation or any tender.

6) DELIVERY:

All the goods ordered shall be delivered at RGUKT–AP, Srikakulam campus premises within the period specified in the Purchase Order. All the aspects of safe delivery shall be the exclusive responsibility of the supplier. If the supplier fails to deliver the goods on or before the stipulated date, then a penalty at the rate of 0.5% per week of the total order value shall be levied subject to maximum of 5% of the total order value.

If at any time, during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly submit a written request for extension of the delivery schedule to the RGUKT–AP, Srikakulam with a brief note about the reasons and its likely duration. On receiving the supplier’s communication, the institute shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier’s contractual obligations by issuing an amendment to the contract.

7) LIQUIDATED DAMAGES / TORN:

If the supplier fails to deliver any or all of the goods or fails to perform the service within the time frame(s) incorporated in the tender, the institute shall, without prejudice to other right and remedies available with RGUKT-AP, Srikakulam Campus under the tender, deduct from the quoted price, as liquidated damages/torn, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods and/or services until actual delivery or performance subject to a maximum of 5% of the quoted price. Once maximum is reached, the institute may consider termination of the tender.

8) FORCE MAJEURE :

If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive. Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, RGUKT-AP, Srikakulam Campus party may, at least option to terminate the contract.

9) INSOLVENCY ETC.:

In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified, the institute shall have the power to terminate the contract without any prior notice.

10) BREACH OF TERMS AND CONDITIONS:

In case of breach of any terms and conditions as mentioned above, the Competent Authority, will have the right to cancel the work order/ job without assigning any reason thereof and nothing will be payable by the institute. In that event the security deposit shall also stand forfeited.

11) SUBLETTING OF WORK:

The firm shall not assign or sublet the work/job or any part of it to any other person or party without having necessary permissions in writing from RGUKT-AP, Srikakulam campus, and RGUKT-AP, Srikakulam, is at liberty to refuse, if it thinks fit or unfit. The tender is not transferable. Only one tender shall be submitted by one bidder.

12) RIGHT TO CALL UPON INFORMATION REGARDING STATUS OF WORK:

The institute will have the right to call upon information regarding the status of work/ job at any point of time.

13) TERMS OF PAYMENT:

90% Payment shall be released after the successful delivery of the ordered goods against the submission of the Inspection report by the committee / Purchase Order. Payment of balance 10% would be made after three months on getting 'Satisfactory Certificate' from the concerned department/section. Payment shall be done through online mode only. Hence, details like, Name of the Bank & Branch, Account No., IFSC code etc., have to be furnished along with the bill.

14) ARBITRATION:

If any difference arises concerning this agreement, its interpretation on payment to be made there under, the same shall be settled out by mutual consultation and negotiation. If attempts for

conciliation do not yield any result within a period of 30 days, either of the parties may make a request to the other party for submission of the dispute for decision by an Arbitral Tribunal containing Sole Arbitrator to be appointed by the Secretary, Department of Legal Affairs. Such requests shall be accompanied with a panel of names of three persons to act as the sole arbitrator. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three persons to be submitted by the claimant. The provision of Arbitration and Conciliation Act, 1990 and the rule framed there under and in force shall be applicable to such proceedings.

15) LEGAL JURISDICTION:

All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during or after completion of contract will be settled amicably in a spirit of co-operation and the decision of RGUKT-AP, Srikakulam shall be the final on all such matters and shall be binding on the Bidder. Even then, any dispute that arises will be subjected to jurisdiction of the courts in Srikakulam Dist. of Andhra Pradesh.

16) INSPECTION:

- a) RGUKT-AP, Srikakulam Campus shall have the right to inspect and/or to test the goods to confirm their conformity to the tender specifications at no extra cost to RGUKT-AP, Srikakulam.
- b) The institute reserves the right to inspect and test the equipment, wherever necessary, and reject the Goods after the goods have arrived at the final destination, and it shall in no way be limited or waived by reason that the Goods having previously been inspected, tested and passed by the institute prior to the goods shipment.
- c) The Director, RGUKT-AP, Srikakulam Campus shall be the final authority to reject full or any part of the supply which is not conforming to the specification and other terms and conditions.
- d) No payment shall be made for rejected goods. Rejected items must be removed by the bidders within two weeks of the date of rejection at their own cost and replaced immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.

17) Vendors are informed that based on the information submitted online, a shortlist of the bidders who fulfil all the requirements will be prepared and Financial bids of shortlisted firms only be considered for final evaluation and awarding the bids by the RGUKT-AP, Srikakulam.

18) RGUKT-AP, Srikakulam reserves the right to modify or alter the specifications after short listing of tenderers.

19) The order will be based on the actual requirement at the time of ordering, optional items may also be ordered based on the actual requirements at the time of ordering. Not quoting for this may result in disqualification. The institute reserves the right to change the order quantity or split the orders among multiple vendors without assigning any reason(s) whatsoever.

20) EVALUATION PROCEDURE:

- i. The Technical Bids will be opened as per the schedule given in the tender document
- ii. The tenders will be evaluated so as to ascertain the capability of the bidders to provide the material within the period mentioned above and also to assess whether the bidder satisfies the eligibility criteria as detailed in Clause 3 above or not.
- iii. The rejection of the bidder on technical grounds will be based on the failure to meet eligibility

requirements.

- iv. Price Bids of only those who are successful in the Technical Evaluation will only be opened. The Price Bid of the bidder who does not fulfill the eligibility criteria will not be opened and their tender stands rejected.
- v. Any claims or disputes raised by the unsuccessful bidders in respect of selection process and non-allotment of award will have no legal validity and will not be enforceable against the RGUKT-AP, Srikakulam, No further correspondence will be entertained regarding the disqualification.
- vi. The RGUKT-AP, Srikakulam reserves the right to accept or reject any / or all the tenders without assigning any reasons whatsoever. The RGUKT-AP, Srikakulam, also reserves the right to cancel the selection process for award of the contract at any time. The decision of the Director, RGUKT-AP, Srikakulam is final and binding.

SECTION – 4: TECHNICAL DETAIL

(Parameters and Technical Specifications for executing the work)

1. Tenders are invited with branded/quality material.
2. The participant manufacturer/companies having own manufacturing units or their authorized dealer can only participate. Proof of manufacturing is to be attached. RGUKT-AP, Srikakulam, RGUKT AP may also visit and inspect the manufacture set up as deemed fit.
3. The Bidder should have a minimum annual average turnover of Rs. 10 lakhs in supplying the Lab Equipment in the last three financial years. Income tax statement should be submitted duly signed by the concerned Chartered Accountant with Balance Sheet & ITR Copy.
4. The Bidder should have required experience in supply order of the lab items/equipment at least one work order costing not less than 80% of the estimated Tender value or two work orders costing not less than 60% or three work orders costing not less than 40% of the tender value in any of the last three financial years. A certificate should be submitted with copies of work orders and satisfactory completion certificate from the client.
5. The Bidder should have minimum Liquid Assets Certificate of last two financial year 2022-23 & 2023-24 for a value not less than 100% of the estimated Tender value in the form of Certificate by any Nationalized Bank/Scheduled Bank.

SECTION – 5: TECHNICAL BID – CHECK LIST

(Tenderer may use separate sheet wherever required)

S.No.	Details of the Firm/Bidder	Page No.
1	Name & Address of the Vendor	
2	Name of the firm and date of incorporation	
3	Details of the cost of the Processing Fee worth Rs.5,000/-	
4	Details of the Earnest Money Deposit (EMD) worth Rs.27,000/-	
5	Are you the authorized dealer /distributor / reseller / Manufacturer for the products quoted?	
6	State clearly whether it is Sole proprietor or Partnership firm or a company or a Government Department or a Public Sector Organization. (Bidders should submit the relevant documents as per law)	
7	Proof of manufacturing dealers participating should enclose 'Dealer Certificate' from their parent manufacturer company & Proof of manufacturing	
8	Copies of 'Work Orders' from the clients	
9	Proof of 'A Class Certificate / Trade License Certificate'/MSME certificate issued by the Govt. of Andhra Pradesh	
10	Latest Income Tax (F.Y. 2022-23, 2023-24) Returns Certificate	
11	GST Registration No. with proof	
12	Whether each page of tender and its annexure have been signed and Stamped	
13	Bidder Acceptance Form (Annexure-I)	
14	Bidder Information Sheet (Annexure-II)	
15	Sheet of List of Major Customers (Annexure-III)	
16	What would be the delivery period in days from the date we place an official purchase order.	
17	On Manufacturer's side to whom RGUKT – AP, Srikakulam have to contact in case of delayed supply and other issues committed by the authorized dealer /distributor / reseller?	

	Contact Details of the bidder: Name & Address: E-mail ID: Telephone/Mobile No:	
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NOTE:

Page number/serial number must be given to each and every page of the Tender Document and the documents attached. Mention page number, wherever the copy (ies) of the document(s) is kept. In case of non-fulfillment of any of the above information/ document(s), the Tender will be summarily rejected without giving any notice.

(Dated Signature of the Tenderer with stamp of firm)

Undertaking:

1. I/we have carefully studied all the terms & conditions of the tender and shall abide by it.
2. I/we shall supply the items of requisite quality.
3. I/we undertake that the information given in this tender are true and correct in all respect and I/We hold the responsibility for the same.

(Dated Signature of the Tenderer with stamp of firm)

Date:

Place:

Annexure - I
BIDDER ACCEPTANCE FORM

From:
(Registered Name & Address of the Bidder)

To
The Director
RGUKT-AP, Srikakulam,
SM Puram (V), Etcherla (M)
Srikakulam District, Andhra Pradesh.
India. PIN-532402
Sir,

Having examined the bidding documents and amendments there on, for the supply, and installation of '**Control Systems & Power Electronics Lab Equipment**' at RGUKT-AP, Srikakulam, SM Puram(V), Etcherla (M), Srikakulam District, Andhra Pradesh in response to your tender call dated.....

1. I/We hereby offer to supply and install the equipment / items as listed in the schedule to this tender hereto as you may specify in the acceptance of Tender at the price given in the said Schedule and agree to hold this offer open for a period of 90 days from the date of opening of the tender.
2. I/we shall be bound by a communication of acceptance / rejection by RGUKT-AP, Srikakulam.
3. I/We have understood the Instruction to bidders and terms and conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly Examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.
4. Certified that ours is:
 - a) A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor
(OR)
 - b) A partnership firm, and the person signing this bid document is a partner of the firm and has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement /by virtue of general power of attorney
(OR)
 - c) A company and the person signing the document is the constituted attorney/ authorized signatory.

(NOTE: Strike out whatever is not applicable. All corrections/deletions should invariably be attested by the person authorized to sign the bid document).

I/We do hereby undertake that, until a formal notification of award, this bid, together with

your written acceptance thereof shall constitute a binding contract between us.

5. If bid is accepted, I/we undertake to;

- a) Provide services/execute the work according to the tender schedule specified in the bid document,
- b) Obtain the performance guarantee of a bank in accordance with bid requirements for the due performance of the contract
- c) Agree to abide by the bid conditions, including pre-bid meeting minutes if any, which remain binding upon us during the entire bid validity period and bid may be accepted any time before the expiration of that period.

6. We understand that you are not bound to accept the lowest or any bid you may receive, nor to give any reason for the rejection of any bid and that you will not defray any expenses incurred by us in bidding.

Yours faithfully,

(Signature)

Dated this day of _____

Address:

Telephone: _____

FAX _____

E-mail _____

Annexure II
BIDDER INFORMATION SHEET

1	Name of the organization	
2	Year of establishment	
3	Registered Office Address	
4	PAN No	
5	GST No	
6	Name & Designation of Authorized person:	
7	Phone No.	
8	Email ID	
9	Nature of the firm (Proprietary/partnership/etc...)	
10	Whether Manufacturer/authorized dealer	
11	Total No. of service centers in India	
	Bank Details of the Agency:	
	Name of the Bank	
12	Branch Details:	
	Bank Account Number	
	IFSC Code	
13	Tender Processing Fee Details (Non-refundable)	Amount Rs. E Transaction ID : Date: Bank:
14	Earnest Money Deposit (EMD) Details:	Amount Rs. E Transaction ID/ BG No: Date: Bank:

Annexure-III
SHEET OF LIST OF MAJOR CUSTOMERS

S.No.	Customer full address with Phone number and mail id	Year of supply	Equipment supplied

PERFORMANCE SECURITY BOND FORM

- 1) In consideration of Rajiv Gandhi University of Knowledge Technologies – AP, Srikakulam (here in after called the RGUKT–AP, Srikakulam) having agreed to exempt (here in after called the said contractor (S) from the demand of Security Deposit/Earnest Money Deposit of Rs. _____ /- on production of Bank Guarantee for Rs. _____ /-. For the due fulfillment by the said contractors of the terms & conditions to be contained in an Agreement in connection with the contract for supply of we, (name of the Bank) (herein after referred to as ‘the Bank’) at the request of Contractor’s do hereby undertake to pay the RGUKT–AP, Srikakulam an amount of not exceeding, against any loss or damage caused to or suffered or would be caused to or suffered by the RGUKT–AP, Srikakulam reason of any breach by the said contractors of any of the terms & conditions contained in the said agreement.
- 2) We (Name of the Bank) _____ do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the RGUKT–AP, Srikakulam stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the RGUKT–AP, Srikakulam reason of breach by the said contractors of any of terms & conditions contained in the said agreement or by reason of the contractors failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee, where the decision of the RGUKT–AP, Srikakulam in these counts shall be final and binding on the Bank. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ /-
- 3) We undertake to pay to the RGUKT–AP, Srikakulam any money so demanded notwithstanding any disputes raised by the contractor(s)/supplier(s) in any suit or proceeding pending before any court or tribunal relating thereto our liability under the present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the contractor(s)/ supplier(s) shall have no claim against us for making such payment.
- 4) We (Name of the bank) agree that the guarantee herein contained shall remain in full force and effect immediately for a period of one year from date herein and further agrees to extend the same from time to time (one year after) so that it shall continue to be enforceable till all the dues of the RGUKT–AP, Srikakulam, under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till RGUKT–AP, Srikakulam certifies that the terms & conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges guarantee.
- 5) We (Name of the bank) further agree with the RGUKT–AP, Srikakulam that the RGUKT–AP, Srikakulam shall have the fullest liberty without our consent and without affecting in any manner our obligations here under to vary and of the terms & condition of said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time to time any of the powers exercisable by the RGUKT–AP, Srikakulam against the said any contractor(s) and to forbear or enforce any of the terms & conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the

said contractor(s) or for any forbearance, and or any omission on the part of the RGUKT-AP, Srikakulam or any indulgence by the RGUKT-AP, Srikakulam to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

- 6) The guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s)/supplier(s).
- 7) This guarantee shall be irrevocable and the obligations of the Bank herein shall not be conditional to any prior notice by RGUKT-AP, Srikakulam.

Date:

For

(Name of the Bank and Branch)

N.B. This guarantee should be issued on non-judicial stamped paper, stamped in accordance with the stamp act.