



UNIVERSITY OF ALLAHABAD

(A Central University)

Limited Tender Enquiry (LTE)

Quotation Ref. No.: SPC/ 39 /2021

Date 13.12.2021

To, _____

Dear Sir,

We intend to purchase following materials/items for Electronic & Communication, UoA. Kindly send your QUOTATIONS giving lowest rates per unit along with terms and conditions in Sealed Cover addressed to Purchase Officer, Purchase & Stores Department, University of Allahabad, and Prayagraj, (UP), Pin-211002 so as to reach this office on or before .07.01.2022 till 05.00 P.M. The word "Quotation for Microprocessor Training Kit, Our Reference No & date of LTE should be clearly mentioned on the sealed envelope.

Sl. No.	Description of the Goods	Quantity Required	Rate per Unit	Total Cost
1	<p>Modern Microprocessor Training kit based on 8085 with LCD Display have following specifications:</p> <ul style="list-style-type: none"> • 8085 Microprocessor (8 bit) chips, operating at 6.144 MHz frequencies. • 32K bytes of EPROM loaded with powerful monitor program. • 8 K bytes of RAM available to the user. • Total on Board memory expansion of 64K bytes using 2732/2764/27128/27256/6264/62256/ with total 4 sockets of 28 pin. • Memory mapping definable by the user. • Battery Backup for RAM. • 24 programmable I/O lines provided through 8255. Expandable to 48 lines • Three 16-bit Timers/Counters through 8253. • RS-232C interface for CRT Terminal • All address, data & control lines are available at 50-pin FRC connector as per STD bus configuration. • On board Graphical LCD 128*64 with 8 Line • On Board USB Interface for PC Interfacing • 104 Keys IBM Compatible Key Board. (USB) • On-Board Real-Time Clock (Optional) • On Board Assembler/Disassembler • On Board Traffic Light Controller • On Board Stepper Motor Interface • On Board Digital Output LED- 8 Nos • On Board Digital input –8 Nos • Powerful software commands • Facility for Down/Up loading files from /to PC. <p>With Built in Power Supply.</p>	25 Nos		
i	<u>Display Module</u>	02		

	<ul style="list-style-type: none"> • Display: 16 x 2-character LCD • Seven segment display: At least 4 nos. • LED bar graph: Require • Interface: Minimum 26 pin FRC cable • Supplied with User Manual 			
ii	I/O Interface Module <ul style="list-style-type: none"> • Keyboard: ASCII keyboard • LED'S: At least 10 nos. • Switches: 4 nos. • Keypad: 4 x 4 matrix hex keypad or higher • Interface: 26 pin FRC cable or more • Supplied with User Manual 	02		
iii	Motor Drive Module <ul style="list-style-type: none"> • On board Stepper Motor with driving circuit Stepper Motor: No of Steps per Rotation: 48(7.5 Deg/Step) Drive, Method: 2-2 Phase, Drive Circuit: Bipolar Chopper, Magnetic Material: Polar anisotropy ferrite sintered magnet (MS500) • On board DC Motor with Fan • Servo Motor • Power Supply: From Microprocessor development platform • Interface: At least 26 pin FRC cable • Supplied with User Manual 	02		
iv	ADC/DAC Module <ul style="list-style-type: none"> • ADC: ADC0809 • DAC: DAC0800 • On board Pot for giving analog voltage 0 – 5 V • Power Supply: From Microprocessor development Platform • Interface: Min 26 pin FRC cable 	02		
v	Wireless Communication Module <ul style="list-style-type: none"> • ESP8266 based Wi-Fi Module • Power Supply: From Microprocessor development Platform 	01		
vi	Elevator simulator Interface Module <ul style="list-style-type: none"> • 4 Switch for 4 Floors • On board 14 LEDs to indicate status and acknowledge the request • Power Supply: From Microprocessor development platform • Interface: At least 26 pin FRC cable • Supplied with User Manual 	02		
vii	Traffic Light Controller Interface <ul style="list-style-type: none"> • On board 4 Cross section with 4 RED LEDs, 4 Yellow LEDs and 8 Green LEDs • Power Supply: From Microprocessor development platform • Interface: At least 26 pin FRC cable • Supplied with User Manual 	02		

viii	Graphical LCD Module <ul style="list-style-type: none"> • On board 128x64 Graphical LCD • Power Supply: From Microprocessor development platform • Interface: At least 26 pin FRC cable • Supplied with User Manual 	02		
ix	Temperature measurement Module <ul style="list-style-type: none"> • On board RTD – PT 100 Sensor • On board Amplifier circuit for signal amplification • On board ADC 0809 for A to D conversion • Power Supply: From Microprocessor development platform • Interface: At least 26 pin FRC cable • Supplied with User Manual 	02		
x	8255 STUDY CARD <ul style="list-style-type: none"> • Power Supply: From Microprocessor development platform • Interface: At least 50 pin FRC cable • Supplied with User Manual 	02		
xi	8155 STUDY CARD <ul style="list-style-type: none"> • Power Supply: From Microprocessor development platform • Interface: At least 50 pin FRC cable • Supplied with User Manual 	02		
xii	8279 STUDY CARD <ul style="list-style-type: none"> • Power Supply: From Microprocessor development platform • Interface: At least 50 pin FRC cable • Supplied with User Manual 	02		
xiii	8253 STUDY CARD <ul style="list-style-type: none"> • Power Supply: From Microprocessor development platform • Interface: At least 50 pin FRC cable • Supplied with User Manual 	02		
xiv	8251 STUDY CARD <ul style="list-style-type: none"> • Power Supply: From Microprocessor development platform • Interface: At least 50 pin FRC cable • Supplied with User Manual 	02		
xv	8257 STUDY CARD <ul style="list-style-type: none"> • Power Supply: From Microprocessor development platform • Interface: At least 50 pin FRC cable • Supplied with User Manual 	02		

2	<p>General Purpose Embedded Trainer. (ADVANCE)</p> <ul style="list-style-type: none"> • On Board USB interface for downloading and communications (using FT232B) • RS232 serial port for the user Design. • On board Toggle switch for following Selection -Downloading the Program into the Microcontroller using Serial port -Downloading the Program into the Microcontroller using USB Port • On Board 8 channel ADC with potentiometers for giving input • On Board DAC Chip • On Board 16*2 LCD Display • On board provision for interfacing 128x64 Graphical LCD • On Board 4 seven segment Display • On Board 4 X 4 Key Matrix • On Board 8 LED Outputs • On Board Two Relays(220V) • On Board two Opto Isolated Inputs • On Board Stepper Motor Controller Driver • On Board DC Motor Controller • On Board Serial EEPROM 24C04 • On Board Thermistor Temperature sensor • On Board LDR sensor • On Board Buzzer output • On board interface for servo motor • On board 8x8 DOT LED Matrix interface • On board RTC -1307 • On board SPI Eprom 25C040 • On board Temperature Sensor DS1820 • On board PS2 interface • On Board Amplifier for sensors like RTD, Load cell and Thermo couple • Built in Power Supply • Enclosed in a Plastic Box <p>Supplied with User Manual, Connecting wires, USB cables & CD with Sample programs, Data Sheet & necessary Software</p>	05		
i	<p>8051 Daughter Board</p> <ul style="list-style-type: none"> • Based on 89c51RD2 • All ports are available onboard for the user • On board USB for Downloading the Program • Onboard Reset switch 	01		
ii	<p>PIC Daughter Board</p> <ul style="list-style-type: none"> • Based on PIC 16F877A • All ports are available onboard for the user • Onboard Reset switch • On board USB for Downloading the Program 	01		
iii	<p>ARM7 Daughter Board</p> <ul style="list-style-type: none"> • Based on LPC 2148 	01		

	<ul style="list-style-type: none"> All ports are available onboard for the user Onboard Reset switch On board USB for Downloading the Program 			
iv	AVR Atmega 16 Daughter Board <ul style="list-style-type: none"> Based on AVR Atmega 16 All ports are available onboard for the user Onboard Reset switch On board USB for Downloading the Program 	01		
v	GPS interfacing Module <ul style="list-style-type: none"> GPS module Antenna 12V DC Adaptor Enclosed in a Plastic Box 	01		
vi	GSM Interfacing Module <ul style="list-style-type: none"> GSM module Antenna 12V DC Adaptor Enclosed in a Plastic Box 	01		
vii	RFID Interfacing Module <ul style="list-style-type: none"> RFID Module with EM-18 Sensor Onboard Buzzer 12V DC Adapter 2 RFID CARD Enclosed in a Plastic Box 	01		
viii	Arduino Uno R3 with USB Cable	05		
3	Modern Micro Controller Kit Based on Intel's 8051/31Micro Controller having following specifications: <ul style="list-style-type: none"> 8031/51 Micro controller (8 bit), operating at 20 MHz crystal frequency. 32K EPROM loaded with Powerful Monitor Program 32K bytes of RAM available to the user. 16K /8K Bytes of Scratch pad Ram. Total On board memory expansion to 64K bytes using 27512/62256 with 3 sockets of 28 pin. Memory mapping definable by the user. 48 Programmable I/O lines through 8255 Three 16 Bit Timer/Counters through 8253. 8251 for RS232C interface for PC On Board Interrupt Controller On-Board Real-Time Clock On Board Battery Back Up for RAM 20x4 LCD Display IBM Compatible ASCII Keyboard On Board A/D Converter On Board D/A Converter On Board Opto Isolated Input On Board Relay contacts Additional 8 LEDS available for interfacing to Port 1 	15		

	<ul style="list-style-type: none"> • Additional 8 TTL input available through DIP-Switch • On Board Assembler / Dissembler • Powerful software commands. • Down/Up loading of files from/to PC. • Built in Power Supply 			
4.	<p>High Speed Universal Burner Support 245 IC manufacturers, 34044 different types of devices. Extremely fast speed Supported devices: EPROM, Paged EPROM, Parallel and Serial EEPROM, BPROM, NVRAM, SPLD, CPLD, EPLD, Firmware HUB, Microcontroller, MCU. Built with 48 universal pin-drivers. PC hosted mode and stand-alone mode. Under PC hosted mode the programme is controlled by a PC via USB2.0 (high speed) to program a chip. Only IC manufacturer approved programming algorithms are used for high reliability. (+5%~-5%) and (10%~-10%) Vcc verification enhances programming reliability. Electrical spec. of the AC adapter: AC 100-240V, output 12V/2A; power:15W Advanced and powerful functions. Project function simplifies processes such as device selection, file loading, device configuration setting, program option, and batch file setting into one touch step. Password can be set for project files and production volume control Batch command combines device operations like program, verify, security into a single command at any sequence. Log file is useful for quality tracking. Over-current and over-voltage protection for safety of the chip and programmer hardware. WINDOWS XP/Vista compatibility/Win7/Win10.</p>	01		
5.	<p>COMPREHENSIVE IC TESTER FEATURES</p> <ul style="list-style-type: none"> • Tests most of the 6 to 40 pin ICs in DIP package. The list includes 74/54, 40/45, 93/96 series ICs, EPROMs, RAMs, peripheral ICs, microprocessor (8088/8085/Z80/6502), operational amplifiers, voltage comparators, transistor arrays, optocouplers, analogue switches, voltage followers, timers, A to D converters, D to A converters and miscellaneous analogue ICs. • Automatic testing of variety of ICs. • Potential free 20 pin ZIF socket for testing 	01		

	<p>analogue ICs and 40 pin universal ZIF socket for testing digital ICs are provided.</p> <ul style="list-style-type: none"> • 16-characterX2 line LCD dot matrix display and 16 keys keyboard for man to machine communication and easy operation. • Single step mode enables the user to test the IC step by step. • Self-test facility to test the internal modules of the IC tester automatically at power on and also through 'SELF TEST' key of the keyboard. • Audio alarm to user whenever it is required. <p>SPECIFICATIONS</p> <ul style="list-style-type: none"> • IC PACK: Digital ICs up to 40 pins and analogue ICs up to 20 pins in DIP package. • IC TYPE: Tristate, open collector & bidirectional TTL/CMOS digital ICs also analogue ICs as per list. • TEST BY: Truth table comparison for digital ICs. Functional test of output for various input conditions for analogue ICs. • ZIF: 20 pin DIP ZIF for analogue ICs and 40 pin Universal ZIF for digital ICs. • KEY: 16 keys • DISPLAY: 16-character x 2 line • SUPPLY VOLTAGE: 230V AC. 			
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11. While submitting the quotation following should invariably be mentioned:
- Name of the manufacturer of the item quoted along with brand name, if any, Details of specification.
 - Lowest rate F.O.R. destination. Period of validity of quoted prices - **(Minimum Six Months)**.
 - Firm delivery time from the date of receipt of confirmed order, condition of supply and terms of payment.
- If you are manufacturer of the items or if you have proprietary distribution/sales authorization, please mention it in the quotation. For items of equipment nature the Instruction Manual, Diagram of the circuit drawing must be supplied along with supply without which the delivery shall be incomplete.
 - Please fill in and return the Suppliers Profile Form & Mandate Form. Terms & Conditions as applicable are attached.
 - Quotations will be received **only through courier/post in Purchase Cell, UoA**. Quotations received after the due date and time shall not be considered
 - Modules are dependent on main units. So all items should be considered as a package.


 Purchase Officer
 E-mail. purchasecell.uoa@gmail.com

13/12/21
 हलमहाकाव विश्वविद्यालय
 University of Allahabad



UNIVERSITY OF ALLAHABAD

Terms & Conditions For LTE

1. Quotation received after due date and time shall be summarily ignored.
2. Unsolicited / conditional / unsigned tenders shall not be considered.
3. Complete specification with model and manufacturer name and address should be given while quoting. Literature / Pamphlets should also be enclosed wherever applicable.
4. Rates must clearly indicate all taxes and discounts offered, if any.
5. No price negotiation will be entertained in normal course of action.
6. Delivery shall be given in 30 days of receipt of purchase order at the University Campus. The offered delivery period shall have to be strictly adhered to incase an order is placed.
7. GST would be recovered as per rules. Kindly furnish GST No in the quotation for our records.
8. Payment shall be made on delivery and satisfactory installation of the equipment.
9. After sale, the service will be provided free of cost up to warranty period. Charges after warranty period may be quoted.
10. Tender conditions, if any, or otherwise sent also with the tender shall not be binding on us.
11. The acceptance of the quotation will rest with the competent authority of Allahabad University, who does not bind himself to accept the lowest quotation and reserves the right to himself to reject, or partially accept any or all the quotation & received without assigning any reasons.
12. All the above instructions and our standard terms and conditions must be complied, failing which your offer may be liable for rejection.
13. All suits shall be in the courts of Allahabad District Jurisdiction only.
14. The firm shall have its own printing press and a certificate issued by the competent Authority is required to be enclosed mandatorily.
15. Terms & conditions of purchase as per University rules shall be applicable.
16. Tender should be addressed to the Purchase Officer, Purchase & Stores Department, University of Allahabad, Prayagraj- 211002 (U.P.)
17. If required number of quotations will not be received by the last date of the LTE. The date may be extended as per rule.

Mandate Form for Payment-2019

Public Fund Management System(PFMS) Facility for receiving Payments

Details of Account Holder/Firm:

1.	Firm/Contractor/Agency	
2.	Name of Account Holder	
3.	Complete Contact Address	
4.	Telephone Number	
5.	E-mail	

Bank Accounts Details:

1.	Name of the Bank viz. SBI/PNB	
2.	Branch Name with Complete Address	
3.	Telephone Number and E-mail of Bank Branch	
4.	Whether the Branch is computerized?	
5.	Whether the Branch is RTGS enabled? If yes, then what is the Branch's IFSC Code?	
6.	Is the Branch also NEFT enabled	
7.	Type of Bank Account (SB/Current/Cash Credit)	
8.	MICR Code of Bank	
9.	Complete Bank Account Number	
10	Repeat Bank Account Number	

Date:

Signature of Customer

I hereby certify that all the details mentioned above are true to my knowledge and belief.

Bank Stamp

Signature of Branch Manager

Name.....

Mobile No.....

E-mail.....