

TENDER NOTICE

Sealed Bids are invited from Active Registered Tax Payer (with FBR) Suppliers/authorized Dealers/manufacturers for supply of following Equipment for Communication Lab, Department of Electronic Engineering (DEE), FET (Female), International Islamic University, Islamabad:

Sr .#	Name of Labs/Department/Faculty	Document Fee
1.	Universal Microcontroller Trainers	Rs.1000/-(non-refundable) (Detail of items/ Specifications are mentioned in the tender documents)
2.	Motorized Antenna Trainers GUI Based	

- Tender documents can be downloaded from www.ppra.org.pk and www.iiu.edu.pk.
- Tender fee i. e. Rs.1000/- (Non-refundable) will be deposited along-with bid/tender in shape of Call Deposit/Bank Draft in favor of IIUI.
- Tenders valid for a period of 04 months on F.O.R basis along-with earnest money @ 02% (refundable) of total bid in the shape of Call Deposit/Bank Draft in the name of International Islamic University, Islamabad, must reach in the Office of Mr. Javaid Rabbani, Assistant Director (P&S), Room # 213, (2nd Floor) Administration Block, Sector H-10 International Islamic University, Islamabad, Phone # 9019255 on or before **Tender Closing Date i. e. 19-01-2016 up-till 10:30 A. M. which will be opened on the same date at 11:00 A. M.** in presence of the bidders/their representatives who may like to attend the opening ceremony.
- Only registered Suppliers /authorized Dealers/manufacturers who are active taxpayers in FBR Active Taxpayer List (ATL) are eligible for participation.
- The University reserves the right to accept or reject any/all bid(s)/tender(s) in terms of Section-33 of Public Procurement Rules, 2004.

Asif Munir Babar, Additional Director (P&S), Room # 213, (2nd Floor) Administration Block, Sector H-10 International Islamic University, Islamabad, Phone # 9019255

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD
(Purchase & Stores Section)

No. 17/11/2015/P&S

Dated: _____

M/s _____

SUBJECT: Tender Documents of Equipment for Communication Lab, Department of Electronic Engineering (DEE), FET (Female)

Dear M/s,

You are invited to submit tender for supply of subject items in accordance with the specifications enclosed at **Annex-I**.

2. Sealed tenders valid for a period of 04 months along with Earnest Money @ 02% of the total value of tender in shape of Call Deposit/Bank Draft in the name of "International Islamic University, Islamabad" **must reach the undersigned on or before 19-01-2016 at 10:30 A. M.** The tenders will be opened on the same day at 11:00 A. M. in the presence of the bidders/their representatives who may like to attend the opening.

3. Tenders received after the due date and time will not be entertained.

4. Amendments/alteration/cutting and overwriting etc. in the tender must be signed in full by the person who has signed the tender. Changes or revisions in rates after the opening of tender will not be allowed.

5. Tenders must be in a sealed cover and on the envelope, it must be written in bold letters **"Tender for Supply of Equipment for Communication Lab, Department of Electronic Engineering (DEE), FET (Female)"** to be opened on **19-01-2016** & should be sent in the name of Assistant Director-II (P&S), Room # 213, 2nd Floor Administration Block, Sector H-10 International Islamic University, Islamabad.

6. The General Sales Tax Registration No. issued by the Sales Tax Department must be quoted in the bid, otherwise, tender shall not be considered.

7. Bid (s) without required earnest money or for lesser amount will be rejected as non-responsive.

8. The successful bidder shall have to supply the required items on F.O.R basis strictly within the stipulated period mentioned in the Supply Order otherwise Earnest Money will be forfeited.

9. For successful bidder(s), 05% of total value of Purchase/Supply Order will be held by IIU till the completion of Warranty Period of the items.

10. The University reserves the right to reject all bids in terms of Section-33 of Public Procurement Rules, 2004.


(Javaid Rabbani)

Assistant Director-II (P&S)
 051-9019255

**Specification of Equipment for Communication Lab, Department of
Electronic Engineering (DEE), FET (Female)**

S:NO	Items Name & Specification	Qty.	Unit Price Inclusive of GST (Rs.)	Total Amount
01	<p><u>Universal Microcontroller Trainers:</u></p> <p>UNI-DS6 development board by mikroelektronika</p> <ul style="list-style-type: none"> • GLCD 128 x 64 displays • 2x16 LCD • Power Supply Regulator (9-32V DC or 7-23V AC input power) • Serial EEPROM(24LC01) • voltage regulator (4.096V) • Piezo Buzzer • Temperature sensor DS18S20 One-Wire (-55°C to +125°C (-67°F to +257°F) with 0.5°C accuracy, using 1-wire bus) • MMC/SD Card Slot • ADC (MCP3204) • USB-UART1 connector (02) • LEDs (72) • Push buttons (72) • USB Connector 2.0 • LCD contrast potentiometer • mikroBoard slot • GLCD contrast potentiometer • Touch Panel Controller • IDC10 PORT connectors(10) • DC MOTOR 2 click (DC motor driver boards) TB6593FNG driver IC, 2.5 to 13V (output current of up to 1.2 amps with peaks up to 3.2 amps) • Stepper 2 click (stepper motor driver board) A4988 micro stepping motor driver, external power supply (minimum 7V), output drive capacity 35V and ±2A, Full-, half-, quarter-, eight-, and sixteenth-step modes. • MAX3232 Board (3.0V to 5.5V operating range) <p>Serial 7-seg Display 2 Board (eight 7-segment digits arranged in two rows of four digits.)</p>	05		

S.NO	Items Name & Specification	Qty.	Unit Price Inclusive of GST (Rs.)	Total Amount
02	<u>Motorized Antenna Trainers GUI Based :</u>	03		
	<i>RF Transmitter:</i>			
	<ul style="list-style-type: none"> • Frequency : 100 - 850 MHz Crystal Controlled • Intervals : 50 MHz • Accuracy : 0.01% • Output Impedance : 75 Ohms • RF Level : 90 dBuV Typical • Output Level : Variable with Switchable Attenuator • Modulation : 1 KHz Test Tone • Power Supply : 230V 50 Hz 			
	<i>RF Receiver:</i>			
02	<ul style="list-style-type: none"> • Frequency : 86 860 MHz PLL Controlled • Step Size : 0.05, 0.1, 0.25, 0.5, 1, 10, 100 MHz • Accuracy : 0.01% • Display : 16X2 Backlit LCD • Function s : Menu, Enter, Escape, Up & Down • Memory Location : 1000 individual frequencies can be stored/recalled • Input Impedance : 75 Ohms • Measurement : RF level in dBuV with 0.1dB resolution • Dynamic Range : 110 dB (70 dB Log + 40 dB Attenuator) • Speaker : Inbuilt for Audio output • Manual/ Auto Mode : Data logging for antenna gain & polar/cartesian plot with stepper motor • RS232 interface : Easy connectivity to PC using polar pattern plotting software • Power Supply : 230V 50 Hz 			
	<i>Stepper Motor Controller Unit:</i>			
	<ul style="list-style-type: none"> • Rotation : 0-360 Degrees with 1 Deg resolution • Angular Steps : 1, 5, 10, 45 degrees • Display : 16X2 Backlit LCD • Function s : Menu, Enter, Escape, Up & Down • Memory : 1000 memories for storing angular positions for quick recall • Auto mode : Automatic Rotation with Interface to Receiver • Mode : Clockwise/Anti Clockwise Rotation, Fast /Slow Speed 			

	<p>Experiments:</p> <ul style="list-style-type: none"> • Variation of field strength with distance • Plot radiation pattern of Omni directional antenna • Plot radiation pattern of directional antenna • Polarization of vertical and horizontal antenna • Study resonant and non resonant antenna and estimate VSWR and impedance • Demonstrate reciprocity theorem of antennas • Study current distribution along the element of antenna • Study different antennas polar plots, radiation patterns, gain, beam width, front back ratio • Comparison of different antennas <p>Antennas</p> <ul style="list-style-type: none"> • Dipole L/2 • Dipole L/4 • Dipole 3L/2 • Folded Dipole • Yagi Uda (3E) • Yagi Uda (4E) • Ground Plane with Reflector & Director • Slot • Square Loop • Rhombus • Axial Mode Helix RHCP • Endfire (Phase Array L/2) • Phase Array L/4 • Broadside Array L/2 • Microstrip Patch • Log Periodic • Zeppelin (Horizontal End Fed) • Crossed Dipole LHCP • Crossed Dipole RHCP • Sleeve • Axial Mode Helix LHCP • Monopole 			
Total Value of the bid				
Earnest Money @ 2% of total value of the bid				

Note:

Please give all the available technical details of the items offered by you, supported with the technical literature, brochure, drawings and pictures, client list details, warranty, authorization certificates, etc.

For any further technical query, please contact with Ms. Saba Hameed, Chairperson, DEE (Female) during office timings on phone # 9019352.