

SPECIFICATIONS AND TERMS & CONDITIONS FOR THE PURCHASE OF EQUIPMENTS & SOFTWARES

DUE DATE: 20/01/2012

SPECIFICATIONS: -

- 1. Ni-Multi Sim Software**
National Instruments Departmental License of Multisim/MCU Module for Circuit Simulation and Ultiboard for PCB Designing (Perpetual License) : 50 Users
- 2. NI-Lab View Software**
National Instruments Lab VIEW 2010 or latest Academic Site License with all 25 Toolkits. Department Teaching License includes 1 year of SW Maint, Lab VIEW PDS, Meas Studio, Imaq Vision, Lab View RT, Lab VIEW DSC and other Add on SW (Perpetual License) : 50 users
- 3. NI-ELVIS-II+**
National Instruments ELVIS II (Education Laboratory Virtual Instrumentation Suite) Prototyping Board with Power Cord- Integrated Suite of 12 Virtual Instruments (for Academic Use only) : 03 units
- 4. HF LCR Meter with graphical analysis mode(20 Hz to 120 MHz)** : 1 pc

Test Conditions: -

Frequency Range: 20 Hz to 120 MHz
Basic Accuracy: $\pm 0.05\%$
Frequency resolution: $< 1\text{mHz}$
AC drive level: 10mV to 1 V(rms), 200 μ A to 20 mA (rms)
Signal source impedance: 50 Ω nominal
DC bias: Internal DC bias

Mode of Operation:-

Meter mode: Two user selectable component parameters should be displayed in single and repetitive mode.
Graphical sweep/ Analysis Mode: Two user selectable component parameters can be swept against frequency, AC drive level or DC bias.

Measurement parameters:-

R,Z,X	: 0.01m Ω to 2G Ω	G,Y,B	: 0.01nS to 2kS
L	: 01nH to 2kH	C	: 1fF to 1F
D	: 0.00001 to 1000	Q	: 0.00001 to 1000

All measurements and set up data should be stored in USB Flash memory. Screen shot-Screen Image (Meter/Analysis mode) should be save in .BMP format to USB memory with appropriate file name.

Other facilities like Marker facility, Equivalent circuit analysis, USB port, External port for LED/LCD Monitor, PS/2 keyboard interface port, PC connectivity thru GPIB/LAN as option must be available. Suitable PC interface hardware (Furnace, Sample holder, PID temperature control) and software should also be provided for measurement of A.C. parameters in bulk samples with variation in frequency and temperature from room temperature to 1000 $^{\circ}$ C.

- 5. MATLAB (64 bit) version 2011 with major toolboxes, simulink, block set: Communication Systems, Digital Signal Processing, Neural Network etc. - 20 user academic license.**
- 6. TMS 320 C6x based D.S.P. Evaluation Module DM 642-T.V.P.720 MHz Clock Frequency with JTEG-C x ds 510 USB with C.C.S. (Version 3.3) + linker for Matlab 2011 : 03 units.**
- 7. Software: ISE Version 13.1i for embedded Systems Lab: 20 Users**

TERMS AND CONDITIONS:-

- Rates of the firm/manufacturer/dealer quoting lowest rates will be considered.
- University reserves the right to cancel any item and to increase or decrease the quantity or configuration of items specified without specifying any reason.
- F.O.R. Guru Nanak Dev University, Amritsar.
- Validity of rates will be three months. In case price slashes down, benefit must be passed on to Guru Nanak Dev University, Amritsar.
- All rates must be submitted in sealed envelope in the name of Head, Department of Electronics, Guru Nanak Dev University, Amritsar titled "Tender for the purchase of Software and Equipments".
- Earnest money of 2% of the quoted amount in the shape of demand draft in the favor of Registrar, Guru Nanak Dev University, Amritsar payable at Amritsar must be deposited with the sealed tenders.
- Supply of items must be done within 10 days after order.
- Items quoted should be strictly according to the specifications attached herewith, otherwise, quotation will be rejected.
- Payment after the installation of the equipment in good working conditions according to specifications.
- Sr. No. of items quoted from you may please be mentioned on top of envelope.
- Technical bid and financial bid should be marked and sealed separately and then packed in a single sealed envelope.

NOTE: Those who have already quoted for these items for the tender dated 28/10/2011 need not quote again.