Ref. No. PUR/34/14/5513-32 **Dated: 04.03.2015**

REGISTERED

M/s _____
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Subject: Notice Inviting Quotation for purchase of N/C items for EIE Deptt.

This institute intends to procure the Non-consumable items for EIE Deptt. as per **Annexure-'A**ô Interested Firms/Parties are requested to send the quotation to the office of undersigned in a sealed cover super scribed **"Quotation purchase N/C items for EIE Deptt." on or before 24.03.2015.**

Note: It may be noted that quotation received only through REGISTERED/SPEED post shall be considered. The institute is located in remote area and it takes 5 to 7 days to reach the mail, therefore, quotation be dispatched well in time considering this factor.

N.B.:

1. Rate of Sales Tax/VAT/Service Tax, if extra must be mentioned clearly.
2. Price quoted must be FOR SLIET.
3. Quotation received later than due date are liable to be ignored/rejected.
4. Other terms and condition for submitting the quotation are given on overleaf which must be read carefully before submitting the quotation.
5. We are not responsible for accidental opening of the cover if it is not properly super scribed and sealed.
6. Quotation must be submitted on letter head of the firm with all particular, any other format will not be acceptable.

Faculty I/c (Purchase)

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TERMS & CONDITIONS FOR QUOTATION

DELIVERY	The rate quoted must preferably be free delivery/F.O.R. Longowal after allowing the discount, if any. Where quoted extra ad-valorem rate payable should clearly be indicated. Supply should be made within the specified delivery period.
TERMS OF PAYMENT	Our normal term of payment is within 45 days after receipt of stores in good condition by means of cheque/draft/RTGS.
PERFORMANCE SECURITY	In case the quoted value is Rupees one lac and above, Performance Security @5% of order value in the shape of Acct. Payee Draft, FDR or BG valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations, as per GFR-2005 rules, is also required.
TAXES	No sales tax concession against Form 'C' and 'D' is admissible to this Institute. However, **'Form E'** certificate being an educational institute can be issued if sales tax concession is admissible.
EXEMPTIONS	Excise and customs duties are exempted to the institute. The relevant exemption certificate will be issued to the successful bidder only if the excise duty/custom duty is exclusively mentioned in the Quotation. In case the offered items are to be imported, the rates should be quoted in foreign currency on FOB basis. Basic duty as applicable under notification No. 51/96 customs dated 23.07.1996 as applicable shall be borne by the institute. If the price quoted is in foreign currency then payment shall be made through letter of credit against submission of B.G. of Min. 25% value of supply order, if the order value is more than US$ 10,000 or through Telegraphic Transfer (TT) if the order value is less than US$ 10,000 though Nationalized banks. The bank charges outside India should be borne by the Beneficiary. Clearance at customs will be arranged by us but you will assist our clearance agent. In case of indigenous item the price must be quoted in Indian Rupees and 100% payment will be made only after successful installation, testing and commissioning of equipment. **No advance payment will be made.**
DIRECTOR'S RIGHTS	Director, SLIET, reserves the rights of acceptance or rejection of any or all quotations. The discretion for increasing or decreasing of the quantities also rests with him. SLIET also not bind itself to accept does the lowest price. In case of any dispute, the decision of Director SLIET will be final & binding.
VALIDITY OF QUOTATIONS	Quotations will be considered valid for 03 months from the date of receipt.
CORRESPONDENCE	No correspondence regarding acceptance/rejection of a quotation will be entertained.
SAMPLE/BRAND/ MAKE/WEIGHT	Sample where asked for, will invariably be made available and sent along with the quotations. However, Brand/Make/Weight etc. must be mentioned clearly in the quotations. Technical literature/pamphlet should also be enclosed.
REJECTION	Quotation not confirming to the set procedure as above will be rejected. Conditional, telegraphic quotation shall be rejected out rightly.
DISCOUNT/REBATES	A special discount/rebate wherever admissible keeping in view that the supplies are being made for education purpose in respect of Public Institution of national importance may please be indicated.
GENERAL TERMS	SLIET shall not be held responsible for any postal delay in sending or late receipt of quotation. Quotation should be free from corrections & erasures. **Other terms & Conditions will be applicable as per GFR-2005**. **Faculty I/c (Purchase)**

ANNEXURE-'A

Sr. No.	Name of items with complete specification	Qty.
1.	**Analog Electronics Work Station:** The Work Station should consist of an Instrument panel & working area. The Test Bench is designed with proper instrument panel & sufficient working area of wooden top with antistatic Material. The Work Station made up of M.S. Steel with wooden top on working area. Main specification as follows:- ÅThe Powder coated 1 mm MS steel structure. Å18 mm thick table top with laminated finish. ÅLength = 4 feet; Width = 3 feet; Height = 1430mm ÅTest Bench should have one no. of pull out Drawer with lock. ÅTest Bench should equip with three nos. of 5 Amps Electrical socket & one MCB for overload protection. Åt Should have separate platform for soldering station with electrics socket. ÅLeveling Screws should be provided on all four legs. Test Bench is Consist of the following instruments a) 100 MHz Digital Storage Oscilloscope • Bandwidth 100MHz • Channel Dual analog Channel • Display 64K TFT Color LCD • Sample Rate 1 GSa / sec (SignleCh) ,500 Msa/s (Dual Channel) • Vertical Resolution 8 bits • Vertical Sensitivity 2mV/div- 10V/div. • Lower Frequency Response < 5 Hz • Rise time < 3 ns • Probe attenuation Factor 1x, 5x, 10x, 50x, 100x, 500x, 1000x • Scanning speed range 2ns/div- 50s/div. • Sample rate and Delay Time Base Accuracy ±50 ppm • Waveform Measurement Vp-p, Vmax, Vmin, Vavg, Vamp, Vtop, Vbase,Vrms, Overshoot, Preshoot, Freq, Period,Rise Time, Fall Time, +Pulse Width, • -Pulse Width, +Duty, -Duty, Delay 1 Ÿ 2, Delay 2Ÿ 1 , • Memory Depth 16kpts (Common), and Long memory 1 Mpts • Max. Input Voltage 400V (DC +AC peak, 1 M ohm input impedance) • Cursor Measurement Manual, Track, Auto measure • Time Delay Between Channels 500 ps • Math Functions Built in FFT, +, - , x • Interface USB device , USB host ,RS-232 and support U disk storage and pict bridge print standard • Trigger Mode Edge, Video, Pulse-width, Slope, Alternative,Pattern, Duration • Trigger source CH 1, CH 2, EXT • Trigger Hold Off 500 ns-1.5 s • Additional features Waveform recording and replay facility, pass/fail detection function , PC application software for remote operation,	02

- Input Supply 100V-240VAC rms , 45-440Hz
- Standard Accessories Software and manual CD, 10x Switchable probe ï 2nos., USB cable for PC interface

b) 3 MHz Funstion Generator

- Operating Modes Sine, Square, Triangle, Ramp, Pulse, Invert Ramp, Invert Pulse, TTL, Dc free running, without DC offset.
- Frequency Range 0.3Hz to 10MHz sine wave, square wave Triangular wave ,0.3Hz to 3 MHz Ramp & Pulse wave
- Amplitude Display 20mVpp- 20Vpp, Accuracy: + 2% + 2D
- Frequency stability <0.1%/ hr or 0.2%/ 24hr at constant ambient temperature
- Sine Wave Distortion 0.3Hz - 100kHz: Max.0.5%;
- 0.1MHz ï 0.5MHz: Max. 1.5%;
- 0.5MHz ï 3MHz: Max. 3%;
- 3MHz ï 10MHz: Max.5%;
- Square wave range 0.3 Hz to 10 MHz
- Square Wave Rise time Typ. Ò70ns
- Triangle wave range 0.3 Hz ï 10 MHz
- Pulse Duty Cycle Adjustable 10% - 90% up to 300kHz & 20% to 80% 300kHz to 3MHz
- TTL / Trigger Output Square Wave synchronous to signal output, TTL > 4 Vpp
- Output Voltage 10Vpp in to 50q , Max. 20Vp-p (OC)
- Attenuation Max. 60dB; 2 Steps: 20dB ± 0.2dB Each; Variable: 0 to 20dB.
- Modulation AM STD, AM BAL, FM int (sweep) & Ext., PWM, PAM
- AM: 0 to 100%, DC to 20KHz
- Modulation Input +/- 30 V max
- Sweep speed 20 ms to 4 sec
- Internal Modulation Generator Waveform: Sine, Square, Triangle
- Freq : 20 Hz to 20 kHz
- Frequency Counter more than 4 digit int./Ext. , Auto ranging
- Frequency Counter Range 10 Hz to 40 MHz
- Input Sensitivity 50 mV rms to 500 mV rms
- Display Backlit LCD readout for displaying functions, Frequency modulation modes, Sweep start ï stop-time,% Pulse duty cycle, DC offset, external frequency in Counter mode
- Input Supply 230 V +/- 10 % , 50 Hz

c) Bench top LCR Meter

- Measurement Modes Auto, Manual, L+Q, C+D,R+Q, [Z]+,R+X,G+B,N+ɗ,
- N-,+ɗ,Vs + Vp ,M,L+AL
- Equivalent Circuit Series or parallel
- L+Q L : 0.01 µH to 9999 H
- Q : 0.0001 to 100
- C+D C: 0.001 pF to 99999 µF
- D: 0.0001 to 10
- R+Q R: 1 mq to 99.9 Mq
- Q: 0.001 to 100
- [Z]+ɗ [Z] : 1 mq to 99.9 Mq
- ɗ : -180º to + 180º
- R+ X R: 1mq to 99.9 Mq

- X : 1mq to 99.9 Mq
- N+ɗ N: 1 to 9999
- ɗ -180º to +180º
- N-1+ ɗ N-1 : 0.0001 to 1
- ɗ : -180º to +180º
- Vs + Vp Vs : 230V/N or 115 V/N , 0.01 V resolution
- Vp : 115 V or 230 V AC
- M M: 0.01 µH to 99.99 H
- L + AL L : 0.01 µH to 9999 H
- AL : L/N2 (N defined by user 1 to 999)
- Measurement Accuracy ± 0.2%
- Test Frequencies 100 Hz,120 Hz, 250 Hz,500 Hz,1 KHz,2.5 KHz,5 KHz,
- 7.8125 KHz, 12.5 KHz , 25KHz
- Measurement Absolute value, % value, del value
- Connection 4 Wire Kelvin on BNC guarded connector for probes and fixtures connections.
- Zero compensation Auto calibration on each frequency, open or closed.
- Limit compensation
- Closed : R< 20 q [Z] < 50 q
- Open : [Z] > 10 kq

d) Averaging Selectable 2 to 8 measurements Multimeter

- General Auto & manual ranging , Microprocessor based True RMS DMM ,Front panel Calibration
- DC Voltage Range 200mV, 2V, 20V, 200V, 1000V
- DC Voltage Resolution 10uV, 100uV, 1mV, 10mV, 100mV
- AC voltage Range 200mV, 2V, 20V, 200V, 750V
- AC Voltage Resolution 10uV, 100uV, 1mV, 10mV, 100mV
- DC / AC Current Range 200uA, 2mA, 20mA, 200mA, 2A, 20A
- DC/AC Current Resolution 10nA, 100nA, 1uA, 10uA, 100uA, 10mA
- Resistance Range 200, 2k, 20k, 2000k, 20M (Ohm)
- Resistance Resolution 10m, 100m, 1, 10, 100, 1k (Ohm)
- Frequency Counter 10Hz-20kHz, 20kHz-200kHz, 200kHz-10MHz
- Frequency Counter Resolution 1Hz, 10Hz, 1kHz
- dB measurement -40 to ï 11.8 dBm, -11.8dBm to +8.2dBm, +8.2dBm to +10.0dBm
- DB Measurement Resolution0.01dBm
- Display 5 digit seven segment LED display.
- Other Tests Continuity Testing, front Panel Calibration, Diode Testing, Indication for Blown fuse
- Protection Automatic Electronic Protection, against wrong connection up to 2 A in DC/AC current range.
- Crest Factor Up to 7
- Power Supply 230 V AC +-/ 10%, 50 Hz
- Operating Conditions 0-50ºC, RH80%
- Weight Approx 2.9kg
- Dimensions W x H x D 205 x 95 x 292 mm

e) Temperature controlled Soldering &Desoldering Station 100W

- Password Lock Convenient for control
- °C/°F select mode Set display °C/°F
- Operation mode for Temp. Up down Key

	• Sensor fail Notification • Heater fail Notification • Temperature Range S/A 150-480°C, D/A 300-450°C • Wattage S/A 100W, D/A 100W • Standard Tip S/A 44-710652, D/A 44-915412 • Energy Saver mode The station will enter the sleep mode if it has been idle for 20 minutes, when over 40 minutes without operation the station can enter the power off suspend status and cut off the power of the heater to extend tip life. • Delayed suction • A delayed switch feature has been incorporated for the unit that allows the pump to continue sucking for 1.5 sec. after the actuator switch is released • Display Digital • Input Range 220 ï 240 VAC 50 Hz f) Bread Board Strips: 10 numbers g) POWER SUPPLY 0-5V, 0-30V (VARIABLE), 5Amp (with short circuit protection).	
2.	**TEMPERATURE CONTROL SYSTEM KIT** a. Temperature controller with facilities for P, I, D and relay control blocks b. Operating temperature: Ambient to 90°C c. Separate controls for P, I, D channel gains d. Two settings for relay hysteresis e. Fast 25W oven fitted with IC temperature sensor f. Forced cooling option to ready the oven for next experiment g. Digital display of set and measured temperature on a 3½ digit built-in DVM h. 0-9999 sec. timer on panel for a convenient temperature response experiment i. Buffered output for recorder j. IC regulation in controller circuit power supplies k. 220V±10%, 50Hz mains operation l. Supporting literature and patch cords included	02
3.	**POTENTIOMETER ERROR DETECTOR** m. High quality servo-potentiometers of 360° shaft rotation n. Built-in signal and power sources o. 3½ digit DVM for measurements p. 220V±10%, 50Hz mains operation	02
4.	**LINEAR SYSTEM SIMULATOR** q. Simulated first, second and third order system of type-0 and type-1 (4 combinations) r. Calibrated variable gain amplifier (Resolution 1 : 1000) s. Built-in signal sources: Square wave and Triangular ŬFrequency: 45-90Hz t. Amplitude: 0-2.5V approximately u. Trigger output for perfectly steady display on CRO v. Uncommitted amplifier for phase adjustment w. Provision for disturbance inputs x. 220V±10%, 50Hz mains operation	02