Date: 27/08/2013

## INDIAN INSTITUTE OF TECHNOLOGY KANPUR

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Enquiry no.: PHY/MODERN PHYSICS LAB/2013-14/EQP/3

Enquiry date: 27.08.2013 Closing date: 10.09.2013

Sealed quotations should reach the undersigned latest by 4.00 pm on 10<sup>th</sup> September, 2013

for the following items:

1. Digital Oscilloscope 03 Nos.

2. Digital Multimeters 05 Nos.

3. DC Power Supplies 04 Nos.

# **Technical Specification:**

1. Digital Oscilloscope: Frequency Bandwidth≥50 MHz, Two Input Channels, Real Time Sampling Rate ≥1GS/s, Large TFT/LCD color Display, Selectable ≥20 MHz bandwidth limit, Record length ≥1M point for each channel, Autoset Menu, Probe Check Wizard, Cursors with readouts, Trigger frequency readout, Automatic measurements ≥20, Waveform averaging and peak detection, Dual time base, Fast Fourier Transform (FFT) Features, Pulse Width trigger capability, Video trigger capability with line-selectable triggering, External trigger, Setup and waveform storage, Variable persistence display, USB host and device Interface.

### 2. Digital Multimeters:

- Accuracy:  $\geq 0.1\%$
- Automatic Blocking System (ABS)
- Protective Rubber Holster for rough duty
- Analog scale (Bar Graph)
- Auto Ranging/ Manual Mode

- DC Voltage measurement: few mV to 1000V
- AC Voltage measurement: up to 1000V TRMS measurement
- DC Current measurement: mA to 10A
- AC current measurement: mA to 10A
- Resistance measurement: up to 25.00MW
- Diode continuity, % Duty Cycle
- Capacitance measurement: nF to 30.00mF
- Frequency measurement: Hz to 100.0 kHz
- Temperature measurement

# 3. DC Power Supplies (Dual):

- Voltage Range:  $\geq 50V$
- Current Range:≥ 5A
- Two Digital Panel Displays for the two voltages and currents
- Resolution: 0.01%
- Constant Current and Constant Voltage Operation
- High efficiency and power density
- Overload and Reverse Polarity Protection

#### Terms and conditions:

- Quotations should have a validity of a minimum of 60 days.
- All the equipment should be provided with a replacement warranty of 1 year against manufacturing defects.
- Maximum possible educational discount should be specified on the quotation since all are for teaching purposes.
- Quotations are required in a sealed envelope with enquiry number mentioned on the envelope.
- The delivery period should be within 60 days of placing the purchase order.
- The rate offered should be F.O.R Kanpur for firms located outside Kanpur and free delivery at the Institute premises for local firms.
- Institute is exempted from payment of E. Duty under notification no.10/97
- Institute is entitled to avail concession rate of sales tax as admissible under Sub-sec 5 of Sec 8 C.S.T Act 1956 applicable to Educational/Research institution in inter-state purchase.