



**GAUHATI UNIVERSITY**  
**Department of Instrumentation & USIC**  
**GopinathBardoloi Nagar, Guwahati – 781 014 Assam : India**  
Contact: +919435545453 (M), email: [utpalsarma@gauhati.ac.in](mailto:utpalsarma@gauhati.ac.in)

**Ref.: INSTR&USIC/NIQ/17/176**

**Date: 12.04.2017**

From: Dr. UtpalSarma  
Associate Professor  
Head In-Charge

Notice Inviting Quotation for Supplying Laboratory Equipment

Sealed quotations from the registered dealers/suppliers are invited for supplying the items in the annexed sheet with mentioned specification to the Department of Instrumentation & USIC, G.U. The quotations must be submitted to the HOD; Department of Instrumentation & USIC, G.U. within 15 days from the date of notification of this NIQ in G.U. website. VAT; Unit Price; Model No.etc should be shown clearly in the quotations. **Company's Price List must be enclosed.**

**Terms and Condition:**

1. Gauhati University (GU) reserves the right to modify/cancel the requirements without any further notice.
2. All quotations will be treated as per GU rules and regulations.
3. Quoted rates **MUST** be valid for at least 90 days.
4. Separate quotations must be provided for each list mentioning the list no. over the envelop.
5. Lowest bid will not be the only criterion for selection of dealers/suppliers.

(Utpal Sarma)

Copy to :-

1. System Administrator, GU, with a request to upload in GU Website
2. Department Notice Board.

**List-1 (Biomedical Trainer Kit)**

Sl No	Item	Specification
1	<b>ECG amplifier with 12 Lead Kit</b>	12 Lead Real Time ECG Trainer Study of Standard Unipolar and Bipolar Leads Real time ECG wave measurement Clamp & Suction Electrodes ECG, DSO output through 4mm socket Test point on the top of instrument Study & signal processing output for each Block Gain & Cal adjustable
2	<b>ECG Simulator</b>	Sinus rhythm Sinus bradycardia Sinus tachycardia
3	<b>Int-Ext. Pacemaker Kit</b>	Pacemaker Demo. Type Trainer Internal & External Pacing Pace Pulse Rate 30 to 150 BPM $\pm$ Pulse Duration 2mS. $\pm$ Input ECG sync pulse 9V $\pm$ Audio & Visual Indication
4	<b>Pacemaker Simulator Kit</b>	Pulse Rate adjustable 40 to 120 BPM $\pm$ Output Voltage adjustable 0 to 9V $\pm$ ECG Output 10mV $\pm$ , Pulse Output 0 to 9V $\pm$ Indication Hear Rate, Sync, Patient Input, Selection of arrhythmia AV Block, Bradycardia, Tachycardia, Patient Input 0 to 9V $\pm$
5	<b>Medical Telemetry Analog Signal Kit</b>	ECG /Heart Rate / Respiration Rate Real Time data transfer Real time measurement FM Modulation Power Supply 230 $\pm$ 10%, 50Hz

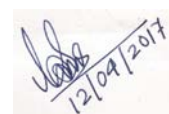


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## List-2 (PLC Trainer Kit)

Sl No	Item	Specification
1	PLC Trainer Kit	<ul style="list-style-type: none"> <li>• PLC-Siemens S-7 1200</li> <li>• Digital Inputs- Minimum 16</li> <li>• Digital Outputs- Minimum 10</li> <li>• Analog input-Minimum 2</li> <li>• Analog output-Minimum 2</li> <li>• Input /Output LED indicator</li> <li>• PC interface facility</li> <li>• Communication Port -RS 232 / RS 485 / Ethernet</li> <li>• Power Supply- 24VDC</li> <li>• Ladder Programming Software</li> </ul> <p style="text-align: center;"><b><u>Interfacing Module with following Specs</u></b></p> <p>DC Geared Motor- 12 / 24VDC, Speed: 0- 60rpm, Torque: 10/20kgcm ; Reactant Tank- 10" X 10"X10", MOC Plastic/PP5mm thick/SS304 (1.5mm thick) (1No.) ; Miniature Heater- 1000W, 230VAC ; Proximity Sensor - Type- Inductive, 3 wire, Distance 7mm, 24 V DC ; Process Tank- 6"X6"X12" (P.P. 5 mm thick) (Quantity: 2 nos.) ; Stirrer- 230VAC, 2 Speed ; Thermostat- 24V DC, Range 30-110°C ; Level Switch- Magnetic Type, Float operated, NO Contact,24VDC Operated ; Solenoid Valve- 24VDC, 6mm Orifice, 1/4 "size ; Power Supply- I/P = 230 VAC, O/P = 24 V DC, 3A ; Conveyor Belt- 70mm X 1225mm (Red) ; Switches- Mains, 6 Amp (Red)Rocker Switch, 16 Amp (Red) ; Relay- 24V DC, 1C/O (2 nos.)</p>

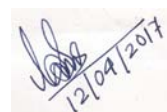


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List-3 (FPGA Development Kit)

Sl No	Item	Specification
1	Xilinx Kintex-7 FPGA KC705 Evaluation Kit Part Number: EK-K7-KC705-G	<ul style="list-style-type: none"> <li>• Featuring the XC7K325T-2FFG900C FPGA</li> <li>• Full seat Vivado® Design Suite: Design Edition or better with 1 year of updates and support</li> <li>• AMS 101 evaluation board</li> <li>• Board Design Files (DxDesigner 2005, Allegro 16.3 – 16.5)</li> <li>• FPGA Mezzanine Card (FMC) interface for I/O expansion</li> <li>• FMC-HPC (Partial Population) connector (4 GTX Transceiver, 116 single-ended or 58 differential (34 LA &amp; 24 HA) user defined signals)</li> <li>• FMC-LPC connector (1 GTX Transceiver, 68 single-ended or 34 differential user defined signals)</li> <li>• PCIe Gen2x4, SFP+ and SMA Pairs, UART, IIC</li> <li>• 1GB DDR3 SODIM Memory</li> <li>• 10-100-1000 Mbps Ethernet (GMII, RGMII and SGMII)</li> <li>• HDMI output</li> <li>• XADC Header</li> <li>• SD Card Interface</li> <li>• LCD Display</li> <li>• PCI Express x8 edge connector</li> </ul>



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