**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA**

 **UNIVERSITY COLLEGE OF ENGINEERING, NARASARAOPET-522601**

**Phone No. 08647226199 Mobile: 7702908555**

**Email:** **principal.ucen@gmail.com**

**TENDER NOTICE**

**Lr. No. JNTUK/UCEN/Laboratory Equipment/2018-19/, Dt.27.06.2018**

Sealed quotations are invited for the supply of **Laboratory Equipment** to our college. For details please refer to the JNTU KAKINADA.

Website: www.jntuk.edu.in**.** Last date for receipt of bids along with E.M.D is

07.07.2018 .

 **Sd/- PRINCIPAL**



4cmx8cm

**TENDER NOTICE**

 **Tender Notice No. JNTUK-UCEN/ Laboratory Equipment /2018-19/, Date: 27.06.2018**

Sealed quotations are invited from reputed Dealers/ Suppliers for the supply of the listed items. The detailed specifications, terms & Conditions for the items can be obtained in respect of items from the undersigned from **28.06.2018 (Saturday)** between **11.00 AM to 5.00 PM** on payment of **. 500/- (Non-Refundable)** in the form of Demand Draft payable at Narasaraopet in favor of **Principal, University College of Engineering JNTUK, Narasaraopet** drawn on any nationalized bank not earlier than date of this notification. The sealed quotations should reach the undersigned on or before **2.00 PM on 07.07.2018.**

The College Authorities reserve the right to accept or reject any or all bids without assigning any reason whatsoever.

 PRINCIPAL

**Tender Notice No. JNTUK-UCEN/ Laboratory Equipment /2018-19**

**Date: 27-06-2018**

**TENDER SCHEDULE**

**GENERAL CONDITIONS:**

1. Please quote your lowest rates for each item described. The quotation should reach this office **on or before 07/07/2018 by 02:00 P.M.** sealed covers should be submitted for the items super scribing as **“Tender Notice No.”, “Description of item” &“Item Number(s)”.** The sealed covers should be sent by the Registered Post (or) to be dropped in the sealed box provided in the office of the Principal. The tender will be **opened on 07/07/2018 at 02:30 P.M.** by the undersigned/his nominee in the presence of the committee members and available tenderers or their representatives.
2. Separate tender forms should be submitted for each item as per the specifications mentioning with the additional features if any.
3. **E.M.D:** The tender documents should be submitted along with earnest money deposit **Rs.5,000/-** in the form of Demand Draft in favor of **“The Principal, JNTUK, University College of Engineering JNTUK Narasaraopet, Narasaraopet”** to be payable at State Bank of India, Narasaraopet. The Demand Draft pertaining to E.M.D. of unsuccessful party will be returned.
4. **PRICES:** The price should be F.O.R. destination inclusive of taxes, packing & forwarding charges, freight and delivery charges. Items on rate contract, if any together with the terms and conditions may please be furnished.
5. **PAYMENT:** 100% payment will be made within a reasonable time only after the receipt of all items in good condition and installation as per given specifications and after testing for satisfactory working and on receipt of the company’s invoice with all Supporting vouchers such as copy of A.P. Sales Tax or VAT Registration certificate etc. **No advance will be paid in any case either in part or in full.**
6. **ACCEPTANCE:** It is not binding on the university/ institution to accept the lowest of the tenders. The university/ institution reserves the right to place orders for individual items with different tenderers.
7. **SPECIFICATIONS:** Full specifications along with the description and make should be mentioned in the tender.
8. **Warranty/Guaranty:** Warranty/Guaranty period should be mentioned by the tenderer.
9. **DELIVERY:** The period of delivery at destination from date of placing orders is **FOUR WEEKS**.
10. **VALIDITY:** The quotations should be valid for at least 90 days.
11. The Institution reserves the right to cancel the tender without assigning any reason.
12. The tenderer should produce copy of Service tax certificate and PAN card.
13. Those who purchased tender schedule officially by paying **Rs. 500/-** in the form of Demand Draft drawn in favor of Principal, JNTUK University College of Engineering, payable at Kakinada are only eligible to participate in the tender. Those who have downloaded the tender schedule from the JNTUK website ([www.jntuk.edu.in](http://www.jntuk.edu.in)) should submit a separate DD for **Rs.500/-** along with the quotation.
14. This Institution being Government educational institution is exempted from payment of Central/State Excise Duty.
15. Since the college is Government institution whatever conditions are applicable to any Government institute shall be applicable even if not specified.
16. Any tender that is received after due date will not be accepted. The college is not responsible for any postal delay.
17. List of Major Customers should be provided.
18. Either Color Letter head or white paper with round seal and signature is compulsory while quoting the tender price.
19. Wherever possible, buyback procedure should be adopted.

**PRINCIPAL**

**Important points for the bidder**

1. Tender should reach office of the Registrar, JNTUK Kakinada in Kakinada on or before

2:00PM on 07/07/2018.

2. The DD for Rs. 500/- which is towards schedule cost is nonrefundable, it can be drawn in any

 Nationalized Bank.

3. EMD of Rs. 5,000/- can be drawn in any nationalized bank. With this EMD of Rs.5,000/- the

 bidder can quote for any one of the items only.

4. EMD will be refunded after satisfactory installation and commissioning of the item procured.

5. If the successful bidder does not honour the purchase order, EMD will not be refunded.

6. The Demand Draft pertaining to E.M.D. of unsuccessful party will be returned.

7. The tender will be opened on 07/07/2018 at 02:30 hrs. by the undersigned/his nominee in the

 presence of the committee members and available bidders or their representatives.

**FORMAT OF QUOTATION\***

**(To be filled in concerned firm letterhead)**

To

The Principal,

University College of Engineering JNTUK Narasaraopet,

Narasaraopet.

 Date:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No** | **Description of goods (with full Specifications)** | **Qty** | **Unit** | **Quoted Unit rate in Rs.** | **Total Amount** |
| **In figures** | **In words** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

 Gross Total cost:

We agree to supply the above goods in accordance with the technical specifications for the total contract price of Rs.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Amount in figures) (Rupees \_\_\_\_\_\_\_\_\_\_\_\_amount in words) within the period specified in the Invitation for Quotations.

We also confirm that the normal commercial warranty / guarantee of months shall apply to the offered goods. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mobile No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\***Applicable while the bids are being invited for more than one item and would be evaluated for all the items together. Modify where evaluation would be made for each item separately.

**Tender Notice No: UCEN/ME/MOS Lab/2018-19, Date: 27-06-2018**

Item No: 1

Department of ME

**Spring Testing Machine**

 **(Mechanics of Solids Lab)**

**Specifications of Spring Testing Machine**

* Maximum load-2500N,
* Clearance between cross heads-250mm,
* Least count for length – 0.01mm,
* Least count for load – 0.1N
* The supplier must deliver the equipment at the laboratory install and demonstrate the equipment without any additional cost.

**Tender Notice No: UCEN/ME/MOS Lab/2018-19, Date: 27-06-2018**

Item No: 2

Department of ME

**Impact Test for both Izod & Charpy**

 **(Mechanics of Solids Lab)**

**Specifications of Impact Test for both Izod & Charpy**

* Charpy-0.2kgm
* Distance of axis of hammer rotation and center of test piece point hit by hammer- Izod-825 mm
* Charpy-825 mm
* Max permissible loss by friction and wind age 0.5% of max impact energy.
* The supplier must deliver the equipment at the laboratory install and demonstrate the equipment without any additional cost.

**Tender Notice No: UCEN/ME/HM Lab/2018-19, Date: 27-06-2018**

Item No: 3

Department of ME

**Performance test on Single Stage Centrifugal Pump**

**(Hydraulic Machines Lab)**

**Specifications of Performance test for Single Stage Centrifugal Pump**

* A mono block centrifugal pump (39 mm inlet X 39 mm outlet), 1.5 HP, 2800 rpm
* A digital tachometer
* A measuring tank of 40 to 50 liters capacity
* A sump tank of 125 to 130 liters capacity

**Tender Notice No: UCEN/ECE/DICA Lab/2018-19, Date: 27-06-2018**

Item No: 4

Department of ECE

**Xilinx – Vivado Design Suite Software**

 (**Digital IC Applications Lab**)

Specifications

Of

Xilinx – Vivado Design Suite Software (25 Users)

# Xilinx Vivado Design Suite with the Following Capabilities and Features

### Accelerating Design and Integration

* Software-Defined IP Generation with Vivado High-Level Synthesis
* Model-based DSP Design Integration with System Generator for DSP
* Block-based IP Integration with Vivado IP Integrator

### Accelerating Verification

* Vivado Logic Simulation
* Integrated Mixed Language Simulator
* Integrated & Standalone Programming and Debug Environments
* Accelerate Verification by >100X with C, C++ or SystemC with Vivado HLS

### Accelerating Implementation

* 4X Faster Implementation
* 20% Better Design Density
* Up to 3-Speedgrade Performance Advantage for the low-end & mid-range and 35% Power Advantage in the high-end.

**Tender Notice No: UCEN/ECE/DICA Lab/2018-19, Date: 27-06-2018**

Item No: 5

Department of ECE

**Xilinx – Digilent Artix 7 Nexys – 4 DDR FPGA Kits**

 (**Digital IC Applications Lab**)

Specifications

Of

Xilinx – Digilent Artix 7 Nexys – 4 DDR FPGA Kits

**Nexys-4 DDR FPGA Board with the Following Capabilities and Features**

* The Nexys4 DDR board featuring the XC7A100T-1CSG324 FPGA
* 99K logic cells (15,850 logic slices, each with four 6-input LUTs and 8 flip-flops)
* 4,860 Kbits of fast block RAM
* Six clock management tiles, each with phase-locked loop (PLL)
* 240 DSP slices
* Internal clock speeds exceeding 450MHz
* On-chip analog-to-digital converter (XADC)

**Tender Notice No: UCEN/ECE/DICA Lab/2018-19, Date: 27-06-2018**

Item No: 6

Department of ECE

**Xilinx – Zynq Zed Development board**

 (**Digital IC Applications Lab**)

Specifications

Of

Xilinx – Zynq Zed Development board

**Zed Board (Zynq-7000) Development Board with the Following Capabilities and Features**

* Zed-Board with the Xilinx Zynq**-**7000 all programmable SoC (AP SoC)
* The Zynq-7000 AP SoCs tightly coupled ARM®processing system and 7-series programmable logic to create unique and powerful designs with the Zed-Board
* Video processing, Motor control, Software acceleration
* Embedded ARM processing, General Zynq-7000 AP SoC prototyping
* Xilinx Zynq-7000 AP SoC XC7Z020-CLG484
* Dual-core ARM Cortex™-A9, 512 MB DDR3 , 256 MB Quad-SPI Flash
* 4 GB SD card, Onboard USB-JTAG Programming, 10/100/1000 Ethernet
* USB OTG 2.0 and USB-UART, Analog Devices ADAU1761 Sigma DSP® Stereo, Low Power, 96 kHz, 24-Bit Audio Codec
* Analog Devices ADV7511 High Performance 225 MHz HDMI Transmitter (1080p HDMI, 8-bit VGA, 128x32 OLED), PS & PL I/O expansion (FMC, Pmod, XADC)

**Tender Notice No: UCEN/ECE/LICA Lab/2018-19, Date: 27-06-2018**

Item No: 7

Department of ECE

**Cathode ray Oscilloscope**

**(Linear IC Applications Lab)**

Specifications

Of

Cathode Ray Oscilloscope

|  |  |  |
| --- | --- | --- |
| **S.No** | **Item** | **Specification** |
| 1 | Cathode ray Oscilloscope | i) Sensitivity 1mV/cm, ii) Operating Modes: CH I/CH II / CH I & CH II, Alt or Chop (frequency 0.5 MHz approx.) Add or Sub +CH I + CH II (with invert switch for both channels,**iii) Bandwidth – 30 MHz****iv) Accuracy - ±2%**v) Time Coefficient Accuracy :18 calibrated steps in 1-2-5 seq 0.5 us/div to 0.2 s/div, with variable to 0.2 us/div, with x10 to 20 ns/div, LED indication when UNCAL + 2% |

**Tender Notice No: UCEN/ECE/LICA Lab/2018-19, Date: 27-06-2018**

Item No: 8

Department of ECE

**Function Generators**

 **(Linear IC Applications Lab)**

Specifications

Of

Function Generators

|  |  |  |
| --- | --- | --- |
| **S.No** | **Item** | **Specification** |
| 1 | Function Generators | i) Frequency Range - 10 Hz to 15 MHzii) Display Accuracy - Up to 3 Hz : ± (1% + 3 D), 3 Hz - 3 MHz : ± (5 × 10 + 1D)iii) Supply - 230 V ± 10%, 50 Hz (100/120/220/240 V available on request)iv) Power Consumption - 22 VA approx.v) Operating Conditions - 0 to 50 °Cvi) Output Voltage - 10 Vpp into 50 , max. 20 Vpp open circuitvii) Attenuation - max. 60 dB 2 steps : 20 dB ± 0.2 dB each Variable : 0 to 20 dBviii) Frequency Change - 1 : 100 approx.ix) Input Impedance - 50 k II 25 pFx) Input Voltage - ±30 V max. |

**Tender Notice No: UCEN/ECE/VLSI Lab/2018-19, Date: 27-06-2018**

Item No: 9

Department of ECE

**Mentor Graphics – HEP1**

 (**VLSI Lab**)

Specifications

Of

Mentor Graphics – HEP1

**Mentor Graphics – HEP1 – 30 Users**

**HEP-1 (IC Nanometer Design Suite: Backend):**

The IC Nanometer Design package with a complete environment for the design, capture, layout and verification of analog, digital and mixed-signal integrated circuits. The package should include all products that incorporate the IC Nanometer Design platform.

* **Pyxis Suite** for Schematic capture, net-listing, simulation setup and results viewing, Physical layout, Editing, schematic-driven layout, and top-level floor-planning and routing
* **Questa ADMS and Questa AMDS RF** - A language-neutral, mixed-signal simulator that enables top-down design and bottom-up verification of multi-million gate analog/mixed-signal SoC designs
* The **Calibre** product line for physical verification and design for manufacturability of deep sub micron integrated circuits.
	+ **Calibre** should be able to perform **Design Rule Check (DRC)** and **Layout Versus Schematic (LRS)**
	+ **Calibre** - The industry standard platform for physical verification, offering superior performance and capacity for both flat and hierarchical algorithms.
	+ **Calibre xRC** - Accurate transistor-level, gate-level and hierarchical parasitic extraction.

**Tender Notice No: UCEN/CE/SFW II Lab/2018-19, Date: 27-06-2018**

Item No: 10

Department of CE

**TOTAL STATION**

 (**Survey Field Work II Lab**)

**Specifications of Total Station**

* **Pentax Window CE Total Station, (Model: W-1502N) with Aluminum Telescopic Stand and Leveling Staves 6m x 5 Sec. Telescopic 5mm standard graduation, black & white with canvase case.**

**Pentax Window CE Total Station (Model: W-1502N) having a strong carrying case with:-**

* Single Prism Assembly with holder and Target Plate
* Range Pole 2 Mts X 2Sec.
* Wooden Tripod Stand
* One USB Data Transfer Cable,
* One Pendrive,
* Two Batteries,
* One Charger,
* One Tommy Pin, One Screw-driver, One Rain Cover.
* One CD containing Instruction Manual,
* One CD containing Active Sync Software,
* One On-board Pentax Field Genius Data Collection,
* Software (Pre-loaded).
* Dual side display, Detachable Tribrach

**Having following features:-**

* Data communication Ports: 1 No. mini USB, 1 No. Pen drive Slot.
* Display: 3.5 inch TFT colour LCD.
* A daylight readable touch screen with backlight illumination.
* Processor Speed : 528 MHz
* Operating System : Window CE \
* Internal Memory: > 1 GB.
* Fast Measurement in quick mode ≤ 2.5 sec. with fast saving time.
* Visible Laser Pointer.
* Graph of entire survey displayed on screen of Total Station with Zoom & Pan facility with line joining / erasing facility & with facility for collecting data in different layers.
* Topo Drawings can be created simultaneously as you measure in layers On-board Total Station.
* Dual axis Compensator.
* On Board pre-loaded graphical software.
* Range under Good Conditions :- Single Prism : > 3.5km
* Can measure Distance without Reflector Up to 500 Meters to a 90% reflective object (in good condition).
* Angle Least Count : 1"
* Angle Accuracy : 2" (As per DIN 18723 / ISO 17123-3)
* Distance Least Count : 1 mm
* Distance Accuracy in Prism Mode : ±(2mm+2ppmxD)mm
* Distance Accuracy in Reflector less mode : 2 ~ 200m : ±(3+2ppmxD)mm
* Battery 8 hrs. Continuous use.
* Laser Plummet in alidade rotating through 360°.
* A Tubular Plate bubble on alidade.
* Three Electronic bubble, one circular bubble in center and
* Two Electronic bubbles at right angles to each other on display panel.
* Alpha Numeric Keyboard with 26 keys in addition to Touch Screen.
* Contours can be created On-board Total Station in colour.
* Many other COGO facilities available.