



Date: 01/01/2022

A D PATEL INSTITUTE OF TECHNOLOGY (ADIT)

(A Constituent college of CVM University)

New Vallabh Vidhyanagar,

Post Box: - 52, Vitthal Udyognagar-388121

Dist: -Anand (Gujarat) India

Phone: 02692-233680

www.adit.ac.in

Tender Notice: ADIT/AICTE IDEALAB/2021-22 dated 01/01/2022

Sealed tenders are invited by Principal, A D Patel Institute of Technology, New Vallabh Vidyanagar, Gujarat for supply of the following item:

| Item No. | Name of the equipment/Items | Specifications | Quantity |
|----------|---|----------------|----------|
| 1 | Laser Cutter & Engraver (Non Metallic components) | Appendix –I | One |
| 2 | Vinyl Cutting plotter | Appendix-II | One |
| 3 | CNC Plasma Cutting Machine | Appendix-III | One |
| 4 | CNC Wood Router | Appendix-IV | One |
| 5 | Tool and Cutter Grinder | Appendix-V | One |
| 6 | Digital Microscope | Appendix-VI | One |
| 7 | PCB Milling Machine | Appendix-VII | One |
| 8 | Electronics workbench | Appendix-VIII | Three |
| 9 | Electric Pipe Bending Machine | Appendix- IX | One |
| 10 | SLA 3D Printer | Appendix-X | One |
| 11 | Homogenizer | Appendix-XI | One |

Place of Delivery:

To,
The Principal (AICTE IDEA LAB)
A.D.Patel Institute of Technology
New Vallabh Vidhyanagar, Post Box:-52
Vitthal Udyognagar-388121
Dist:-Anand(Gujarat) India

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Appendix-I (Item No. 1)

Technical Specifications for Laser Cutter & Engraver (Non-Metallic components)

Quantity: 01

| Specifications | |
|-----------------|-------------------|
| Working Area | : 600 mm x 900 mm |
| Laser Type | : CO2 |
| Laser Power | : 100 Watt |
| Cutting Speed | : 0-30000 mm/min |
| Engraving Speed | : 0-60000mm/min |
| Colling | : Water cooled |

Appendix-II (Item No. 2)

Technical Specifications for Vinyl Cutting plotter

Quantity: 01

| Specifications | |
|--------------------|---|
| Max. Media Width | 700 mm |
| Max. cutting Width | 600 mm |
| Drive motor | Servo ARMS drive |
| Max. Speed | 1100 mm/s |
| Max. Pressure | 1000 g |
| Carriage | Yes |
| Power supply | AC 85 – 264 v/ 50-60Hz |
| Supported Software | Flexi 8, CoralDraw, Anycut, Signmaster |
| Applications | Radium, vinyl, Reflective Retro, Hip, Garment vinyl full cutting, all suitable signage material cutting, digital Sticker half/full cutting, full cutting & creasing for box, Glass vinyl cutting (up to C4), Mobile/laptop skin lamination vinyl cutting, Pen plotting for drawing purpose etc... |

Appendix-III (Item No. 3)

Technical Specifications for CNC Plasma Cutting Machine

Quantity: 01

| Specifications | |
|-------------------|--|
| Bed Size | : 1500 mm × 3000mm |
| Type | : Table Type CNC |
| Cutting Capacity | : 1 mm to 20 mm thickness |
| Cutting Materials | : Mild Steel, Stainless steel and electric Conducting Materials |
| Cutting speed | : Around 2500 mm/min |
| Accessories | : All required accessories like compressor, Drier, stabilizer etc. |
| Type of Control | : Closed Loop |

Appendix-IV (Item No. 4)

Technical Specifications for CNC Wood Router

Quantity: 01

| Specifications | |
|-------------------|------------------------------|
| Working Area | : 1300 mm x 2500 mm x 250 mm |
| Max RPM | : 0-24000 |
| Max Working RPM | : 0-18000 |
| Power Consumption | : 5.5 kW |
| Phase | : 3 Phase |
| Working Mode | : Stepper |
| Rotary attachment | : 125 mm D x 1300 mm L |
| Dust collector | : Required |

Appendix-V (Item No. 5)

Technical Specifications for Tool and Cutter Grinder

Quantity: 01

| Specifications | |
|-----------------------------|--------------------|
| Max Distance Between center | : 300 mm to 350 mm |
| Table dimension | : 500 x 150 mm |
| Grinding Speed | : 2800 RPM |
| Motor | : 1 HP |

Appendix-VI (Item No. 6)

Technical Specifications for Digital Microscope

Quantity: 01

| Specifications: | |
|-------------------|---|
| Model | Inverted Metallurgical Microscope with Digital USB Microscopy Camera with Metallurgical Image Analysis Software |
| Magnification | 50X,100X,200X,500X, & 1000X |
| Objective | 5,10,20,50 & 100X |
| Eyepiece | 10X Paired & 15X Paired |
| Power Source | 50 Watt LED |
| Software Features | Grain Size/Phase Analysis/Nodules/Inclusions/Porosity etc.. |
| Digital Camera | USB 5MP Microscopy Camera with: 1.Resolution/Frame rate 2592x1944 (full resolution): 7FPS /1280 x 960: 27FPS, 640 x 480: 90FPS 2.Exposure time: 0.1ms~3000ms 3.Sensitivity: 0.53V/Lux-sec 4.Dynamic Range: 67 Db 5.Date interface: USB2.0 (B type interface) 6. Pixel Size: 2.2µm x 2.2µm |
| Size | 210mm*180mm with Moving Range 75mm*50mm |

Appendix-VII (Item No. 7)

Technical Specifications for PCB Milling Machine

Quantity: 01

| Specifications | |
|-------------------------------|----------------------------------|
| Working area(X x Y x Z) | : 230X200x15mm |
| Minimum drill hole size | : 0.3mm |
| Minimum cutting trace/space | : 0.2mm(8mil) |
| X/Y resolution | : 0.006mm |
| Spindle speed (MAX. RPM) | : 25000rpm |
| Spindle motor | : BLDC motor |
| Depth sensing and adjustment | : Automatic, Software controlled |
| Tool change | Manual |
| Tool holder | 1/8 inch |
| Auto level/surface inspection | Available |
| X/Y/Z driver | Stepping Motor |
| Dimensions (W x H x D) | (432x320x455) mm |
| Power consumption | 110/220VAC,150W |
| Sound/dust enclosure | Integrated |
| Operating System | Windows 10(32/64bit) |

Appendix-VIII (Item No.8)

Technical Specifications for Electronics workbench

Quantity:03

| Instruments | Specifications |
|---|---|
| One Digital Storage Oscilloscope | 2 Channels, 60MHz, 320 Horizontal 240 Vertical Pixels, USB storage, RS232C, optional J45 interface, High resolution color LCD display, 2mV/div to 50V/div Vertical Sensitivity |
| One Function Generator | Square wave, sine wave, triangle wave, TTL pulse, positive and negative ramp, pulse and skewed sine wave, AM, and sweep functions Voltage ranges: 0-30 Vp-p |
| Two Digital Multimeters | Cell operated, 4½ Digital Multimeter, with capacitance measurement, Hfe, Transistor check |
| One Power Supply | 0-30V regulated variable power supply with 2A, 0-5 V regulated variable power supply with 2A Coarse and Fine regulation |
| Variac | Variable AC supply (0-230V) |
| 3 Female USB port (for supply) | For Arduino types of development board |
| Soldering station with De-soldering station | Soldering: 40W/80W, Max Temp: 480°C Temperature, Multi tip interface De-soldering: 24VAC,80W Soldering: 24VAC,70W Desold pump: 24VDC, 80W Vacuum Pressure: 12000 rpm, 700mm/hg Temp Range: 180 to 480°C Temperature control accuracy +/- 1°C Tip Leakage Current: < 2 mA Temperature control Stability +/- 5°C Tip to Ground Resistance: < 2 Ohms Tip to Ground Leakage Voltage: < 2 mV |

Appendix-IX (Item No. 09)

Technical Specifications for Electric Pipe Bending Machine

Quantity: 01

| Specifications | |
|-------------------------|-------------------------------|
| Type of Machine | : Three roller type motorized |
| Pipe Diameter | : Up to 2 Inches |
| Pipe Thickness | : Up to 3 mm |
| Pipe Bending Material | : MS, GI, SS, Al and Brass |
| Max. Bending Angle | : 180° |
| Electric Motor Capacity | : 5 hp |

Appendix-X (Item No. 10)

Technical Specifications for SLA 3D Printer

Quantity: 01

| Specifications | |
|-----------------------|--------------------------------------|
| Build Volume | 14.5 × 14.5 × 18.5 cm |
| Laser Power | One 250 mW laser |
| Layer thickness | 25 – 300 microns |
| XY Resolution | 25 microns |
| Laser Spot size | 85 microns |
| MATERIALS | Biocompatible, Engineering, and More |
| SUPPORTS | Auto-Generated, Light-Touch Removal |
| Post Processing Unit: | Curing Unit Washing Unit |

Appendix-XI (Item No. 11)

Technical Specifications for Homogenizer

Quantity: 01

| Specifications | |
|------------------------------------|----------------------------------|
| Rated Capacity | : 20-50 LPH |
| No. of Stages | : Two |
| Application | : Fruit Juices and Beverages |
| Operating Pressure | : 300-500 bar |
| M O C of all fluid Contact Surface | : AISI 304 (S.S.) |
| M O C of suction & dis. Valve | : AISI 304 with Stelite Seating |
| Homogenizer Covering | : Teflon coated SS 304 enclosure |



General Conditions and Important Instructions for Bidders

1. Quotation,

- 1.1 Please quote the price of item/equipment as per specification given in Appendix-I to XI in prescribed format given in Annexure-A
- 1.2 The contract shall be for the full quantity for each item as described above.
- 1.3 Corrections, if any, shall be made by crossing out, initialling, dating and rewriting.
- 1.4 Unit price with and without all duties and other levies payable by the supplier under the contract shall be clearly quoted.
- 1.5 Applicable taxes shall be quoted separately for all items.
- 1.6 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 1.7 The Prices should be quoted in Indian Rupees only.

2. Each bidder shall submit only one quotation for each item/Equipment.

3. Quotation shall remain valid for a period not less than 45 days after the last date of quotation submission i.e. 31/01/2022.

4. Evaluation of Quotations,

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

4.1 are properly signed; and

4.2 Confirm to the terms and conditions, and specifications.

5. The Quotations would be evaluated item wise; bidder shall submit a single bid for each equipment and quoted price should be “FOR ADIT-Karamsad”.

6. Award of contract:

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.



- 6.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 6.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
7. 100% Payment of total cost shall be made in Indian Rupees only after successful delivery, installation and one week of testing.
8. All supplied items are under warranty of Minimum 1 year from the date of successful acceptance of items with free repairs and free replacement at our site.
9. **The last date for submitting the sealed tender by person / R.P.A.D /Speed Post / Courier is on or before 31/01/2022 before 04:00 P.M. and tender opening on 01/02/2022 at 3:00 P.M.**
10. Detailed specifications of the items are at Annexure I to XI.
11. Training Clause (if any): Free Training at the time of Installation at our site.
12. Testing/Installation Clause (if any): Free Installation at the time of delivery at our site.
13. Information brochures/ Product catalogue, if any must be accompanied with the Quotation clearly indicating the model quoted for.
14. **Sealed tender to be submitted/ delivered at the address mentioned below, A. D. Patel Institute of Technology, New Vallabh Vidyanagar, Post Box:-52, Vitthal Udyognagar-388121 Dist:-Anand (Gujarat) India. With title line, "Tender Notice: ADIT/AICTE IDEALAB/2021-22"**
15. We look forward to receiving your quotation and thank you for your interest.
16. In case of any dispute, only ANAND jurisdiction is allowed.



Annexure- A

**FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)**

Date: _____

To:

| Sr. No. | ITEM Description | Unit Price | P& F Charges, if applicable | Tax | Quantity | Total Amount |
|---------|--|------------|-----------------------------|-----|----------------------|--------------|
| | | (a) | (b) | (c) | $d=c \times (a + b)$ | |
| 1 | <ul style="list-style-type: none">ModelSpecifications | | | | | |
| 2 | | | | | | |
| | Total | | | | | |

| | |
|-------------------------------------|-------------------------------------|
| Erection & commissioning | Vendor scope (if applicable) |
| Payment Terms | |
| Warranty | |
| Delivery | |
| Insurance | |
| Validity of quotation | |
| Any other remarks | |
| Grand Total (Rs.) | |

(Authorized Signature with Rubber Stamp)

(Name of the Authorized Person)

(Name & Address of the Firm)

(Contact Numbers)