NOTICE INVITING TENDERS

Tender No. CARE/IDEA LAB/08-2025/001   **Date: 13.08.2025**

CARE invites Tender in Two Bid Systems (Technical and Commercial) from Resourceful and Reliable Suppliers/Vendors for the Supply and Installation of AICTE – IDEA LAB Funded Project.

Interested Suppliers may view and download detailed tender documents from CARE's website https://care.ac.in/. Tender can be submitted on or before due date along with necessary documents submitted in hard copy in sealed cover to CARE College of Engineering, #27 Thayanur, Trichy, Tamil Nadu -- 620 009.

Principal
CARE College of Engineering (Autonomous)
No. 27, Thayanur, Trichy - 620 009.

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

BID DOCUMENT

Notice Inviting Tender No.	CARE/IDEA LAB/08-2025/001
Name of the Work	Supply, Installation, Commissioning and Testing the following Equipments / Machines: **ANNEXURE - A**
Other Terms (Vendor has to submit the required documents after installation)	1. Knowledge transfer and training should be provided to the faculty. 2. Include the machine/equipment instruction manual (in English) and the circuit/block diagram in English. 3. The standard operating procedure (SOP) manual to be supplied.
Annual Maintenance Contract	Minimum 2 years after warranty period of 2 Years in total 4 years
Technical Specification	Annexure – A
Declaration in Company Letterhead	Annexure – B
Financial Bid	Annexure – C
Manufacturing Authorization Form (MAF)	Annexure – D
Mandate Form	Annexure - E
Tender Creation Date and Time	14.08.2025 and 10:00 A.M.
Tender Closing Date and time	25.08.2025 and 11:59 A.M.
Technical Bid Open Date and time	25.08.2025 and 03:30 P.M.

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

Eligibility Criteria

1. The Bidder must be an authorized supplier or service provider for the quoted products.

2. The Bidder should not have been blacklisted by any Govt. Dept./Semi-Govt./Dept. or any other organization

3. The Bidder Should be a registered firm/company in India with valid GST and PAN.

4. Each bidder must have an average annual turnover of ₹5 Crores or more over the last three financial years (FY 2022–23, 2023–24, 2024-25). (Proof must be submitted).

5. The Bidder must have the Experience in supplying similar items is essential (proof of past supply must be submitted).

Bid Details

- The contract period is **90 days** from the date of order.

- The quoted prices should be **fixed** and **inclusive of all taxes, duties, and transport charges**.

- Only **one quotation per firm** will be accepted. Any multiple quotations for the same items will be disqualified.

- Item-wise pricing must be provided in the **prescribed financial format**.

Quotation Submission Guidelines

- Bids should be submitted in a **sealed envelope** and should be scripted at the top of the cover as "**AICTE CARE IDEA LAB-EQUIPMENTS**".

- The Technical Bid and the Financial bid should be placed in **separate sealed covers and addressed to The Principal, CARE College of Engineering, #27 Thayanur, Trichy, Tamil Nadu -- 620 009**

Required documents

- GST Registration Certificate
- PAN/TAN Copy
- Item-wise specifications

Quotation Validity

- All quotations must remain valid for **90 days** from the last date of submission.

Evaluation of Quotations

Quotations will be evaluated by the Purchaser's Technical committee based on:

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

- Compliance with specifications and terms.
- Valid documentation.
- Responsiveness and lowest evaluated price.

Award of Contract

- The Purchaser's Technical committee reserves the right to accept/reject any or all quotations without assigning any reason.
- Selected bidders will be notified formally with a **supply order**, and the terms will be binding.

Additional Terms

- Payment will be released **post successful delivery, inspection, and training (if applicable)**.
- Supplier must ensure product warranty and quality assurance.
- Any damage or mismatch during delivery will not be entertained for payment.
- Bidders must **clearly mention applicable taxes (GST)**.

Delivery Location

Materials must be delivered to:

CARE College of Engineering,

#27 Thayanur, Trichy,

Tamil Nadu -- 620 009

We invite all eligible firms to participate and thank you for your interest in contributing to the development of the IDEA Lab.

Principal
CARE College of Engineering (Autonomous)
No. 27, Thayanur, Trichy - 620 009.

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

Annexure A

TECHNICAL SPECIFICATION

S No	Equipment	Specifications	Quantity
1	3D Printer	Build Volume: $256 \times 256 \times 256$ mm. Nozzle Temperature: Maximum of 320°C, suitable for advanced materials like PPA-CF/GF, PPS, and PPS- CF. Chamber Heating: Active heating with a controlled temperature of up to 60°C, reducing warping and improving layer bonding. Printing Speed: Maximum travel speed of 500 mm/s with a toolhead acceleration of 20,000 mm/s². Filtration System: Includes a G3 pre-filter, H12 HEPA filter, and activated carbon filter for effective air filtration. Connectivity: Ethernet, WPA2-Enterprise Wi-Fi, and LAN-only operation for secure and flexible networking. AI Features: AI-powered print failure detection, vibration compensation, and extrusion control for reliable printing. Filament Management: Supports auto filament reloading and multi-material printing. Power Requirements: 100–240V with a maximum power draw of 750W. Dimensions: $389 \times 389 \times 457$ mm³. Weight: Approximately 14.13 kg.	1
2	PCB Milling Machine	Cuttable Materials: Modeling Wax, Chemical Wood, Foam, Acrylic, Poly Acetate, ABS, PCB, FR4, Copper clad, Metal, RT Duroid, Aluminum and etc., Table Size/ Working Area (X/Y/Z) (mm): 220 x 330 x 120 Resolution (X/Y): 3.125 Micro Meter (0.003mm) Repositioning accuracy: 0.01-0.02mm Max Travel Speed (mm/sec): 58 (2.28 ") Drilling (mm): 0.2 -3.175 (8-125 mil) Maximum Drilling Cycles/ Min: 50 Spidle speed/ Main Axle Rotating Speed: 25000 RPM Minimum Width Line & Space in mm: 0.1 (4 mil) Max working speed: 3500mm/min Feeding Height: 120 mm Working drive: 0.02-0.05mm Supported format: Standard Gerber, DXF, Excellon Main Axle Power Rate: 300 W Power: 220 V AC Steel Cabinet Desktop, CPU, Mouse and Keyboard Single Side Copper Clad - 10 No's Double Side Copper Clad - 10 No's Engrave Bits - 10 No's Spring Collecting Chuck Tool Bit Holder PCB Washing Tub - 1 No Digital Microscope Endoscope Camera - 1 Machine Operating and G-Code Conversion Software G-Code Converting Software - Copper CAM (1 user) Machine Operating Software - MACH3 Mill (1 user) Surface Levelling Software - Auto Leveler (1 user) Multipurpose Working Table Solder Masking	1

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

		PTH Masking UV Exposure	
3	Laser Cutter Machine	Structure: Iron Fabrication Structure Laser Power: 60/80/100 Watts Working Area: 600 × 900 mm Z-axis Work Size: 30 mm Transmission Way: X, Y, Z-square linear rail and round timing belt Control System: RD Controller USB Laser Source: CO2 Gas Glass Tube Cooling Way: Water Cooling Chiller Motor: Stepper Mirror: 25 mm Dia Metal Gold Coated Lens: 19 mm Dia German Make Connectivity: USB, Ethernet Cable Command Code: HPGL, G Code Working Speed: 0–400 mm/sec Working Precision: 0.05 mm Power: AC 220V ±10% / 50–60 Hz Controller Software: EzCad Compatible Software: Corel Draw, Autocad, TYPE 3, Artcam, UG, Pro-e Machine Size: 1300 cm × 150 cm × 100 cm Optional Features: AutoFocus Change to 4-axis Up and Down Table Exhaust Fan	1
4	Vinyl Printer and Cutter	Max. Plotter Width: 630 mm CPU Compatibility: Windows 7/10 (32-bit/64-bit) Drive Motor: Stepping Motor Max. Plotter Speed: 800 mm/s Cutting Force: 50–500 g Mechanical Resolution: 0.0254 mm/step Blade Type: Super Steel (1.2 mm and 2.0 mm) Display Panel: 8-digit × 2-line LCD Interface: USB Port, Serial Port Measurement: 960 × 350 × 430 mm Buffer Capacity: 1–4 M Power Requirement: 220 V Stand to be Included	1
5	3D Scanner	Category: Infrared VCSEL structured light Visibility: Invisible Safety: CLASS I (eye-safe) Technology: Infrared linear-array structured light Color scanning: Supported Scanning Features: Alignment modes without markers: Texture/feature/mixed alignments Human body scanning: Invisible light/hair/dark environment scanning; auto removal of shaking layers Medium/large-sized objects: Optimal distance range 300mm – 500mm; Effective working range 280mm – 1000mm Maximum single scanning area: Up to 580mm x 550mm Measurement Rate: Maximum: 1,500,000 points/s Details: Point distance: 0.2 - 3mm	1
6	Mini Desktop Lathe cum Milling	SWING OVER BED: 420 MM DISTANCE BETWEEN CENTER: 500 MM MAX. LONGITUDINAL TRAVEL: 400 MM MAX. CROSS TRAVEL: 195 MM SPINDLE HOLE: 28 MM STEP OF SPINDLE SPEED: 7 RANGE OF SPINDLE SPEED: 160 - 1360 RPM BARREL TRAVEL: 70 MM METRIC THREAD RANGE: 0.2-6MM LONGITUDINAL RANGE OF AUTOMATIC FEEDING: 0.05 - 0.35 MM / 0.002 - 0.014 CROSS RANGE OF AUTOMATIC FEEDING: 0.05 -0.35 MM / 0.002 - 0.014 STEP OF SPINDLE SPEED: 16	1

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

		RANGE OF SPINDLE SPEED: 120 - 300 RPM SWIVEL DEGREE OF HEADSTOCK: 360 MOTOR POWER: 0.55 KW	
7	CNC Router	Working area – 1300 x 2500mm Resolution: ± 0.03/300 mm Repeatability: ± 0.03 mm Z- Gantry clearance – 250 mm Total size of machine- 1700 x 3000 x 1500mm Double motorized-SERVO motors on all axes Electronic assembly- SERVO drives for all axis 25mm rack and pinion 20 mm high precision linear guides on X ,Y axes Backlash free precision hardened and ground ball screw linear rails on Z-axis SINGLE Spindle 5.5 Kw 0- 24000 (Water Cooled) Spindle control(VFD)- INNOVANCE/FOLIN Rapid transverse speed up to 20 meter/minute Max working speed up to 18 meter/minute Lathe structure : welding steel structure AC 220V, 50/60 Hz, Single Phase AC 415V, 50/60 Hz, Three Phase The system should support both Stepper and Servo motors. Table Type: T-slot Linear Guide: Hg 20 for X, Y, and Z axes Command Code: The system should support G Code formats (*nc, *mmg, *plt, *cnc). Operating System: DSP Control System Memory: 128 MB or support for Flash Drive Dust Collector: The system should include a dust collector hood.	1
8	Drilling M/c 1 HP Motor	No Load Speed: 0 - 630 rpm Motor Power: 1 HP Max Torque: 11 Nm Drill Depth: 160 mm Drilling Diameter: 25mm	1
9	Handheld High Speed Drilling.	Rated input power : 450 W Drill chuck, version : Keyed chuck Voltage, electrical : 220–230 V No-load speed, 1st gear : 0 rpm Power output : 250 W Impact rate at no-load speed : 0 bpm Drill spindle connecting thread : 3/8"-24 UNF Chuck capacity, min./max : 1.5 – 10 mm Drilling range Drilling diameter in concrete : 10 mm Drilling diameter in wood : 20 mm Drilling diameter in steel : 8 mm	2
10	Benchtop Grinder Machine	Powerful 373 watts motor Accepts cotton buffing and wire brush wheels Sturdy cast iron base with rubber mounts No Load Speed: 3450 RPM Package Contents: Main Unit, 2 Tool Rest, 2 Eye Shield Material: Plastic, Metal Product Dimensions: 27L x 4W x 15H Centimeters Style: Bench Grinder Power Source: Corded	1
11	Solder stations	Power Rating: Approximately 60 W maximum output power. Temperature Range: Adjustable from approximately 200 °C up to 480 °C. Temperature Stability: Within ±2 °C under normal operating conditions. Heating Element: Ceramic heating element for rapid heat-up and efficient temperature maintenance. Display: Digital or analog temperature display (depending on variant) for precise temperature control. Temperature Control: Adjustable via knob or digital interface with fine resolution. Power Supply: AC 220 V ±10%, 50/60 Hz Safety Features: Thermal cutoff and overload protection within required	5

![CARE COLLEGE OF ENGINEERING logo]

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

		standards. MCH Solid State Element used as compared to winding element used in other's products. ESD Safe Power Supply to Iron: 24 Volts / 60 Watts	
12	Desoldering Machine	Power Source: Corded Electric Wattage: 30 Watts Portable Included Components: Desoldering Iron solder tool This desoldering Iron solder tool adopts durable and ceramic heater. Light weight with a heat resistant plastic handle. Possessing fast and heat dissipation, withstanding high voltage and temperatures. Iron plated tip and stainless steel construction for longer life. 30W Desolder Iron	1
13	Advanced motorized Sewing Machine	Automatic zig-zag sewing machine with compact free arm. Thread Tension Control: Manual Stitch PatternSelector: Dial Type 7 built-in stitches &14 Stitch functionincluding 4-step buttonholing; Seven applications including lace fixing, quilting, smocking and rolled hemming Auto tripping bobbin system;drop feed for embroidery; manualneedle threading; sewinglight Sewing speed: 550SPM (StitchesPer Minute); Stitchlength control; Triple strength stitch	1
14	Wood Lathe	Package size: 1300*820*930mm Working size: 3-260mm diameter, 500mm length Chuck diameter: 160mm Function: Turning,Hollowing, Drilling,Cutting off Tailstock to be Included Transmit: High precision ball screws, linear square guide rails Driving system: Stepper motors and drivers Turning spindle power: 1.1KW Machine total power: 1.5KW Spindle rotate speed: 2800rpm Accuracy: 0.02mm at most Compatible file format: DXF Control system: 4 Axis mini lathe controller Computer system compatible: All Windows Machine and computer connection: LAN cable Machine voltage: AC220V/110V Single phase Standard tools: Hollowing tool and holder: 1 set Cut-off cutter (soft wood cutter): 1 piece Outer turning tool and holder: 1 set	1
15	Corded Drill Machine	Power Source: Corded Electric Maximum Rotational Speed: 2600 RPM Voltage: 240 Volts (AC) Maximum Chuck Size: 10 Millimeters Included Components: Tool Special Feature: Lightweight	1
16	Portable Welding Machine	Power Source: ac Wattage: 4600 Watts Battery Capacity: 200 Amp Hours PORTABLE & COMPACT DESIGN The welding machine has a wide amperage range of 20-200A The no-load voltage ranges from 56-70V	1
17	REFRIGERATOR	Single door refrigerator with Intellisense Inverter Technology Capacity: 184 liters Energy Rating - 2 Star energy efficiency Upto 9 hours of cooling retention	1

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

18	NORMAL AND MICROWAVE OVEN	Capacity: 20 litres Special Feature: Defrost, Turntable, Auto Heat, Timer, Compact,Vapor Clean, Auto Cook defrosting of food without compromising on the textures of flavour. Vapor Clean: Keep oven odor free and stain free with the touch of a button	1
19	Magnifying Glass with Stand	Power adapter: Input 110-240V50/60Hz, Output: DC 4.8V 250mA. Welding holder size: length6.3cm/2.48in, Base size: 10 * 6.8cm / 3.94 * 2.68in (L * W). Features: Material: ABS + electronics material	2
20	Digital Microscope	Batteries 1 Lithium Polymer batteries required. Hardware Interface USB, USB 2.0 Light Source Type LED Compatible Devices Laptop Standing screen display size 6 Inches Maximum magnification1000 x Optical zoom40 x Voltage5 Volts Material Metal	1
21	Mixed Signal Oscilloscope	Mixed Signal Oscilloscope 100 MHZ 4 Channel 2Gsa/s 12 Bit High resolution 7" Touch screen Display: 100 MHz;4 channels; 2 GSa/s; 50 Mpts memory depth; 500,000 wfm/s waveform capture rate; 7" TFT-LCD with capacitive touch screen (1024*600); SPO technology,2 Mpts FFT Serial bus triggering and decode (Standard), supports IIC, SPI, UART, RS232, CAN, and LIN；Support MSO, USB AWG Bode Plot: USB WIFI；Optional: SDS800X HD-16LA MSO function (SW) SLA1016 MSO function hardware for SDS1000X-E oscilloscope, 16-channel, 500 MSa/s, 14 Mpts	1
22	Digital Storage Oscilloscope	Digital Storage Oscilloscope 100MHZ 2 Channel 2Gsa/s 12-bit high resolution with 7" inch touch screen display: 100 MHz;2 channels; 2 GSa/s; 50 M memory depth; 500,000 wfm/s waveform capture rate; 7" TFT-LCD with capacitive touch screen (1024*600); SPO technology,2 Mpts FFT Serial bus triggering and decode (Standard), supports IIC, SPI, UART, RS232, CAN, and LIN；Support MSO, USB AWG Bode Plot: USB WIFI	1
23	Signal generator	Dual Channel Function/Arbitrary Waveform Generator 60MHZ: 60MHz; 2 channels; 150MSa/s; wave length: 16Kpts; function/arbitrary waveform output amplitude:4mV ~ 20Vpp (high impedance); modulation function (AM, DSB-AM, FM, PM, ASK, FSK, PWM, Sweep, Burst); frequency counter function, Easy Pulse technology. Standard interfaces: USB Device, USB Host.	1

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

24	Variable Power Supply	Programmable DC Regulated Power Supply Triple Output: 3 independent controlled and isolated output: 32V / 3.2A×2, 2.5V / 3.3V / 5V / 3.2A×1, total power 220W. Resolution:10 mV/10 mA Three output modes: independent, series and parallel LED display; 32 V full scale, 4 digits; 3.2 A full scale, 3 digits 100V / 120V / 220V / 230Vcompatible design, to meet the needs of different power grids. Intelligent fan for temperature control, effectively reduces noise. Supports SCPI commands & USB device interface.	1
25	Bench Top Multimeter	Benchtop Digital Multimeter 6½ Digit: 6½-digit; 150rdgs / s measurement speed; 4.3 inch (480 * 272) true color TFT-LCD screen display; True RMS AC voltage and AC current measurements. Support GPIB Interface and Scanner Card	1
26	PROJECTOR	Colour: 8000 Lumens projector screen size of up to 381cm. Captivating visuals:Outfitted with a robust LED lamp producing 8000 lumens.	1
27	HEAVY DUTY LASER PRINTER	Connectivity Technology Wi-Fi, USB, Ethernet Printing Technology Laser Special Feature Usb Printer Output Monochrome Max Print speed Monochrome 20 ppm	1
28	COMPUTER WORSTATION IN NET WORKING	Intel Core i5 27" FHD IPS Desktop 16GB/1TB SSD Win11 Camera Wireless Keyboard & Mouse Conn: WIFI+BLUTOOTH	5
29	SMART BOARD	Version: Android 14 RAM: 8GB, ROM: 128GB, 65" or more Processor : OCTA Core Resolution: 3840*2160 @60 Hz Specifications: 4K,IPS Ultra HD Brightness: 450 cd/m²(typ).4MM Toughened Glass Level 9 MoHs, Antiglare/Advanced IR Technology, Multi-touch, Zero Bonding Fast USB Sockets, Type C, HDMI In & OUT, VGA, In Built Speakers, SD Card Slot Available	1
30	Belt and Disc Sanding Machine	Motor: 230V 50Hz Power: 380W S2 30min No-load Speed: 1450rpm Belt Size: 100x914mm Disc Size: 150mm Table Titing Range: 0°-45° Belt Titing Range: 0°-90° Table Size: 190x125mm	1
31	Scroll Saw	Thickness of Cut: 50 mm (2 inch) Throat: 406 mm (16 inch) Length of Stroke: 18 mm (11/16 inch) Strokes Per Minute: 400-1,600 SPM Overall Length: 600 mm (23-5/8 inch)	1
32	Filament Dehydrator	Operating Temperature Range: Min 45°C– 70°C Drying Time Setting: 0–48 hours or higher Hot-Air Heating: upto 360° circulation Moving Speed: 300 mm/s or more Power Rating: 160 W Shipping Weight: 2.5 kg	1
33	SMT Pick and Place Machine	Mounting head Quantity: 2 pieces Mounting Accuracy: 0.05mm	1

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

		Mounting Angle: 0-360 Theorectical Velocity: 8000 pcs/hour Normal Mounting: 6000 pcs/hour Visual Mounting: 4500 pcs/hour Nozzle Type: JUKI Nozzle RC (0402, 0603, 0805, 1206, etc) Element for Mounting: LED lamp (0603, 0805, 3014, 5050, etc) Chip (SOT, SOP, QFN, BGA, etc) Substrate Minimum Size: 10x10 mm Substrate Maximum Size: 320x220-450mm Substrate Thickness: ≤ 2mm Substrate Warp allowed Value: < 1mm 8mm: 40 bit 12mm: 8 bit 16mm: 4 bit 24mm: 2 bit Pre IC Material Level: 10 bit IC Pallet: 1 bit Tubular Feeder: 1 Yingxing special 5 tube tublar feeder (optional) X, Y axis moving range: 430x530mm Z axis moving range: 19 mm Z axis rotation angle: 0-360 Visual System: independent research and development Visual Camera: CCD HD Camera Visual Quantity: 4 pieces Identification ability: Max 20*20mm PC System: Microsoft WIN7 Operational Software: independent research and development Compatible File Format: CSV, TXT, format file Programming Mode: Support online and offline Pressure: 0.4 Mpa (Internal Pump) Vaccum Value: -92kpa Power: 230W Power Supply: AC220V + 10% 50Hz Host Size: L 990 x W 730 x H 385 mm Feeder Size: L 235 x W 700 x H 245 mm	
34	SMT Accessories	1). IC Tray - 2 Nos. 2). Demo board with SMD components - 2 Sets 3). Solder Paste 4). Stencil Frame 5). Magazine -2	1
35	Reflow Oven	No. of Waves: 7 or higher Heating Type: Infrared IC Heater Max. PCB Width: 300×320 mm or more Power Supply: AC 220V / 50Hz Peak Power: 1500W Cycle Time: 1–8 min or less Temperature Range: 0°C–280°C Overall Dimensions: min 350×450 mm Machine	1
36	Stencil Printer	Platform Size: 300×400 mm PCB Size: 250×400 mm Template Size: 370×470 mm Printing speed: Manual Control PCB Thickness: 0～80 mm PCB Tuning range: Front/ Side +10mm Platform height: 220 mm Repeatability: ±0.01mm	1

![CARE College of Engineering logo]

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

		Outside/Reference: Hole Dimensions: 540×370×350 mm	
37	Digital multimeter	Display: 4000 counts DC voltage: up to 1000 V, accuracy ±0.5% + 3 digits AC voltage: up to 1000 V, accuracy ±1.0% + 3 digits DC/AC current: up to 10 A, accuracy ±1.5% + 3 digits Resistance: ranges up to 40 MΩ, accuracy: ±0.5–1.5% depending on range Capacitance: up to 1000 μF, accuracy ~±2–5% depending on value Operating/storing temperature: 0 °C–40 °C and −30 °C–60 °C Dimensions & Weight: 183 × 91 × 49.5 mm, 455 g Safety ratings: IEC-compliant, CAT III 600 V, CAT II 1000 V, Pollution Degree 2	5
38	Non-Contact Voltage Tester	Function: Non-contact AC voltage detection tester. Voltage Detection Range: Approximately 90 V to 1000 V AC. Detection Method: Capacitive, with visual and audible indication. Sensitivity: Adjustable sensitivity for different voltage ranges. Response Time: Instantaneous detection within standard operating conditions. Indicators: Bright LED indicators and audible beep for voltage presence. Operating Environment: Suitable for use in ambient temperatures from 0 °C to 40 °C. Power Source: Powered by standard batteries Safety Standards: Complies with IEC/EN 61010-1 CAT III 1000 V safety standards. Weight: Lightweight, approximately 150 g for ease of portability.	5
39	LCR Meter	Display: Approximately 2.8" TFT touch LCD screen. Resolution: 25,000 or above counts resolution on both primary and secondary displays. Basic Accuracy: Within ±0.2% under standard conditions. Test Frequencies: Six or eight selectable frequencies depending on model variant. Measurement Combinations: Up to 15 different measurement combinations available. Test Level: Selectable AC test levels approximately 0.3 V, 0.7 V, and 1 V rms; DC test level selectable at ±1 V. Measurement Speed: Selectable measurement speeds of approximately 10 measurements per second (fast) and 2.5 measurements per second (slow). Auto LCR Mode: Automatic identification and measurement of component types within supported ranges. Data Hold: Feature available to hold measured data on display. Interface: USB virtual COM port provided for remote communication capabilities. Software: Datalogging software available for data capture and analysis.	1
40	Jig Saw	Rated Input Power: Approximately 500 W maximum power consumption. Voltage, Electrical: Nominal 230 V AC supply. Saw Stroke Length: Approximately 20 mm stroke length. Stroke Rate at No Load: Adjustable within approximately 800 to 3,100 spm (strokes per minute). Weight: Approximately 2.08 kg total weight. Bevel Angle: Adjustable within approximately -45° to 45° range.	1
41	Miter Saw	Rated Input Power: Approximately 1,750 W maximum power consumption.	1

![CARE College of Engineering logo]

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

		Saw Blade Diameter: Approximately 254 mm nominal diameter. Mitre Setting: Adjustable up to approximately 47° left and 52° right. Bevel Setting: Adjustable up to approximately 45° left and 0° right. Saw Blade Bore Diameter: Approximately 25.4 mm standard bore. Cutting Capacity at 0°: Approximately 90 mm × 130 mm maximum cross-section. Cutting Capacity at 45° Mitre: Approximately 90 mm × 91 mm maximum cross-section. Cutting Capacity at 45° Bevel: Approximately 60 mm × 130 mm maximum cross-section. Tool Dimensions (W×L×H): Approximately 477 mm × 559 mm × 567 mm. No-Load Speed: Fixed at approximately 5,000 rpm. Weight: Approximately 11.1 kg.	
42	Hot air gun	Rated Input Power: Approximately 1,800 W maximum power consumption. Voltage, Electrical: Nominal 230 V AC supply. Working Temperature Range: Adjustable within approximately 60 °C to 550 °C. Heat-Up Time: Approximately 1 second to reach target temperature. Airflow: Adjustable within approximately 350 to 550 liters per minute. Airflow Control: Three selectable airflow settings. Power Source: Corded Electric Wattage: 1800 Watts Voltage: 230 Volts	2
43	Table saw	Rated input power: Max 1800 W Incline setting: 45 ° L / 0 ° R Table size: Up to 555 x 555 mm Saw blade diameter: 254 mm Cutting height 90°: 80 mm Cutting height 45°: 55 mm Saw blade bore diameter: 30 mm Weight24.4 kg Max. cutting capacity on the right: 545 mm No-load speed: 4300 rpm Cutting height 90°: 80 mm Cutting height 45°: 55 mm	1
44	Angle Grinder	Rated Input Power: 670 W No-Load Speed: ~11,000 rpm Disc Diameter: 100 mm Spindle Thread: M10 Weight: ~1.5 kg (tool only) Switch: Lockable ON/OFF selector	1
45	Straight Grinder	Input Power: 300 W No-Load Speed: 0-28,000 rpm Spindle Collar Diameter: ~41 mm Collet Diameter: Up to 8 mm Tool Diameter Capacity: ~25 mm Weight: ~1.5 kg Switch: Lockable two-motion paddle	1
46	Circular Saw	Rated input power: ~1,400 W Saw blade diameter: ~184 mm Blade bore (arbor): ~20 mm No-load speed: ~5,200 rpm Weight: ~4.1 kg	1

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

47	Blower	Rated input power: 650 W Weight: 1.7 kg Electrical voltage: 230 V AC Sound pressure: 103 dB(A) Sound power: 95 dB(A) Uncertainty (K): ±3 dB	1
48	Cordless Screw Driver	Battery Capacity: Around 1.5 Ah nominal capacity. Torque (Soft/Hard/Max): Approximately 14 Nm / 30 Nm No-Load Speed (1st Gear / 2nd Gear): Ranges from 0 up to 400 rpm and 0 up to 1,500 rpm respectively. Battery Type: Rechargeable Lithium-Ion battery. Chuck Capacity (Min/Max): From approximately 0.8 mm up to 10 mm. Weight (Excluding Battery): About 0.8 kg. Torque Settings: 20 plus 1 adjustable settings	1
49	Vacuum Cleaner	Rated Input Power: 1,100 W Weight: 6 kg (without accessories) Container Volume: 10 L net (8 L for water), 15 L gross Filter Surface Area: 2,300 cm² Max Airflow Rate: 53 L/s Max Vacuum Pressure: 270 mbar Mobility: 4 wheels	1
50	Random orbit sander	Rated power: up to 280 W Pad diameter: 125 mm Orbit: around 2.6 mm (about 1.3 mm eccentricity) No-load speed: 7,500–12,000 rpm Orbital stroke rate: 15,000–24,000 opm Weight: 1.3–1.4 kg	1
51	Planer	Rated input power: up to 710 W Planing width: approx. 82 mm Max planing depth per pass: up to 2.6 mm Weight: 2.8 kg Rebate (rabbet) depth adjustability: approx. up to 9 mm No-load speed: around 18,000 rpm	1
52	Cordless Vacuum Cleaner with Starter kit	Battery Voltage: 18V Weight (excl. battery): 1.3 kg Container Volume: 0.7 L Filter Surface Area: 55 cm² Airflow Rate: 10L/s Vacuum Pressure: ≤ 60 mbar Runtime: 7 min/Ah	1
53	Rotary Tool Kit	Rated Input Power: 175 W Voltage: 230V AC Weight: 0.66 kg Dimensions: 24 cm length × 4.1 cm width × 4.3 cm depth No-Load Speed: 5,000–35,000 rpm Corded Speed Setting: fully dial speed control Accessory Quick-Change System: EZ twist keyless nose cap Vibration Level: 11 m/s²	2
54	Rubber Grip Hacksaw	Depth of Throat: Approximately 98 mm (3.85 inches) nominal depth. Blade Length: Around 254 mm (10 inches) standard length.	2
55	Hacksaw Mini	Blade Length: Approximately 10 inches nominal length. Handle Material: Constructed from metal as standard. Overall Length: Around 11 inches total length.	2

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

56	Claw Hammer Steel Shaft	Weight: 220 grams Dimensions: 27.8 cm × 12.4 cm × 3.6 cm (L × W × H)	2
57	Ball Pein Hammer	Weight: 110 grams nominal weight. Dimensions: 32.6 cm × 10 cm × 2 cm (L × W × H)	2
58	Rubber mallet	Weight: 450 grams nominal weight. Dimensions: Around 33.6 cm × 9.6 cm × 6.2 cm (L × W × H)	2
59	Ring spanner set 12Pcs	Weight: 3.08 Kg. Quantity: 12 pcs per set. Size: 6 mm to 32 mm overall range.	1
60	Open end spanner set 12Pcs	Weight: 1.74Kg nom.wt. Qty: 12pcs/set. Size: 6mm-32mm overall dims.	1
61	Combination Spanner set 8Pcs	Weight: Approx649g nom.wt. Qty: 8pcs/set.	1
62	Allen key set 10pcs	Hex Key Size: 1.5,2,2.5,3,4,5,5.5,6,8,10mm; Qty:10pcs/set	2
63	Allen key set 12pcs	BallKeySize:1/16",5/64",3/32",7/64",1/8",9/ 64",>5/32",3/16",7/32",1/4",5/16",3/8" Qty:12pcs/set	2
64	Combination plier	Weight: 422g Size: 8"/200mm	2
65	Long nose plier	Weight: 399g Size:180mm/6"	2
66	Circlip straight 5"	Weight: 399g Size:130mm/5"	2
67	Circlip bent	Weight: 399g Size:130mm/5""	2
68	Diagonal Cutter	Weight: 239g Size:180mm	2
69	Wire Stripper	Weight: 281g 130mm	2
70	Adjustable spanner	Size: 150 mm	2
71	Pipe wrench	Size: 300 mm	2
72	C – clamp	Size: Upto 75 mm	4
73	C-clamp	Size: Upto 150 mm	4
74	Snap- off Knife	Size:18 mmm	2
75	16pcs screw driver set	Pieces Per Set: 16 pcs	1
76	6pcs precision screw driver set	Pieces Per Set: 6 pcs	2
77	Max steel snip cutter	Length: 250 mm	2
78	PVC Pipe cutter	Length: 42 mm	2
79	Hot Glue Gun	Power: 40 W	4
80	Small file set	Length: 160 mm	2
81	Big file set	Length: 200 mm	2
82	Chisel set	Weight: 340 gm	2
83	Punch set	Weight: 390 gm	2

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

84	Bench wise	Base Type: Fixed Size:2–3½" JawWidth:60mm	2
85	Router Bit Starter Kit	Pieces Per Set: 15 pcs	1
86	Drill bit set	WAF(mm):1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7, 7.5,8,8.5,9,9.5,10,10.5,11,11.5,12,12.5,13 Sz(mm):205×115×55	2
87	Baby wise	Vice Type: Bench Size:2" JawWidth:50mm	2
88	Ratchet Set	Ratchet Set	2
89	Pegboard	Pegboard	5
90	Digital Vernier Caliper	Product Type: Digital Calliper Meas.Range:0–150mm / 0–6" Resolution:0.01mm	2
91	Micrometer	Resolution:0.001mm/0.00005" Meas.Range:0–25mm/0–1"	1
92	Steel Rule 300mm	Product Type: Steel Rule ScaleSize:12"/300mm Material: Stainless Steel	5
93	Steel Rule 600mm	Product Type: Steel Rule ScaleSize:24"/600mm Material: Stainless Steel	5
94	Engineering Square	Size:150×80mm Material: Carbon Steel	2
95	Meter Tape 30m	Length: 30 m	1
96	Measuring Tape 3M	Length: 3 m	3
97	Measuring Tape 5M	Length: 5 m	3
98	Spirit Level	Vials:3 Accuracy:0.5mm/m Length:300mm Product Type: Level	3
99	Goggle	Goggle – Industrial Standard Make	5
100	Apron	Apron - Standard Make	5
101	Ear Muff	Earmuff – Industrial Standard Make	5
102	Mask	Mask – Industrial Standard Make	50
103	Fire Extinguisher	Fire Extinguisher– Industrial Standard Make	6
104	First Aid Kit	First Aid Kit – Industrial Standard Make	2
105	Gloves Pair	Gloves – Industrial Standard Make	10
106	3D printer Filament	Weight Kg: 1 Melt Flow Index: 2 (190°C/2.16kg) Nominal Filament Length: 330m Dim Accuracy: +/-0.1mm Roundness Accuracy: +/-0.5mm Spool Inner Dia: 55mm Spool Outer Dia: 200mm Spool Weight: 300g SpoolWidth: 65mm	10
107	Acrylic Sheet 3mm, 4ft x 4ft		20
108	Acrylic Sheet 4mm, 4ft x 4ft		20

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

109	Acrylic Sheet 5mm, 4ft x 4ft		20
110	Foam Sheet 8mm, 4ft x 4ft		2
111	Foam Sheet 10mm, 4ft x 4ft		1
112	Foam Sheet 12mm, 4ft x 4ft		1
113	Foam Sheet 15mm, 4ft x 4ft		1
114	Ply Board 5mm, 2ft x 4ft		12
115	Nylon Rod 10mm, 1m		5
116	Nuts (3mm,4mm,5mm, 6mm,8mm,10mm, 12mm) Pack of 100		1
117	Bolts (3mm,4mm,5mm, 6mm,8mm,10mm, 12mm) dia 1" Inch Pack of 100		1
118	Screws (3mm,4mm,5mm) Pack of 100		1
119	Washers (3mm,4mm,5mm, 6mm,8mm,10mm, 12mm) Pack of 100		1
120	Studs (6mm,8mm) 1 Meter		2
121	Nails (1",2",3",1.5",5") Pack of 100		1
122	Fevicol 2Kg		1
123	2 Way Tape		10
124	PVC Pipe .75",10ft		10
125	PVC Pipe 1",10ft		10
126	PVC Pipe 1.5",10ft		10
127	PVC Pipe 2.0",10ft		10
128	Aluminium channels (L, C, Box, strip length 12ft)		2
129	PCB Drill Bit 0.4mm		10
130	PCB Drill Bit 0.8mm		10
131	PCB Drill Bit 1mm		10
132	Drill Bit 4mm		10
133	Drill Bit 5mm		10
134	Drill Bit 6mm		10
135	Arduino UNO R3		5

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

136	Arduino NANO		5
137	Arduino Mega		3
138	Raspberry Pi Model 4B, 4GB		3
139	ESP8266 NodeMCU		2
140	ESP32 Development Board		2
141	Beaglebone development Board		1
142	Beaglebone Black		1
143	Voltage Regulator Module		2
144	Mini Micro submersible Water Pump		2
145	Piezoelectric Plate		2
146	8*8 LED Matrix Module		2
147	Bluetooth		2
148	7 Segment LED Display		2
149	GSM/GPRS/GPS Module		2
150	Laser Module		2
151	LDR Module		2
152	4×4 Matrix Keypad		2
153	Joy Stick Module		2
154	Active Buzzer (BIG)		2
155	Active Buzzer (SMALL)		2
156	Motor Driver		2
157	Sound Playback Module		2
158	BO Motors		10
159	Vibrating Motor		10
160	Capacitive Touch Switch		2
161	IR Sensors (Obstacle Sensors)		2
162	Triple Axis Magnetometer		2
163	Humidity Sensor		2
164	MQ-2		2
165	MQ-3		2
166	MQ-4		2
167	MQ-5		2

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

168	MQ-7		2
169	Ultrasonic Sensor Module		2
170	Triple Axis accelerometer		2
171	PIR Motion Detector Module		2
172	Pulse Rate Heart Sensor		2
173	Relay Module		2
174	Soil Moisture Sensor		2
175	Touch Sensor		2
176	Rain Drop Sensor		2
177	Flex Sensor		2
178	Temperature Sensor		2
179	Force Pressure Sensor		2
180	Colour Recognition Sensor		2
181	Water Flow Sensor		2
182	Sound Sensor		2
183	IR Sensor Array for Line Following		2
184	RFID Reader-Tags		2
185	RF Modules Tx& Rx 315 MHz ASK		2
186	Stepper motor with Driver Board		2
187	Servo Motor 360 rotation		10
188	Servo Motor 180 rotation		10
189	Metal Gear Servo Motor (180° Rotation)		10
190	Solder Wire 100grm		10
191	Solder Flux		10
192	830 Points Solderless Breadboard		5
193	400 Points Solderless Breadboard		5
194	Copper Clad Board single side		10
195	Copper clad board double side		10
196	Male to Male Breadboard Jumper		10
197	Female to Female Breadboard Jumper		10

![CARE College of Engineering logo]

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

198	Male to Female Breadboard Jumper		10

Annexure B

(To be submitted by bidder on its Company Letterhead)

It is here by submitted that if I/We …………………………......................(Name of bidder/firm/company) withdraw or modify the bids during period of validity, or if I/We………….. (Name of bidder/firm/company) are awarded the contract and I/We……………................................(Name of bidder/firm/company) fail to sign the contract or to submit a performance security before the deadline defined in the tender documents, I/We ……………............................(Name of bidder/firm/company) will be suspended to take part in CARE's tendering process for the period of two years from the date of ……………………..occurrence of the above mentioned default."

Date :

Authorized Signatory

Annexure C

FINANCIAL BID

("FINANCIAL BID FOR AICTE IEDA LAB– SUPPLY OF MACHINERY & INSTRUMENTS")

Sl. No.	Name of the Mandatory Equipment	(in Figures)	(in Words)

Signature of Tenderer/Authorized Signatory   :

Name of the Tenderer   :

Seal of the Tenderer   :

Address   :

Note: -

(if there is any discrepancy in figures and words in the quote, the rate quoted in words shall
 prevail)

![CARE College of Engineering logo]

CARE
COLLEGE OF ENGINEERING
(An Autonomous Institution)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE, MECH)
#27, Thayanur, Tiruchirappalli - 620009

Annexure D

ORIGINAL MACHINERY & INSTRUMENTS MANUFACTURER
(OEM) Manufacturing Authorization Form (MAF)

(On Letter Head of Manufacturer)

Ref. No: Date:

To

       THE PRINCIPAL,
       CARE COLLEGE OF ENGINEERING
       No.27 Thayanur, Trichy
       Tamil Nadu – 620 009

We manufacturers of Original Machinery & Instruments at _____
do hereby authorize (M/s. Name and address of the agent) to submit an offer against the   Tender for the supply of (Name of the Machinery & Instruments)

M/s.   is authorised to submit the bid and conclude the contract regarding business.

We hereby extend our full guarantee and warranty for the goods offered by the above firm. The dealer is associated with us from the period _____ to ___

Yours faithfully,

(Signature)

Name and seal of the Manufacturer.

MANDATE FORM

ELECTRONIC CLEARING SERVICE (CREDIT CLEARING)/REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS

DETAILS OF ACCOUNT HOLDER: -

NAME OF THE ACCOUNT HOLDER	
COMPLETE CONTACT ADDRESS	
TELEPHONE NUBER//E-MAIL	
GST Number	
PAC Card Number	

BANK ACCOUNT DETAILS:

BANK NAME	
BRANCH NAME WITH COMPLETE ADDRESS	
TELEPHONE NUMBER AND E-MAIL	**Bank Ph. No : E-ail :**
IFSC CODE	
IS THE BRANCH ALSO NEFT ENABLED	**YES / NO**
TYPE OF BANK ACCOUNT(SB/CURRENT)	**SAVINGS ACCOUNT / CURRENT ACCOUNT**
BANK ACCOUNT NUMBER	
MICR CODE OF THE BANK	