ANJUMAN COLLEGE OF ENGINEERING & TECHNOLOGY



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Ref. No. ACET P 14662/25

Date: 04 -09-2025

Tender

Notice

Sealed/Online tenders are invited from reputed and experienced suppliers, manufacturers, or authorized distributors for the supply, installation, and commissioning of equipment, tools and machines for setting up an AICTE IDEA Lab at our institute. The laboratory is to be developed as per the AICTE guide lines for promoting innovation, design thinking and prototyping skills among students and faculty. The detailed specifications of the required items are enclosed with this document.

Sr. No	Equipments	Preferred brands if any	Specifications	Qty
1-a	Single Nozzle3D printer	Branded Company Product with at least three years product warranty	Printing Technology: Fused Filament Fabrication (FFF) or Fused Deposition Modeling (FDM). Printable Area: The minimum printable area should be at least 310 x 310 x 310 mm or above Printer Design: Core XY or Cartesian. Temperature Range: Hot end: Upto 300°C or above Heat bed: Upto 120°C.orabove. Nozzle: Compatible with All polymers,0.4,0.6 and 0.8mm Steel Sheet: Provided with satin or smooth PEI surface. Filament Diameter: 1.75mm (supports PLA, PETG, ASA, ABS, etc.). Extruder: Gearbox with 1/10 ratio, Speed: 550 MM/Sec or above Stepper Drivers for smooth motion .or equivalent Stepper Motors: Choose between 1.8° or precise 0.9° X, Y stepper motors. LCD Screen: 3.5"graphic 65k color screen or larger. Connectivity: USB drive, LAN, or internet. Supported Materials: PLA, PETG, ASA, ABS, PP, PC, flexible filaments, and more. Wi-Fi Module: Built-in (network connectivity not required for setup or operation). Compatibility: Windows, mac OS, Linux. Printer Dimensions: The maximum physical Dimensions of the system 700 X 700 X 700 or above. Fully enclosed Machine.	1

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1-b	Single Nozzle 3D printer	Branded Company Product with at least three years product warranty	Industrial Resin 3D Printer Machine size: 780x560x1750mm, Build size: 350x190x350mm, Machine Gross Weight: 108Kgs, Input Power: 100~240V, 50~60Hz including AI camera and real-time monitoring and wrap d, auto leveling losing , power loss recovery, and detection	1
2	PCB Milling Machine	Branded Company Product with at least three years product warranty	complete kit, Cuttable Materials: Modeling Wax, Chemical Wood, Foam, Acrylic, Poly Acetate, ABS, PCB, Copper glad, etc TableSize:225(X)×150(Y) mm or more Drive System: Stepping Motor(X, Y, Z Axis) Operating Speed: 800 mm/min Software Resolution: 0.01mm / step Position accuracy: 0.01 to 0.02 mm Max Travel Speed(mm/sec)-58(2.28") Drilling (mm)-0.2 -3.175 (8-125 mil) Maximum Drilling Cycles/ Min-50 Spindle Motor: DC Motor Type 380 or More SpindleSpeed:Adjustable20,000andabove rpm or more Tool Chuck Type: Collet Interface: USB or cable Control Commands: RML-1, NC code Power Supply: DC24V, 2.5A (via AC100- 240V, 50/60Hz adapter) PowerConsumption:Approx.50Wormore	1
3	CO2 Laser Cutting Machine	Branded Company Product with at least three years product warranty	Working Area: Min 600x900 mm or above Laser Type: CO2 DC Glass Laser Tube/RF Metal Laser Tube Laser Power:80/100W Wave Length: Upto 10.6 Micrometer Cutting Speed: 30000 mm/min or more Engraving Speed: 64000mm/min or more XY Axis: LM Guide Rail or equivalent Cooling: Air/ Water Cooling SupplyVoltage:230V/415V Accessories: CO2 Focus Lens: 1No. Mirror 25mm: 3 Nos. Acetone: 1 litre Acrylic sheet: 2 Nos	1
4	Vinyl Printer	Company Product with at least Two years	Dimensions: 50cm x15cm x 15cm or above Weight: 15.4 lbs or less Max cut size using machine mat:11.5 inch x 23.5 inch or more Cut speed: upto14.1ips	, 1

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focusable cameras or equivalent CPU:Quad-core64-bitSoC,1.5GHzwith is GPU RAM: 4GB Projector: DLP MEMS mirror or equival Camera Sensor: Sony 13 MP or better Scan Speed: 4 seconds or more Working Distance: Effective Working Di 160mm-1400mm Scan Speed: 980,000 points/s,upto14FP Align Mode: Feature Alignment, Hybrit Alignment, Texture Alignment, Global Ma Safety: Eye-safe Texture Scan: Yes Interface: USB 2.0 or above Outdoor Scanning: Yes Output Formats: OBJ; STL; PLY;P3; 3M Scanning Environment: Indoor and outdo (shaded) Texture /Color Scanning: Yes Minimum Capturable Feature Size: 0.2mr Scanner Weight: 500 grams or less Scanner Dimensions: upto 240×60×60 mr Compatible OS: Any OS supporting a mo browser	ent stance: S d rkers 1 IF or n or less
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6	Lathe Machine cum milling	Branded Company Product with at least three years product warranty	Centre Width: Upto 400 mm or better Height of Centers: Up to 88 mm Maximum Work piece Diameter: Upto 100 mm Machine Base: Cross-ribbed surface, high- quality cast iron with ground prismatic guide, capable of fitting milling/drilling attachment Spindle: Supported with adjustable taper roller bearings Spindle Receiver: MK3 or compatible Spindle Drill Hole: Upto 22mm or better Spindle Concentricity: Upto 5micronsor better Chuck: 3-jaw chuck as per DIN 6386, centrically clamped, 100 mm diameter or better Run Out (without Chuck): Upto 10 microns Sleeve Receiver: MK2, retractable sleeve with scale Spindle Speed Range: Between 50 to 2500 rpm Speed Stages: 6-8 Motor Rating: 550W or better, induction motor, single phase 230V Traverse Cross: Up to 70 mm or better TraverseLongitudinal: Upto 300 mm or better Weight(Complete): Upto 55kg or more Additional Accessories: Splash guard and chip collecting tray: 1No. Cutter set with tungsten inserts: 2 Nos. Milling Attachment: 1 nos Tungsten disposable tipsten-piece set: 1No. Sample work pieces (Nylon Rod, Aluminium Rod) Desktop: 1No.	1
7	CNC Router	Branded Company Product with at least three years product warranty	Working Area: Min 1300x2500mm Z Axis Working Area: 200 or above Resolution: ±0.03/300mm or more CNC Spindle: 3KW or more Lathe Structure: Welding Steel Structure or equivalent XYZ Structure: Rack Pinion, Ball Screw Linear Rails Max Spindle Speed: Min 18000RPM Table: T-Slot/Vacuum Bed/ Water Bed Repeatability: ±0.03 Working Mode: Stepper Motor /Servo Motor Dust Collector: To be included by Vendor Voltage: AC 220V/415V, 50/60 Hz, 3 Phase	1
8	Belt and Disc Sanding Machine	Branded Company Product with at least three years product warranty	Motor: 230V 50Hz Power: 380W S2 30min No-load Speed: 1450rpm or more Belt Size: 100x914mm or less Disc Size: 150mm or better Table Titing Range: 0°-45° Belt Titing Range: 0°-90° Table Size: upto	1

9	Scroll Saw	Branded Company Product with at least three years product warranty	Power input: 50Watt Thickness of Cut: 50mm (2inch) Throat: 406 mm (16 inch) Length of Stroke: 18mm (11/16inch) Strokes Per Minute: 400-1,600 SPM Overall Length: 600mm (23-5/8inch)	1
10	Wood Turning Lathe	Branded Company Product with at least three years product warranty	Motor: 230V~50Hz, 550W, S2:15 minor above Max. Disc Diameter:min75 mm Max. Cutting Length: 450 mm or more Spindle Speed: 5 speeds such as 1600/2600 / 3200 RPM etc Material: Cast Iron Bed Height: 0.2 m Cable Length: 0.850m	1
11	Bench Top Drill Machine	Branded Company Product with at least Three to Five years Warranty	Continuous rating input: Max. 250W Capacity: Steel: Min 13 mm (1/2") Wood: Min 24 mm (15/16") No Load Speed (RPM): 570, 890, 1,300, 1,900, 2,670(50Hz), 690, 1,070, 1,560, 2,280, 3,200 (60Hz) Net weight: Max. 20 kg (44.1 lbs.) Power supply cord: 1.75m(5.7ft) Additional Accessories: Bench Vise: 1No., Drill Bit Set 10 Pcs: 1 No	1
12	Portable Welding Machine	Branded Company Product with at least Three to Five years Warranty	Welding Current (at40°C, 10min cycle): 120A @100%, 150A @ 60%, 200A @ 35% Supply Voltage: 240V+10%,-15%, 1Phase, 50/60 Hz Open Circuit Voltage: 55V DC ±5V Welding Current Range: 15–200 Amps DC Insulation Class: F Type Ingress Protection:IP21 Dimensions(L×W×H) with Handle: upto 320×120×195 mm Weight(Approx.):4.3kg or less	1
13	Computerized Sewing Machine	Branded Company Product with at least three years product warranty	Motor:120W Max Sewing Speed: 860SPM Power: 220 - 240 V Automation Grade: Automatic Max Stitch Length: 4mm Thread Type: Computerized Weight:7.6 kg Number of Stitches:120 Size/Dimension: 50.8cm x 29.464cm x 40.64 cm Maximum Stitch Width: 7 mm Number of Button hole Styles:7 LCD Screen Display: Yes Bed Type: Free Arm/Flatbed convertible Bobbin Type, Drop & Sew Bobbin System	1

14	Filament Dehydrator	Branded Company Product with at least three years product warranty	Operating Temperature Range:Min45°C–70°C Drying Time Setting: 0–48hours or higher Hot-Air Heating: upto 360° circulation Moving Speed: 300 mm/s or more Power Rating: 160 W Shipping Weight:2.5kg	
15	Reflow Oven	Branded Company Product with at least three years product warranty	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: min350×450mm Machine Weight: upto 25 kg	1
16	Digital multimeter	Branded Company Product with at least three years product warranty	Display Count: Upto4000 DC Voltage Range: Upto1000V AC Voltage Range: Upto1000V DC Voltage Accuracy: ± 0.5% or ± 3digits, whichever is higher AC Voltage Accuracy: Within ±1% + 3digits DC Current Measurement: Up to 10 A AC Current Measurement: Maximum10A DC Current Accuracy: ±1.5% + 3 digits (approx.) AC Current Accuracy: ±1.5% +3digits (typical) Resistance Measurement: Up to 40 MΩ Resistance Accuracy: Estimated at ±1.5% +3 digits Capacitance Measurement: Up to 1000 μF Capacitance Accuracy: ±5% or ±5 digits Operating Temperature Range: From 0°Cup to approximately 40°C Storage Temperature Range: Between-30°C and 60°C Overall Dimensions(H×W×L): Approximately 183×91×49.5 mm Unit Weight: Around455grams Safety Compliance: Asperl EC61010-1&IEC 61010-2-030 standards, suitable for CAT III 600V and CAT II 1000V environments with Pollution Degree 2 classification	5

retrieval Connectivity: USB2.0(host and device), Ethernet (RJ45), and Go-No Go BNC Dimensions(W×H×D): 380×200×125mm or above Weight: 2Kgs or above Safety Compliance: Conforms to IEC61010-1 and IEC 61010-2-030 standards, suitable for CATIII600V and CATII1000V environments with Pollution Degree 2 classification
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nt 1	Output Configuration: 4-channel design with independent electrical isolation across all outputs Channel Output Ranges: • CHI & CH2: Adjustable output voltage from 0 to 32V with a current delivery capacity up to 3A • CH3: Variable range 0 to 5V supporting up to 1A • CH4: Output adjustable from 0 to 15V with a load current of up to 1A Constant Voltage Operating Mode Line Regulation: ≤ 0.01% + 3 mV (approximate value within rated voltage range) Load Regulation: ≤0.01%+3mV(across rated load variation) Ripple & Noise: ≤1m V rms across full bandwidth Constant Current Operating Mode Line Regulation: ≤ 0.2% + 3 mA Load Regulation: ≤ 0.2% + 3 mA Load Regulation: ≤ 0.2% + 3 mA Ripple Current: ≤ 3m Arms typical) Safety & Operational Features Output Control: Independent output ON/OFF switching functionality is required Voltage Resolution: Approximately 100mV (*1) Current Resolution: Approximately 10mA (*1) Display Parameters Display Units: Four separate displays required for individual channel status visualization Display Type: 4.3-inchLCD(color or monochrome as applicable) Functional Features Tracking Operation: Supported(required for synchronizing output behavior) Auto Series/ Parallel: Supported (automatic internal reconfiguration required) Power Requirements Supply Input: 230VAC±10%,50Hz Mechanical Specifications Maximum Dimensions (W×H×D): Within 200 mm × 100 mm × 200mm Maximum Weight: 10 kg or less	Power supply Pro leas	19
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			provide output waveforms including sine, square, triangle, and TTL signals as required. Frequency Range: For sine and square waveforms: approximately 0.1 Hz up to 3 MHz. For triangle waveform: approximately 0.1Hz upto 1MHz.	
20	Function Generator	Branded Company Product with at least three years product warranty	Frequency Resolution: Frequency resolution shall be maintained within a maximum of 0.1 Hz. Frequency Stability: The frequency stability shall be within ±20 ppm (parts per million). Frequency Accuracy: The frequency accuracy shall be maintained within ±20 ppm. Frequency Aging: Frequency aging shall not exceed ±5 ppm per annum. Amplitude Range: Output amplitude shall be up to 10 V peak-to-peak (Vp-p) into a 50 Ω load. Amplitude Accuracy: Amplitude accuracy shall be within ± 20% at maximum amplitude setting. Output Impedance: Nominal output impedance shall be 50 Ω with a tolerance of ±10%. Attenuator: A single- step attenuator of - 40dB ±1dB shall be provided. Display: A 6-digit LED display shall be incorporated for parameter indication. Output Control: Output shall be controlled via an	1
			ON/OFF selector switch. Power Source: The device shall operate on an AC supply of 240 V, 220 V, or 110 V ±10%, With frequency 50/60Hz. Ambient Operating Temperature: Normal operation shall be ensured within the ambient temperature range of 0 °C to40 °C. Dimensions: Maximum dimensions shall not exceed 255mm (W)×95mm(H)×295mm (D). Weight: Maximum device weight shall be within 2.5 kg.	

21	Bench Top Multimeter	Branded Company Product with at least three years product warranty	Input impedance: 10MΩ.AC Voltage (True RMS): Range: 500 mV to 1000V across 5 ranges. Accuracy: ±(0.5%– 5%rdg+digits) depending on frequency and range. Input impedance: 10 MΩ. DC Current: Range: 500μAto20Aacross6 ranges. Accuracy: ±(0.02%–0.3% rdg + 2 digits) depending on range. AC Current (True RMS): Range: 500μA to 20 A across 6ranges. Accuracy: ± (0.5%–1%rdg + digits) depending on frequency. Resistance: Range: 500 Ω to 20 MΩ across 6 ranges. Accuracy: ± (0.1% – 0.3%rdg + digits) depending on range. Diode Test: Max forward voltage1.5V,open voltage 2.8 V. Capacitance:Range:5nFto50μF.Accuracy: ±(2%rdg+4digits). Frequency: Input level varies by range; functions include Auto/Manual Range, Max, Min, dBm, Rel, Hold. Continuity Beep: Threshold<5Ω. Display: Dual7-segment LED,0.4"and0.5". Power Source: AC 100/120/230 V ±10%, 50/60 Hz. Dimensions & Weight: Approximately 251×91 × 291 mm; 2.6 kg. Function: Non-contact AC voltage detection tester.	1
22	Non-Contact Voltage Tester	Branded Company Product with at least three years product warranty	Voltage Detection Range: Approximately 90V 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 (typically 2 × AAA or equivalent). Safety Standards: Complies with IEC/EN 61010-1 CATIII 1000V safety standards. Dimensions: Compact, handheld design suitable for field use (approx.150mm×30 mm × 25 mm). Weight: Light weight, approximately 150 g for ease of portability.	5

23	LCR Meter	Branded Company Product with at least three years product warranty	Resolution: 25,000 or above counts resolution on both primary and secondary displays. Basic Accuracy: Within ± 0.2%understandard conditions. Test Frequencies: Six or eight selectable frequencies depending on model variant. Measurement Combinations: Upto15 different measurement combinations available. Test Level: Selectable AC test levels approximately 0.3V,0.7V, and 1Vrms; 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: Data logging software available for data capture and analysis. Power Rating: Approximately 60W maximum	1
24	Soldering Station	Branded Company Product with at least three years product warranty	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 cu off and overload protection within required standards. Dimensions: Compact design with100mm× 100 mm × 90 mm (W × H × D) or above Weight: Approximately 1.5 kg for ease of Portability and bench use.	3
25	Digital Microscope	Branded Company Product with at least three years product warranty	Specification:Magnification:1600X Light source: 8 LED lights Resolution: 1920×1080, 640*480 Pixel: 30W Focal length: 3-40mm manual adjustment Support Android 4.2 or above/widows/Mac system	1

26	Soldering Rework Station	Branded Company Product with a least three years product warranty		
27	Hand Drill Machine	Branded Company Product with at least three years product warranty	Rated Input Power: Approximately500Wor above maximum power consumption. Bit Holder: Standard 1/2"-20UNF thread type. No-Load Speed (1stGear): Adjustable from0 up to approximately 3,000 rpm. Power Output: Approximately300W continuous output power. Weight: Approximately 1.7kg total device weight. Impact Rate at No- Load Speed: Variable from 0 up to approximately 48,000 bpm. Rated Torque: Approximately 1.4Nm maximum torque output. Drill Spindle Connecting Thread: Standard 1/2"-20 UNF thread. Chuck Capacity(Min/Max):Approximately 1.5mm minimum to 13 mm maximum.	2
28	Cord less drill	Branded Company Product with at least three years product warranty	Torque (soft/hard/max.): Min 21/50/- Nm Noload speed (1stgear/2ndgear): Min0-500 / 0 - 1,900 rpm Weight incl. battery:1.3kgor less Max. impact rate: 27,000 bpm Battery type: Lithium- Ion or equivalent Chuck capacity, min./max.:1.5/13mm Weight excl. battery: 0.99 kg Forque settings:20+2orbetter	2

29	Jig Saw	Branded Company Product with a least three years product warranty		1
30	Miter Saw	Branded Company Product with at least three years product warranty	Rated Input Power: Approximately 1,750W maximum power consumption. Saw Blade Diameter: Approximately 254mm nominal diameter. Mitre Setting: Adjustable upto approximately 47° left and 52° right. Bevel Setting: Adjustable upto approximately 45° left and 0° right. Saw Blade Bore Diameter: Approximately 25.4mmstandardbore. Cutting Capacityat0°: Approximately 90 mm ×130mm 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 477mm×559mm×567mm. No-Load Speed: Fixed at approximately 5,000 rpm. Weight: Approximately 11.1 kg.	
31	Hot air gun	Branded Company Product with at least three years product warranty	Rated Input Power: Approximately 1,800W maximum power consumption. Voltage, Electrical: Nominal 230VAC supply. Weight: Approximately 0.75 kg. Working Temperature Range: Adjustable within approximately 60 °C to 550 °C. Heat-Up Time: Approximately 1second to reach target temperature. Airflow: Adjustable within approximately 350 to 550 liters per minute. Air flow Control: Three selectable air flow settings.	2
32	Table saw	Branded Company Product with at least three years product warranty	Rated input power: Max 1800W 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°: 55mm Saw blade bore diameter: 30mm Weight 24.4 kg or less Max. cutting capacity on the right: 545mm No-load speed: 4300 rpm Cutting height 90°:80mm Cutting height 45°:55mm	1

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	33	Bench grinde	Branded Company r Product with a least three year product warranty		1
	34	Angle Grinder	Branded Company Product with at least three years product warranty		1
	35	Straight Grinder	Branded Company Product with at least three years product warranty	Rated Input Power: Max 300W power consumption. No-Load Speed: Upto28, 000 rpm. Voltage, Electrical: Nominal 230V AC supply. Spindle Collar Diameter: Approximately 41 mm. Weight: Around1.4 kg. Maximum Grinding Tool Diameter: Upto25 mm. Maximum Collet Diameter: Upto8mm. Switch: Lockable switch for enhanced safety.	1
	36	Circular Saw	Branded Company Product with at least three years product warranty	Rated Input Power: Approximately 1,400W maximum consumption. Saw Blade Diameter: Nominal 184mm diameter. Saw Blade Bore Diameter: About20mm standard bore size. Guide Rail Compatibility: Not compatible with guide rails. No-Load Speed: Typically 5,200rpm. Weight: Around 4.1 kg	1
3	7	Blower	Branded Company Product with at least three years product	Rated Input Power: Max 650W power consumption. Weight: Approximately 1.7kg. Voltage, Electrical: Nominal230VACsupply. Sound Pressure Level: Around 103 dB (A). Sound Power Level: Approximately 95dB (A). Jncertainty (K): Within ±3 dB	1
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38	Cordless Scre Driver	Branded Company Product with least three yea product warranty		1
39	Vacuum Cleaner	Branded Company Product with at least three years product warranty		1
40	Random orbit sander	Branded Company Product with at least three years product warranty	Rated Input Power: Upto 280W maximum consumption. Sanding Pad Diameter: Nominal 125mm diameter. Orbit Diameter: Approximately 2.6mm orbital diameter. Weight: Around1.4 kg. No-Load Speed: Adjustable within 7,500to 12,000 rpm range. Orbital Stroke Rate: Between 15,000 and 24,000 orbits per minute (opm). Eccentricity: Approximately 1.3mm.	1
41	Planer		Rated Input Power: Not exceeding 710W under nominal operating conditions. Planing Width: Approximately 82mm effective width capacity. Planing Depth: Within the range of upto 2.6 mm maximum depth per pass. Weight: Circa 2.8 kg total unit mass. Adjustable Rebating Depth: Maximum adjustable depth of approximately 9 mm. No-Load Speed: Operating speed typically around 18,000 rpm.	1

42	Cordless Vacuum Cleaner with Starter kit	Branded Company Product with at least three years product warranty	· · · · · · · · · · · · · · · · · ·	1
43	Rotary Tool Kit	Branded Company Product with at least three years product warranty	Rated Power Input: Approximately 175W within nominal voltage range. Voltage: Operates within 220 to 240VAC supply. Weight: Around 0.66kg total mass. Length: Approximately 24cm overall length. Width: About 4.1 cm nominal width. Depth: Roughly 4.3cm depth dimension. No-Load Speed: Variable speed ranging from 5,000 up to 35,000 rpm. Battery Technology: Not applicable (n.a.). Speed Setting: Fully variable speed control as required. Accessory Quick Change System: Equipped with multi chuck for rapid accessory Inter change. Vibration Level: Approximately 18m/s² measured vibration	2
44	Rubber Grip Hacksaw	Very Good Quality	Depth of Throat: Approximately 98mm (3.85 inches) nominal depth. Blade Length: Around 254mm (10inches) standard length.	2
45	Hack saw Mini	Very Good Quality	Blade Length: Approximately 10 inches nominal length. Handle Material: Constructed from metal as standard. Overall Length: Around 11 inches total length.	2
46	Claw Hammer Steel Shaft		Weight: Approximately 8 oz(220grams) nominal weight. Dimensions: Around27.8cm×12.4cm×3.6 cm (L × W × H) overall size	2
47	Ball Pein Hammer	Quality	Weight: Approximately 110grams nominal weight. Dimensions: Around 32.6cm×10cm×2cm (L × W × H) overall measurements.	2

48	Rubber mallet	Very Good Quality	Weight: Approximately 450 grams nominal weight. Dimensions: Around 33.6cm×9.6cm×6.2 cm (L × W × H) overall size.	2
49	Ring spanner set 12Pcs	Very Good Quality	Weight: 3.08 Kg nominal weight. Quantity: 12 pcs per set. Size: 6mm to32mm overall range.	1
50	Open end spanner set12Pcs	Very Good Quality	Weight: Approx 1.74Kg nom.wt. Qty: 12pcs/set. Size: 6mm-32mmoveralldims.	1
51	Combination Spannerset8Pcs	Very Good Quality	Weight: Approx 649 gram. wt. Qty: 8pcs/set.	1
52	Allen key set 10pcs	Very Good Quality	Hex Key Size: 1.5,2,2.5,3,4,5,5.5,6,8,10mm; Qty:10pcs/set	2
53	Allen key set 12pcs	Very Good Quality	Ball Key Size: 1/16",5/64",3/32",7/64",1/8",9/64",>5/32",3/16",7/32",1/4",5/16",3/8" Oty:12pcs/set	2
54	Combination plier	Very Good Quality	Weight: Approx 422 g nom.wt. Size: 8"/200mm nominal	2
55	Long nose plier	Very Good Quality	Weight: Approx 399 g nom.wt. Size: 180mm/6" nominal	2
56	Circlip straight 5"	Very Good Quality	Weight: Approx 399 g nom. wt. Size: 130mm/5" nominal	2
57	Circlip bent	Very Good Quality	"Weight: Approx 399g nom.wt. Size:130mm/5"" nominal"	2
58	Diagonal Cutter	Very Good Quality	"Weight: Approx 239g nom. wt. Size:180mm nominal"	2
59	Wire Stripper	Very Good Quality	Weight: Approx 281 g nom.wt. Size:130mm nominal	2
60	Adjustable spanner	Very Good Quality	Size: Upto150mm	2
61	Pipe wrench	Very Good Quality	Size: Max300mm	2
62	C-clamp	Very Good Quality	Size:Upto75mm	4
63	C-clamp	Very Good Quality	Size:Upto150mm	4

64	Snap-off Knife	Very Good Quality	Size:18mmm	
65	16pcsscrew driver set	Very Good Quality	Pieces Per Set: 16 pcs	
66	6pcs precision screw driver set	Very Good Quality	Pieces Per Set:16 pcs	
67	Max steel snip cutter	Very Good Quality	Length: 250 mm	2
68	PVC Pipe cutter	Very Good Quality	Length: 42 mm	1
69	Hot Glue Gun	Very Good Quality	Power: 40W	4
70	Small file set	Very Good Quality	Length: 160 mm	2
71	Big file set	Very Good Quality	Length: 200 mm	2
72	Chisel set	Very Good Quality	Weight: 340gm	2
73	Punch set	Very Good Quality	Weight: 390gm	2
74	Bench wise	Very Good Quality	Base Type: Fixed Size:2-3½"nominal JawWidth:60mm	2
75	Router Bit Starter Kit	Very Good Quality	PiecesPerSet:15 pcs	1
76	Drill bit set	Very Good Quality	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 Wt:~1.3Kgnom.wt Size(mm):205×115×55overall	2
77	Baby wise	Very Good Quality	Vice Type: Bench Size:2" nominal JawWidth:50mm	2
78	Ratchet Set	Very Good Quality	Vice Type :Bench Sz:2"nominal;Jaw:50mm	2
79	Peg board	Very Good Quality	3ft x 4ft	5
80	Digital Vernier Caliper	Very Good Quality	Product Type: Digital Calliper Meas.Range:0- 150mm/0-6"Resolution:0.01mm	2

81	Micrometer	Very Good Quality	Resolution: 0.001mm/0.00005" Meas.Range:0- 25mm/0-1"	1
82	Steel Rule300mm	Very Good Quality	Product Type: Steel Rule ScaleSize:12"/300mm Material: Stainless Steel	
83	Steel Rule 600mm	Very Good Quality	Product Type: Steel Rule ScaleSize:24"/600mm Material: Stainless Steel	5
84	Engineering Square	Very Good Quality	Size: 150×80mm nominal Material: Carbon Steel	2
85	MeterTape30m	Very Good Quality	Length: 30m	1
86	Measuring Tape 3M	Very Good Quality	Length: 3m	3
87	Measuring Tape 5M	Very Good Quality	Length:5m	3
88	Spirit Level	Very Good Quality	Vials:3 Accuracy:0.5mm/m Length:300mm Product Type: Level	3
89	Goggle	Very Good Quality	Goggle- Industrial Standard Make	5
90	Apron	Very Good Quality	Apron-Standard Make	5
91	Ear Muff	Very Good Quality	Earmuff-Industrial Standard Make	5
92 ·	Mask	Very Good Quality	Mask-Industrial Standard Make	50
93	Fire Extinguisher	Very Good Quality	Fire Extinguisher-Industrial Standard Make	6
94	First Aid Kit	Very Good Quality	First Aid Kit- Industrial Standard Make	2
95	Gloves Pair	Very Good Quality	Gloves- Industrial Standard Make	10
96		Branded Company Product with at least three years product warranty	Oven Cap:20Lormore Type: Solo Door: Side Swing Child Lock: Yes Completion Beeper: Yes Power Levels: upto 5 Control: Membrane Type Cavity Mat: Anti- Bacterial Dims(mm): 455×252×320 PowerOut:700Worless	. 1

97	Refrigerator	Branded Company Product with at least three years product warranty	Capacity: 183 L or more Annual Energy Consumption: 148 kWh/Year or less Refrigerator Fresh Food Capacity: 165L or more Freezer Capacity: min 18L Bottle Count: 5 or more Noise Level: 40 d Borless Installation Type: Freestanding	1
98	Smart Board	Branded Company Product with at least three years product warranty	Display Size: Approx 75 Inch (190cm)Upto Resolution: 4 KUHD or Higher Brightness: Min350nits; Typ400nits Approx Contrast Ratio: Type 1200: 1Upto Response Time:Approx8ms Viewing Angle: Approx178 Degrees Wide Working Frequency:1.5GHz Nominal RAM:4GBOrMore Internal Storage: 32GBMin OS: Android Based HDMI:3Ports USB: 2Ports Sensing Type: Infrared Touch Frame Surface Protection: 4mmToughened Glass Or Equivalent Infrared Touch Points: 20Approx Voltage:DC+5V±5%Range OPS: Optional	1
99	Projector	Branded Company Product with at least three years product warranty	Projection Tech: RGB liquid crystal shutter projection (3LCD) Up to Connectivity: USBTypeB:1port (Firmware Update/Copy OSD) Approx Analog Input: D-Sub15pin:1portDigital Input: HDMI:1port Projection Lens: Type: No Optical Zoom/Focus (Manual) Nominal Focal Length:16.70mm Approx F Number: 1.44 Nominal Zoom:1.44-1.95Ratio(Wide to Tele) ThrowRatioRange:1.00–1.35(Digital Zoom Approx	1

100	Printer	Branded Company Product with at least three years product warranty	Functions: Print, Scan, Copy Printer Type: Laser Nominal Dims(mm): 409×398.5×267 Approx Weight: 9.7KgNominal Print Speed: Upto30ppm(A4Size)Approx Warranty: 1YearOn-Site Print Resolution: 600×600dpi,HQ1200(2400×600dpi) Quality Approx 2Sided-Duplex- Paper Type: Plain, Thin, Recycled Approx 2Sided-Duplex-PaperSize:A4 Paper Handling: Tray#1- Paper Type: Plain, Thin, Recycled Tray#1- Max Capacity: Upto250 Sheets(80g/m²) Face Down Tray; One Sheet Face Up Tray Approx Copy-Colour/Mono: Yes/Yes Multiple Copies: Sorts/Stacks Upto 99Pages Approx Enlarge/Reduce:25%-400% (In1%Steps) Approx Copy Resolution:600 × 600dpi 2Sided-Duplex- Copy Paper Type: Plain, Thin, Recycled 2Sided- Duplex-Copy Paper Size: A4 Scan-Resolution Interpolated: Upto19200×19200 dpI Approx Scan-Resolution Glass: Upto 600×2400dpi Approx Connectivity: Hi-SpeedUSB2.0 Display Type: 16Chars×2Lines Memory Capacity:32MBApprox Power Source: 220-240VAC50/60Hz Power Consumption-Ready: Approx 6.6W Power Consumption-Sleep: Approx 6.6W Power Consumption-Off: Approx 0.08W Noise Level: 50dB(A)Approx	
101	Desktop	Branded Company Product with at least three Years product warranty	CPU: INTEL CORE I7- 12 TH GEN or Higher RAM: 8GB+512GB SSD or more Conn: LAN+ WIFI + BLUTOOTH+ KEYMOUSE Display: 20" DESKTOP MONITOR	5
102	3Dprinter Filament	Very Good Quality	Weight Kg:1Approx Melt FlowIndex:2(190°C/2.16kg)Nominal Filament Length:330mApprox Dim Accuracy:+/-0.1mmApprox Roundness Accuracy: +/-0.5mmApprox Spool InnerDia:55 mm Nominal Spool OuterDia:200 mm Approx Spool Weight:300gNominal Spool Width:65mm Approx	10
103	Acrylic Sheet 3mm,4ftx4ft	Very Good Quality		20
104	Acrylic Sheet 4mm,4ftx4ft	Very Good Quality		20
105	Acrylic Sheet 5mm,4ftx4ft	Very Good Quality		20

106	FoamSheet8mm, 4ft x 4ft	Very Good Quality	
107	Foam Sheet 10mm,4ftx4ft	Very Good Quality	
108	Foam Sheet 12mm,4ftx4ft	Very Good Quality	
109	Foam Sheet 15mm,4ftx4ft	Very Good Quality	
110	PlyBoard5mm, 2ft x 4ft	Very Good Quality	1
111	NylonRod10mm, 1m	Very Good Quality	5
112	Nuts (3mm,4mm,5mm, 6mm,8mm,10mm, 12mm) Pack of 100	Very Good Quality	1
113	Bolts (3mm,4mm,5mm, 6mm,8mm,10mm, 12mm) dia 1" Inch Pack of 100	Very Good Quality	1
114	Screws (3mm,4mm,5mm) Packof100	Very Good Quality	1
115	Washers (3mm,4mm,5mm, 6mm,8mm,10mm, 12mm) Pack of 100	Very Good Quality	1
116	Studs (6mm,8mm)1 Meter	Very Good Quality	2
117	Nails (1",2",3",1.5",5") Packof100	Very Good Quality	1
118	Fevicol 2Kg	Very Good Quality	1
119	2WayTape	Very Good Quality	10
120	PVCPipe.75",10ft	Very Good Quality	10

121	PVCPipe1",10ft	Very Good Quality	
122	PVCPipe1.5",10ft	Very Good Quality	
123	PVCPipe2.0",10ft	Very Good Quality	
124	Aluminium channels (L, C, Box, strip length 12ft)	Very Good Quality	
125	PCB Drill Bit 0.4mm	Very Good Quality	1
126	PCB Drill Bit 0.8mm	Very Good Quality	
127	PCBDrillBit1mm	Very Good Quality	1
128	DrillBit4mm	Very Good Quality	1
129	DrillBit5mm	Very Good Quality	1
130	DrillBit6mm	Very Good Quality	10
131	ArduinoUNOR3	Very Good Quality	5
132	Arduino NANO	Very Good Quality	5
133	ArduinoMega	Very Good Quality	3
134	Raspberry Pi Model4B,4GB	Very Good Quality	3
135	ESP8266 Node MCU	Very Good Quality	2
136	ESP32 Development Board	Very Good Quality	2
137	Beagle bone blu	Very Good Quality	1

138	Beagle bone Black	Very Good Quality	
139	Voltage Regulator Module	Very Good Quality	
140	Mini Micro submersible Water Pump	Very Good Quality	
141	Piezo electric Plate	Very Good Quality	
142	8*8LEDMatrix Module	Very Good Quality	
143	Bluetooth	Very Good Quality	
144	7 Segment LED Display	Very Good Quality	2
145	GSM/GPRS/GPS Module	Very Good Quality	2
146	Laser Module	Very Good Quality	2
147	LDR Module	Very Good Quality	2
148	4×4Matrix Keypad	Very Good Quality	2
149	Joy Stick Module	Very Good Quality	2
150	Active Buzzer (BIG)	Very Good Quality	2
151	Active Buzzer (SMALL)	Very Good Quality	2
152	Motor Driver	Very Good Quality	. 2
153	Sound Play back Module	Very Good Quality	2
154	BO Motors	Very Good Quality	10

55	Vibrating Motor	Very Good Quality	10
.56	Capacitive Touch Switch	Very Good Quality	2
157	IR Sensors (Obstacle Sensors)	Very Good Quality	2
158	Triple Axis Magnetometer	Very Good Quality	2
159	Humidity Sensor	Very Good Quality	2
160	MQ-2	Very Good Quality	2
161	MQ-3	Very Good Quality	2
162	MQ-4	Very Good Quality	2
163	MQ-5	Very Good Quality	2
164	MQ-7	Very Good Quality	2
165	Ultrasonic Sensor Module	Very Good Quality	2
166	Triple Axis accelerometer	Very Good Quality	2
167	PIR Motion Detector Module	Very Good Quality	2
168	Pulse Rate Heart Sensor	Very Good Quality	2
169	Relay Module	Very Good Quality	2
170	Soil Moisture Sensor	Very Good Quality	2
171	Touch Sensor	Very Good Quality	2

172	Rain Drop Sensor	Very Good Quality	
173	Flex Sensor	Very Good Quality	2
174	Temperature Sensor	Very Good Quality	2
175	Force Pressure Sensor	Very Good Quality	2
176	Colour Recognition Sensor	Very Good Quality	2
177	Water Flow Sensor	Very Good Quality	2
178	Sound Sensor	Very Good Quality	2
179	IR Sensor Array for Line Following	Very Good Quality	. 2
180	RFID Reader-Tags	Very Good Quality	2
181	RF Modules Tx & Rx315MHzASK	Very Good Quality	2
182	Stepper motor with Driver Board	Very Good Quality	2
183	ServoMotor360 rotation	Very Good Quality	10

184	ServoMotor180 rotation	Very Good Quality	10
185	Metal Gear Servo Motor (180° Rotation)	Very Good Quality	10
186	Solder Wire 100grm	Very Good Quality	10
187	Solder Flux	Very Good Quality	10
188	830Points Solder less Breadboard	Very Good Quality	5
189	400 Points Solderless Breadboard	Very Good Quality	5
190	Copper Clad Board single side	Very Good Quality	10
191	Copper clad board double side	Very Good Quality	. 10
192	Male to Male Breadboard Jumper	Very Good Quality	10
193	Femal eto Female Breadboard Jumper	Very Good Quality	10
194	Male to Female Breadboard Jumper	Very Good Quality	10

Terms and Conditions

The following Terms and Conditions apply to all bidders participating in the tender for the supply, installation, and commissioning of equipment, tools, and machines for the establishment of an AICTE IDEA Lab. All prospective vendors are required to read and comply with these terms in their entirety.

1. General Information

All equipment and materials must be delivered in the quantities and specifications as mentioned in the purchase order issued by the purchaser. The delivery location will be specified in the purchase order Anjuman College of Engineering and Technology, Mangalwari Bazar Road, Sadar, Nagpur, Maharashtra-440001.

The entire contract shall remain valid for a period of three (3) months from the date of award. Quotations submitted by bidders must remain valid for a minimum of 90 days from the final date of submission. Any quotation that does not meet this validity period will be considered non-compliant.

2. Bid Submission Guidelines

Bids may be submitted either via email (digitally signed) or in hard copy form, as specifically mentioned in the tender notice. All quotations must be printed on the bidder's official letterhead and duly signed by an authorized representative.

Each bid must be complete in all respects and must include the following mandatory documents:

- Detailed Profile of the Bidder, high lighting experience and key competencies.
- Copy of the Company/Firm Registration Certificate.
- Copy of valid GST Registration Certificate.
- Copy of submitted GST return (atleast upto November 2024).
- · Copy of valid PAN Card.
- Chartered Accountant's Certificate for turnover for FY2021–22, 2022–23, and 2023–24.
- CA-certified and audited Balance Sheets and Financial Statements (Form3CB/3CA) for the last three financial years.
- Copies of Work Completion or Experience Certificates of similar completed works.
- Valid Shop Establishment License or Factory License.
- Genuine Manufacturer Authorization Form (MAF), which will be subject to verification with the respective OEM.
- Bidder should provide an Escalation Matrix for service and after sales support.
- Valid EPF, ESIC, and Professional Tax Registration Certificates (where applicable).
- Income Tax Return Acknowledgements for FY2021-22, 2022-23, and 2023-24.
- Declaration/Affidavit (on Rs.500/-Stamp Paper) regarding no blacklisting from IITs/NITs/Govt. Offices/PSUs/Autonomous Bodies.
- Complete, signed, and stamped tender document including amendments and deviation sheets, if any (to be uploaded online only).
- Declaration of agreed specifications on company letter head, duly signed and stamped.
- Any other documents in support of technical eligibility.

All bidders are required to quote for all the items listed in the BoQ. Partial or item-wise quotations will be summarily rejected. Each bidder is allowed to submit only one quotation per package; multiple submissions from a single bidder will lead to disqualification.

3. Technical Documentation and Compliance

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The bidder must furnish complete technical documentation for each quoted item. This includes detailed product specifications, installation manuals, operation and maintenance manuals. The bidder is also required to submit a layout/design proposal aligned with the lab setup requirements, highlighting compliance points against the tender specifications.

Original technical brochures or scanned versions of product catalogs should be submitted with the bid. Wherever available, URLs to the OEM's official product page should also be provided for cross-verification.

Each bidder must clearly mention the make, model, and complete technical specifications for the equipment being offered. A compliance sheet responding to each technical requirement outlined in the tender must be prepared and duly signed.

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4. Eligibility and Qualification Criteria

All bidders must be OEMs or authorized partners/distributors with valid authorization for the products they

are quoting. Authorization letters must be submitted on the OEM's official letterhead.

Bidders must demonstrate relevant experience by submitting a minimum of three Purchase Orders (executed within the last five years) for similar equipment supplied to academic, R&D, or industrial institutions. A list of at least five institutional clients (with contact information) must be provided as a reference.

It is mandatory that the bidder or OEM has a registered support office in India to provide warranty and after-sales support. In the case of imported equipment, either the OEM or their authorized seller must submit a certificate confirming the presence of such a service support facility in India.

The OEM must also submit a declaration confirming the availability of spare parts for the quoted products for a

minimum of one year and authorize the bidder to participate in the tender.

5. Financial Criteria

Each bidder must have an average annual turnover of Rs. 5 Crores or more over the last three financial years (FY 2022-23, 2023-24, 2024-25). The turnover must be supported by a CA certificate or audited financial statements.

Prices quoted must be inclusive of all taxes (GST, customs, etc.), transportation, packaging, insurance, unloading, installation, commissioning, and training charges. There shall be no extra claim under any circumstances after the finalization of the bid.

The quoted prices must be firm and fixed throughout the duration of the contract. No escalation in price will be allowed under any pretext.

6. Evaluation and Award of Contract

All bids will be evaluated on the basis of compliance with the technical specifications, completeness of submitted documentation, financial eligibility, and price competitiveness. The contract shall be awarded to the bidder whose offer is determined to be technically responsive and lowest in cost. The purchaser reserves the absolute right to reject any or all bids without assigning any reason. The final decision on selection will be at the sole discretion of the purchaser and shall be binding on all parties.

7. Warranty and After-Sales Service

All equipment must carry a minimum onsite warranty of at least three years from the date of successful installation and commissioning. During this warranty period, the bidder shall repair or replace any defective items at no additional cost to the purchaser. All associated transportation, testing, and labor costs shall be borne by the bidder. In case of any service delay or failure to resolve issues during the warranty period, the purchaser reserves the right to invoke penalties or reject future business from the vendor.

8. Payment Terms

Payment shall be released only after the successful supply, installation, and commissioning of the equipment. Final inspection and acceptance will be carried out by the purchaser's technical committee.

No payment shall be made for equipment that is received in damaged condition, is non-functional, or fails to meet the required specifications. The bidder must submit all necessary documentation (delivery challans, installation report, warranty documents, training certificate, invoice, etc.) to process payment.

9. Other Conditions

No bidder shall be given preference based on category, class, or affiliation. The procurement may be extended to additional phases (e.g., Phase II) depending on availability of funds and institutional requirements.

Delayed delivery or installation may result in cancellation of order or imposition of penalties, as deemed fit by the purchaser. The scope of the supply and service must be entirely as per the BoQ and technical specifications. Bids with partial compliance or deviations shall not be entertained.

10. Submission Deadline and Contact Details

All quotations must be submitted by [19/09/2025]

to the email ID:- principal@anjumanengg.edu.in or

sent in hard copy to: Anjuman College of Engineering and Technology, Mangalwari Bazar Road, Sadar,

Nagpur, Maharashtra, 440001 Contact: Prof. (Dr.) K. S. Zakiuddin Contact Number: 9372592309

Email: principal@anjumanengg.edu.in

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