ASANSOL ENGINEERING COLLEGE
(An Autonomous Institute)

NAAC 'A' Graded, NBA Accredited (B. Tech in ME, CSE, ECE)
AICTE Approved, MAKAUT Affiliated, UGC (2f) Recognised
Kanyapur, Vivekananda Sarani, Asansol,
Paschim Bardhaman, WB, PIN-713305

Tender Ref. No: AEC/Idea-Lab/ Tender/Aug 25/01   Date: 20-08-2025

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 guidelines 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	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: Up to 300°C or above Heat bed: Upto 120°C.or above. Nozzle:CompatiblewithAllpolymers,0.4, 0.6and 0.8mm Steel Sheet: Provided with satin or smooth PEI surface. Filament Diameter: 1.75mm (supports PLA, PETG, ASA, ABS, etc.). Extruder: Gearbox with1/10ratio, Speed : 550 MM/Sec or above Stepper Drivers for smooth motion or equivalent Stepper Motors: Choosebetween1.8°or precise 0.9° X, Y stepper motors. LCD Screen: 3.5″graphic65kcolorscreenor 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 700X700X700 or above. Fully enclosed Machine.	1

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2	PCB Milling Machine	Branded Company Product with at least three years product warranty	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 SoftwareResolution:0.01mm/step Positionaccuracy:0.01to0.02mm 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 PowerSupply:DC24V,2.5A(viaAC100–240V, 50/60Hz adapter) PowerConsumption:Approx.50Wormore	1
3	CO2LaserCutting Machine	Branded Company Product with at least three years product warranty	WorkingArea:Min600x900mmorabove Laser Type: CO2DC Glass Laser Tube/RF Metal Laser Tube Laser Power:80/100W Wave Length: Upto 10.6 Micrometer Cutting Speed: 30000 mm/min or more EngravingSpeed:64000mm/min or more XY Axis: LM Guide Rail or equivalent Cooling: Air/ Water Cooling SupplyVoltage:230V/415V Accessories: CO2FocusLens:1No. Mirror25mm: 3 Nos. Acetone: 1 litre Acrylic sheet: 2 Nos	1
4	Vinyl Printer	Branded Company Product with at least Two years Warranty	Dimensions:50cmx15cmx15cmorabove Weight: 15.4 lbs or less Maxcutsizeusingmachinemat:11.5inchx 23.5inchormore Cutspeed:upto14.1ips	1
5	3D Scanner	Branded Company Product with at least three years product warranty	Technology: Stereo camera structured light with focusable cameras or equivalent CPU: Quad-core 64-bit SoC,1.5GHz with integrated GPU RAM:4GB Projector: DLP MEMS mirror or equivalent Camera Sensor: Sony 13 MP or better ScanSpeed:4seconds or more Working	1

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			Distance : Effective Working Distance: 160mm-1400mm Scan Speed : 980,000points/s,upto14FPS Align Modes : Feature Alignment, Hybrid Alignment, Texture Alignment, Global Markers Safety : Eye-safe Texture Scan : Yes Interface : USB2.0 or above Outdoor Scanning : Yes Output Formats : OBJ;STL; PLY;P3; 3MF Scanning Environment: Indoor and outdoor (shaded) Texture /Color Scanning: Yes Minimum Capturable Feature Size:0.2mmor less Scanner Weight:500grams or less Scanner Dimensions:upto240×60×60mm Compatible OS: Any OS supporting a modern web browser	
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 Workpiece Diameter:Upto100 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 DrillHole:Upto22mm or better Spindle Concentricity:Upto 5microns or better Chuck: 3-jaw chuck as per DIN 6386, centrically clamped,100mm diameter or better Run Out(without Chuck):Upto10 microns Sleeve Receiver:MK2,retractable sleeve with scale SpindleSpeedRange:Between50to2500 rpm SpeedStages:6-8 MotorRating:550Worbetter,induction motor, single phase 230V	1

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			Traverse Cross: Up to 70 mm or better Traverse Longitudinal: Upto 300mm or better Weight(Complete): Upto55kgormore Additional Accessories: Splashguard and chip collecting tray: 1No. Cutter set with tungsten inserts: 2 Nos. MillingAttachment:1nos Tungsten disposable tips ten-piece set:1No. Sample work pieces (Nylon Rod, Aluminium Rod) Desktop:1No.	
7	CNC Router	Branded Company Product with at least three years product warranty	WorkingArea:Min1300x2500mm 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:380WS230min No-loadSpeed: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:upto190x125mm	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,S2:15min or above Max. Disc Diameter:min75 mm Max. Cutting Length: 450 mm or more Spindle Speed:5 speeds such as1600/2600 / 3200 RPM etc Material: Cast Iron Bed Height: 0.2 m Cable Length:0.850m	1

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11	Bench Top Drill Machine	Branded Company Product with at least Three to Five years Warranty	Continuousratinginput: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.) Powersupplycord:1.75m(5.7ft) AdditionalAccessories:BenchVise: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,10mincycle): 120A@100%,150A@60%,200A@ 35% SupplyVoltage:240V+10%,-15%,1Phase, 50/60 Hz Open Circuit Voltage: 55V DC ±5V WeldingCurrentRange:15–200AmpsDC Insulation Class: F Type IngressProtection:IP21 Dimensions(L×W×H)with Handle: upto 320×120×195 mm Weight(Approx.):4.3kgorless	1
13	Computerized Sewing Machine	Branded Company Product with at least three years product warranty	Motor:120W MaxSewingSpeed:860SPM Power: 220 – 240 V Automation Grade: Automatic Max Stitch Length: 4mm Thread Type: Computerized Weight:7.6 kg NumberofStitches:120 Size/Dimension:50.8cmx29.464cmx40.64 cm Maximum Stitch Width: 7 mm NumberofButtonholeStyles: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	OperatingTemperatureRange:Min45°C– 70°C DryingTimeSetting:0–48hoursorhigher Hot-Air Heating: upto 360° circulation Moving Speed: 300 mm/s or more Power Rating: 160 W ShippingWeight:2.5kg	1

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15	Reflow Oven	Branded Company Product with at least three years product warranty	No.ofWaves:7orhigher 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	1
			OverallDimensions:min350×450mm Machine Weight: upto 25 kg	
16	Digital multimeter	Branded Company Product with at least three years product warranty	DisplayCount:Upto4000 DCVoltageRange:Upto1000V ACVoltageRange:Upto1000V DC Voltage Accuracy:±0.5%or±3digits, whichever is higher ACVoltageAccuracy:Within±1%+3digits DC Current Measurement: Up to 10 A ACCurrentMeasurement:Maximum10A DC Current Accuracy: ±1.5% + 3 digits (approximate) 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 TemperatureRange:From0°Cup to approximately 40°C Storage TemperatureRange:Between-30°C and 60°C Overall Dimensions(H×W×L):Approximately 183×91×49.5 mm Unit Weight: Around 455 grams Safety Compliance: As per IEC61010-1&IEC 61010-2-030 standards, suitable for CAT III 600V and CAT II 1000V environments with Pollution Degree 2 classification	5

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| 17 | MSO100MHz | Branded Company Product with at least three years product warranty | Bandwidth: Up to 100 MHz
Analog Channels:4 or more
Real-Time Sampling Rate:Maximum1Gsa/s per channel
Memory Depth: 10 Mpts per channel
Waveform Update Rate: Approximately 120,000 wfms/s
VerticalResolution:8bits
VerticalScale:Rangingfrom1mV/divto10 V/div
HorizontalScale:Spanning1ns/divto100 s/div
Spectrum Analyzer Frequency Range: DC to 500 MHz
FFT Points: Upto 1M points for enhanced frequency domain resolution
Waveform Math Functions: Includes addition, subtraction, multiplication, division, minimum, maximum, root, square, absolute, inverse, derivative, integral, and low-pass filter
Trigger Types: Edge, Pulse Width, Video, Pulse Runt, Rise & Fall(slope),Alternate, | 1 |
| | | | Timeout, Event-Delay, Time-Delay, and Bus Arbitrary Waveform Generator(AWG): Dual-channel, 25 MHz, supporting various waveforms such as sine, square, pulse, ramp, DC,noise, sinc, Gaussian, Lorentz, exponential rise/fall, haversine, and cardiac
AWG Sample Rate: 200 Msa/s
AWG Vertical Resolution:14bits
Display:8-inchWVGATFTLCD(800×480 pixels)
Data Logging Capability: Up to 1000 hours
SegmentedMemory:Supportsupto29,000 Segments for efficient waveform storage and retrieval
Connectivity:USB2.0(hostanddevice), Ethernet (RJ45), and Go-NoGo BNC
Dimensions(W×H×D):380×200×125mm or above
Weight:2Kgs or above
Safety Compliance: Conform stoIEC61010-1 and IEC 61010-2-030 standards, suitable for CATIII600V and CATII1000Venvironments with Pollution Degree 2 classification | |

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18	Digital oscilloscope	Branded Company Product with at least three years product warranty	Number of Channels: Upto 2 independent analog inputs Memory Record Length:Upto10Mpts for extended waveform capture BandwidthLimiting:Selectable20MHz bandwidth filter SamplingRate:Maximumof1Gsa/s real-time equivalent per channel Rise Time:≤3.5ns depending on probe and settings Display:7"TFT color LCD with 800×480 resolution Time Base Range: From 5ns/div to 100s/div, user-adjustable Vertical Resolution: 8-bit digital resolution Trigger Modes: Automatic, Normal, and Signal-dependent triggering Maximum InputVoltage:300Vrms(within safety limits) Input Sensitivity: Within the range of 1 mV/div to 10 V/div Input Coupling Options: Selectable among AC, DC, and Ground Trigger Coupling Modes: Configurable as AC, DC, High-pass, or Low-pass Physical Dimensions: Approximately350× 200 × 120 mm or above Unit Weight:2.5kg or above Input Impedance: Nominal 1MΩ//16pF Measurement Capabilities: Equipped for Automatic parameter extraction,background	1
			noise filtering, and AUTOSET configuration for display scaling (time base/gain) Protocol Decoding Support: Capable of analyzing I2C,SPI,UART,CAN,andLIN communication protocols Standard Accessories: Includes mains power cable, user manual (digital format), and one GTL-16E probe per input channel	

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| 19 | Power supply | | Branded Company Product with at least three years product warranty | OutputConfiguration:4-channeldesignwith independent electrical isolation across all outputs
Channel Output Ranges:
• CH1&CH2:Adjustableoutputvoltagefrom 0 to 32V with a current delivery capacity up to 3A
• CH3:Variablerange0to5Vsupportingup to 1A
• CH4:Outputadjustablefrom0to15Vwitha load current of up to 1A

Constant Voltage Operating Mode
Line Regulation: $\leq 0.01\% + 3$ mV (approximate value with in rated voltage range)
Load Regulation:$\leq0.01\%+3$mV(across rated load variation)
Ripple & Noise:$\leq$1mVrmsacrossfull bandwidth

Constant Current Operating Mode
Line Regulation: $\leq 0.2\% + 3$ mA
Load Regulation: $\leq 0.2\% + 3$ mA
Ripple Current:$\leqq$3mArms(typical)

Safety & Operational Features
Output Control: Independent output ON/OFF switching functionality is required
VoltageResolution:Approximately100mV (*1)
CurrentResolution:Approximately10mA (*1)

Display Parameters
Display Units: Four separate displays required for individual channel status visualization
DisplayType:4.3-inchLCD(color or monochrome as applicable)

Functional Features
Tracking Operation: Supported(required for synchronizing output behavior)
AutoSeries/Parallel: Supported(automatic internal reconfiguration required) | 1 |
| | | | | Power Requirements
Supply Input:230VAC$\pm$10%,50Hz

Mechanical Specifications
Maximum Dimensions(W$\times$H$\times$D):Within 200 mm $\times$ 100 mm $\times$ 200mm
MaximumWeight:10kg or less | |

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20	Function Generator	Branded Company Product with at least three years product warranty	Output Function:The equipment shall 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 0.1Hzupto1MHz. Frequency Resolution: Frequency resolution shallbemaintainedwithinamaximumof0.1 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 impedanceshallbe50Ωwithatoleranceof ±10%. Attenuator:Asingle-stepattenuatorof-40dB ±1dBshallbeprovided. Display: A 6-digit LED display shall be incorporated for parameter indication. Output Control: Output shall be controlled via an 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 of0 °C to40 °C. Dimensions:Maximum dimensions shall not exceed255mm(W)×95mm(H)×295mm (D). Weight:Maximum device weight shall be within 2.5 kg.	1
21	Bench Top Multimeter	Branded Company Product with at	DCVoltage: Range:500Mv to 1000V across5 ranges. Accuracy: ±(0.03% rdg + 4 digits). Input impedance:10MΩ.	1

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		least three years product warranty	AC Voltage (True RMS): Range: 500 mV to 1000Vacross5ranges.Accuracy:±(0.5%–5%rdg+digits) depending on frequency and range. Input impedance: 10 MΩ. DCCurrent: Range: 500µAto20Aacross6 ranges. Accuracy: ±(0.02%–0.3% rdg + 2 digits) depending on range. AC Current(True RMS):Range:500µAto20 Aacross6ranges.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/ManualRange,Max, Min, dBm, Rel, Hold. Continuity Beep:Threshold<5Ω. Display: Dual7-segmentLED,0.4"and0.5". Power Source: AC 100/120/230 V ±10%, 50/60 Hz. Dimensions&Weight: Approximately251× 91 × 291 mm; 2.6 kg.	
22	Non-Contact Voltage Tester	Branded Company Product with at least three years product warranty	Function: Non-contact AC voltage detection tester. 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 61010-1CATIII1000Vsafetystandards. Dimensions: Compact, handheld design suitable for field use(approx.150mm×30 mm × 25 mm). Weight: Light weight, approximately150gfor ease of portability.	5
23	LCR Meter	Branded Company Product with at least three	Display:Approximately 2.8"TFTtouchLCD screen. Resolution:25,000 or above counts resolution on both primary and secondary	1

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		Years product warranty	displays. BasicAccuracy:Within±0.2%understand conditions. Test Frequencies: Six or eight selectable frequencies depending on model variant. MeasurementCombinations:Upto15 different measurement combinations available. Test Level: Selectable AC test levels approximately0.3V,0.7V,and1Vrms;DC test level selectable at ±1 V. Measurement Speed:Selectablemeasurement speeds of approximately 10 measurements per second(fast)and2.5measurementsper 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.	
24	Soldering Station	Branded Company Product with at least three years product warranty	Power Rating: Approximately 60W maximum output power. Temperature Range: Adjustable from approximately 200 °C up to 480 °C. TemperatureStability:Within±2°Cunder 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 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 SupportAndroid4.2orabove/widows/Mac system	1

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26	Soldering Rework Station	Branded Company Product with at least three years product warranty	Soldering Iron Power: Upto approximately 60 W output power with temperature adjustable within approximately 200 °C to 480 °C range. Heating Element:Needle bit with MCH heater providing rapid heat-up and stable temperaturecontrolwithin±2°C. Hot Air Blower Power:Upto approximately 500 W output power with temperature adjustablewithinapproximately200°Cto 450 °C range, multiple nozzles included. Hot Air Features: Auto-pause function on placement in cradle, airflow adjustable within operational limits. DC Power Supply:Provides output voltage approximately 15 V up to 2 A maximum current plus 5 V USB output for auxiliary power. Control:Microcontroller-based system with LED indicators for temperature and mode selection. Safety:ESD-safe design compliant with applicable standards. Build: Metallic body with powder coating, approximatedimensions280mm×180mm ×140mm(W× H×D). Weight: Approximately 3.5kg. Power Source: AC 220 V ±10%, 50/60 Hz. Accessories: Includes soldering iron with needlebit,hotair blower with 3nozzles,iron stand with sponge, hotaircradle, patchcord, and power cord. Operating Temperature:Suitable for ambient temperature approximately 0 °C to 40 °C	1
27	Hand Drill Machine	Branded Company Product with at least three years product warranty	Rated Input Power: Approximately 500W or above maximum power consumption. BitHolder:Standard 1/2"-20UNF thread type. No-Load Speed(1stGear):Adjustablefrom0 up to approximately 3,000 rpm. Power Output: Approximately 300W continuous output power. Weight: Approximately 1.7 kg 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 1.5mmminimumto13mmmaximum.	2
28	Cordless drill	Branded Company Product with at	Torque (soft/hard/max.): Min 21/50/- Nm No-load speed(1stgear/2ndgear):Min0– 500 / 0 – 1,900 rpm	2

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		least three years product warranty	Weightincl.battery:1.3kgorless 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 Torquesettings:20+2orbetter	
29	Jig Saw	Branded Company Product with at least three years product warranty	RatedInputPower:Approximately500W maximum power consumption. Voltage, Electrical: Nominal 230V AC supply. Saw Stroke Length:Approximately 20mm stroke length. Stroke Rate at No Load: Adjustable within approximately800to3,100spm(strokes per minute). Weight: Approximately 2.08 kg total weight. Bevel Angle:Adjustable within approximately -45°to45°range.	1
30	Miter Saw	Branded Company Product with at least three years product warranty	RatedInputPower:Approximately1,750W maximum power consumption. SawBladeDiameter:Approximately254mm 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 90mm ×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 approximately5,000 rpm. Weight:Approximately 11.1kg.	1
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 230V AC supply. Weight: Approximately 0.75 kg. Working Temperature Range:Adjustable within approximately 60 °C to 550 °C. Heat-Up Time:Approximately 1 second to reach target temperature. Air flow: Adjustable within approximately 350 to 550 liters per minute. Air flow Control:Three selectable airflow settings.	2

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32	Table saw	Branded Company Product with at least three years product warranty	Ratedinputpower:Max1800W Incline setting: 45 ° L / 0 ° R Table size: Up to 555 x 555 mm Saw blade diameter: 254 mm Cutting height 90°: 80 mm Cuttingheight45°:55mm Sawbladeborediameter:30mm Weight24.4 kg or less Max.cuttingcapacityontheright:545mm No-load speed: 4300 rpm Cuttingheight90°:80mm Cuttingheight45°:55mm	1
33	Bench grinder	Branded Company Product with at least three years product warranty	Grinding wheel diameter: min150 mm Rated input power: 350 W or more Grindingwheelwidths:20mmormore No-load speed: upto 3,000 rpm Grindingwheelbore:20mm/2cm Grit 24, 60 or more Weight:10kgorless	1
34	Angle Grinder	Branded Company Product with at least three years product warranty	RatedInputPower:Approximately670W maximum power consumption. No-LoadSpeed:Approximately11,000rpm. DiscDiameter:Approximately100mm nominal diameter. GrindingSpindleThread:StandardM10 thread. Weight: Approximately 1.5kg. Switch: Lockable switch for operational safety.	1
35	Straight Grinder	Branded Company Product with at least three years product warranty	Rated Input Power: Max 300 W power consumption. No-Load Speed: Upto 28,000 rpm. Voltage, Electrical: Nominal 230V AC supply. Spindle Collar Diameter: Approximately 41 mm. Weight: Around1.4 kg. MaximumGrindingToolDiameter:Upto25 mm. Maximum Collet Diameter:Upto 8mm. 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: About 20mm standard bore size. Guide Rail Compatibility: Not compatible with guide rails. No-Load Speed: Typically 5,200rpm. Weight: Around 4.1 kg	1

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37	Blower	Branded Company Product with at least three years product warranty	Rated Input Power:Max 650W power consumption. Weight: Approximately 1.7kg. Voltage, Electrical: Nominal 230V AC supply. Sound Pressure Level: Around 103 dB(A). Sound Power Level: Approximately 95dB(A). Uncertainty (K): Within ±3 dB	1
38	Cordless Screw Driver	Branded Company Product with at least three years product warranty	Battery Capacity: around 1.5 Ah nominal capacities. Torque (Soft/Hard/Max): Approximately 14 Nm / 30 Nm / Maximum not specified. No-Load Speed(1stGear/2ndGear):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):About0.8kg. TorqueSettings:20 plus 1 adjustable settings.	1
39	Vacuum Cleaner	Branded Company Product with at least three years product warranty	Rated Input Power: Approximately 1,100W maximum power consumption. Weight: around 6 kg total weights. Container Volume (Net):Approximately10 liters capacity. Voltage, Electrical: Nominal230VACsupply. Container Volume (Gross): Approximately 15 liters total volume. Container Volume (Net, Water):About8liters capacity for water. FilterSurfaceArea: Around2, 300cm² effective filtration area. Airflow Rate (Turbine):Approximately53 liters per second. Vacuum Pressure (Turbine):Upto270mbar vacuum pressure. Number of Wheels: Four wheels for mobility.	1
40	Random orbit sander	Branded Company Product with at least three years product warranty	Rated Input Power: Upto280Wmaximum consumption. Sanding Pad Diameter: Nominal 125mm diameter. Orbit Diameter: Approximately2.6mm 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: Approximately1.3mm.	1

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41	Planer	Branded Company Product with at least three years product warranty	Rated Input Power: Not exceeding 710W under nominal operating conditions. PlaningWidth: Approximately82mm effective width capacity. Planing Depth: Within the rangeofupto2.6 mm maximum depth per pass. Weight: Circa 2.8kg 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	Battery Voltage: Rated at approximately18.0 V nominal voltage. WeightExcludingBattery: Around1.3kg without battery attached. Container Volume: Approximately 0.7liters net capacity. Filter Surface Area: Roughly 55cm²filtration surface. Maximum Airflow Rate(Turbine):Upto10 liters per second. Maximum Vacuum Pressure(Turbine):Not exceeding 60 mbar under standard conditions. Operating Time(18Vbattery):Typically7 minutes per Ah of battery capacity.	1
43	Rotary Tool Kit	Branded Company Product with at least three years product warranty	RatedPowerInput: Approximately175W 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 interchange. VibrationLevel:Approximately18m/s² measured vibration	2
44	Rubber Grip Hacksaw	Very Good Quality	Depth of Throat: Approximately 9 8 mm (3.85 inches) nominal depth. Blade Length: Around 254 mm (10inches) standard length.	2

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45	Hacksaw 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	Very Good Quality	Weight: Approximately 8oz(220grams) nominal weight. Dimensions:Around27.8cm×12.4cm×3.6 cm (L × W × H) overall size	2
47	Ball Pein Hammer	Very Good Quality	Weight: Approximately 110 grams 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 to 32mm overall range.	1
50	Open end spanner set12Pcs	Very Good Quality	Weight: Approx 1.74Kg nom.wt. Qty: 12pcs/set. Size:6mm-32mm overall dims.	1
51	Combination Spanner set8Pcs	Very Good Quality	Weight: Approx 649 gnom.wt. Qty: 8pcs/set.	1
52	Allen keyset 10pcs	Very Good Quality	HexKeySize:1.5,2,2.5,3,4,5,5.5,6,8,10mm; Qty:10pcs/set	2
53	Allen keyset 12pcs	Very Good Quality	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
54	Combination plier	Very Good Quality	Weight: Approx 422 gnom.wt. Size: 8"/200mm nominal	2
55	Long nose plier	Very Good Quality	Weight: Approx 399 gnom.wt. Size:180mm/6" nominal	2
56	Circlip straight 5"	Very Good Quality	Weight: Approx 399 gnom.wt. Size:130mm/5" nominal	2
57	Circlip bent	Very Good Quality	"Weight: Approx 399 gnom.wt. Size:130mm/5"" nominal"	2

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58	Diagonal Cutter	Very Good Quality	"Weight: Approx 239 gnom.wt. Size:180mm nominal"	2
59	Wire Stripper	Very Good Quality	Weight: Approx 281 gnom.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	2
65	16pcsscrew driver set	Very Good Quality	PiecesPerSet:16 pcs	1
66	6pcs precision screw driver set	Very Good Quality	PiecesPerSet:16 pcs	2
67	Max steel snip cutter	Very Good Quality	Length:250 mm	2
68	PVC Pipe cutter	Very Good Quality	Length:42 mm	2
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

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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 Sz(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	Pegboard	Very Good Quality		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 Rule 300mm	Very Good Quality	Product Type: Steel Rule Scale Size:12"/300mm Material: Stainless Steel	5
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:150×80mmnominal 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

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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	Firs tAid Kit–Industrial Standard Make	2
95	Gloves Pair	Very Good Quality	Gloves–Industrial Standard Make	10
96	Normal Oven	Branded Company Product with at least three years product warranty	OvenCap: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:183Lormore Annual Energy Consumption:148kWh/Year or less Refrigerator Fresh Food Capacity:165L or more Freezer Capacity: min 18L Bottle Count:5 or more Noise Level:40dB or less Installation Type: Freestanding	1

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98	Smart Board	Branded Company Product with at least three years product warranty	Display Size: Approx 75Inch (190cm) Upto Resolution: 4KUHD or Higher Brightness: Min 350 nits;Typ400nits Approx Contrast Ratio: Typ1200: 1Upto Response Time: Approx 8ms Viewing Angle:Approx178 Degrees Wide WorkingFrequency:1.5Ghz Nominal RAM:4GB Or More Internal Storage:32 GB Min OS: Android Based HDMI:3Ports USB: 2Ports Sensing Type: Infrared Touch Frame Surface Protection:4mm Toughened Glass Or Equivalent Infrared Touch Points:20 Approx 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 AnalogInput:D-Sub15pin:1portDigital Input: HDMI:1port Projection Lens: Type: No Optical Zoom/Focus (Manual) Nominal Focal Length:16.70mm Approx	1
			F Number:1.44 Nominal Zoom:1.44-1.95 Ratio(Wide to Tele) ThrowRatioRange:1.00–1.35(Digital Zoom Approx	

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100	Printer	Branded Company Product with at least three years product warranty	Functions: Print, Scan, Copy Printer Type: Laser Nominal Dims(mm):409×398.5×267Approx Weight:9.7Kg Nominal 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 2 Sided-Duplex-PaperSize:A4 PaperHandling:Tray#1- Paper Type: Plain, Thin, Recycled Tray#1- Max Capacity:Upto250Sheets(80g/m²) Approx Paper Output:Upto100 Sheets (80g/m²) Face Down Tray; One Sheet Face Up Tray Approx Copy-Colour/Mono: Yes/Yes Multiple Copies: Sorts/Stacks Upto 99 Pages Approx Enlarge/Reduce:25%-400%(In1%Steps) Approx Copy Resolution:600×600dpi 2Sided-Duplex- Copy Paper Type: Plain, Thin, Recycled 2 Sided-Duplex-Copy Paper Size:A4 Scan- Resolution Interpolated:Upto 19200×19200 dpI Approx Scan- Resolution Glass: Upto 600×2400dpi Approx Connectivity: Hi-Speed USB2.0 Display Type:16 Chars×2Lines Memory Capacity:32MBApprox Power Source:220-240VAC50/60Hz Power Consumption-Ready: Approx 60W Power Consumption-Sleep: Approx 6.6W Power Consumption-Off: Approx 0.08W NoiseLevel:50dB(A)Approx	1
101	Desktop	Branded Company Product with at least three Years product warranty	CPU:INTELCOREI7-12THGENorHigher RAM:8GB+512GB SSD or more Conn: LAN+WIFI+BLUTOOTH+KEYMOUSE Display:20" DESKTOP MONITOR	5
102	3Dprinter Filament	Very Good Quality	WeightKg:1Approx MeltFlowIndex:2(190°C/2.16kg)Nominal FilamentLength:330mApprox Dim Accuracy:+/-0.1mmApprox	10

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			Roundness Accuracy: +/-0.5mmApprox SpoolInnerDia:55mmNominal SpoolOuterDia:200mmApprox SpoolWeight:300gNominal SpoolWidth:65mmApprox	
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		2
107	Foam Sheet 10mm,4ftx4ft	Very Good Quality		1
108	Foam Sheet 12mm,4ftx4ft	Very Good Quality		1
109	Foam Sheet 15mm,4ftx4ft	Very Good Quality		1
110	PlyBoard5mm, 2ft x 4ft	Very Good Quality		12
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

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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		10
122	PVCPipe1.5",10ft	Very Good Quality		10
123	PVCPipe2.0",10ft	Very Good Quality		10
124	Aluminium channels (L, C, Box, strip length 12ft)	Very Good Quality		2
125	PCB Drill Bit 0.4mm	Very Good Quality		10
126	PCB Drill Bit 0.8mm	Very Good Quality		10
127	PCB Drill Bit 1mm	Very Good Quality		10
128	Drill Bit 4mm	Very Good Quality		10
129	Drill Bit 5mm	Very Good Quality		10

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130	Drill Bit 6mm	Very Good Quality		10
131	ArduinoUNOR3	Very Good Quality		10
132	Arduino NANO	Very Good Quality		10

133	Arduino Mega	Very Good Quality		3
134	Raspberry Pi Model4B,4GB	Very Good Quality		5
135	ESP8266 Node MCU	Very Good Quality		10
136	ESP32 Development Board	Very Good Quality		5
137	Beagle bone blu	Very Good Quality		5
138	Beagle bone Black	Very Good Quality		5
139	Voltage Regulator Module	Very Good Quality		2
140	Mini Micro submersible Water Pump	Very Good Quality		2
141	Piezo electric Plate	Very Good Quality		2
142	8*8 LED Matrix Module	Very Good Quality		2
143	Bluetooth	Very Good Quality		2
144	7 Segment LED Display	Very Good Quality		2
145	GSM/GPRS/GPS Module	Very Good Quality		2

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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
155	Vibrating Motor	Very Good Quality		10
156	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

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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		2
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

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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	830 Points Solderless 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	Female to Female Breadboard Jumper	Very Good Quality		10

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194	Male to Female Breadboard Jumper	Very Good Quality		10
195	Solnoi Electronics Raspberry Pi 3 camera module Night Vision Camera	Very Good Quality		05

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 (e.g., Asansol Engineering College, Kanyapur, Asansol – 713305, Paschim Bardhaman, West Bengal). 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) , 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, highlighting experience and key competencies.
• Copy of the Company/Firm Registration Certificate.
• Copy of valid GST Registration Certificate.
• Copy of submitted GST return (at least up to November 2024).
• Copy of valid PAN Card.
• Chartered Accountant's Certificate for turnover for FY 2021–22, 2022–23, and 2023–24.
• CA-certified and audited Balance Sheets and Financial Statements (Form 3CB/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 FY 2021–22, 2022–23, and 2023–24.
• Declaration/Affidavit (on ₹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 letterhead, 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 specified equipment list as mentioned in the website. 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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AICTE Approved, MAKAUT Affiliated, UGC (2f) Recognised
Kanyapur, Vivekananda Sarani, Asansol,
Paschim Bardhaman, WB, PIN-713305

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.

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 ₹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.

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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 31.08.2025 to the email ID aicte_idea_lab@aecwb.edu.in or sent in hard copy to:

Asansol Engineering College
Kanyapur, Asansol – 713305, Paschim Bardhaman, West Bengal
Contact:
1. **Prof(Dr.) Gouri Sankar Panda**
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Sd/-
Principal,
Asansol Engineering College