

# Tender Document for AICTE IDEA Lab Equipment Procurement (2025) SKIT Jaipur

## Tender Notice

Online tenders are invited from **reputed and experienced suppliers** (manufacturers or authorized distributors) for the *supply, installation, and commissioning* of various equipment, tools, and machines for setting up an **AICTE IDEA Lab** at the institute. The laboratory is to be established as per AICTE guidelines to promote innovation, design thinking, and rapid prototyping skills among students and faculty.

**Tender Reference No.** SKIT/2025/AICTE IDEA LAB/NT-04

**Date of Issue:** 06/10/2025

**Last Date & Time for Bid Submission:** 14/10/2025 up to 3:00 PM IST.

**Submission Mode:** Bidders may submit their bids via official e-tender email (digitally signed PDF) to [idealab@skit.ac.in](mailto:idealab@skit.ac.in).

**Scope:** Supply and install the equipment and items listed in the *Equipment List* (with specifications and quantities detailed in the next section). Installation includes any required onsite assembly, testing, and demonstration of functional operation of all equipment. Comprehensive training for faculty/staff on key equipment operation and safety is also expected as part of commissioning.

**Earnest Money Deposit (EMD):** Not Applicable (or as specified separately, if any). The tender document includes the detailed **Equipment List with Specifications, Terms and Conditions, Eligibility and Qualification Criteria, Bid Submission Instructions, Warranty requirements, Evaluation Criteria, and Contact Information** for queries. Bidders are advised to read all sections carefully and comply with the conditions outlined. All items in the Bill of Quantities must be quoted; *partial or item-wise quotations will not be accepted*. The purchaser reserves the right to cancel or modify any part of the tender for any reason.

## Equipment List and Specifications


The following table lists the required equipment, tools, and consumables along with **preferred brands/quality, minimum technical specifications, and quantity** to be procured for the IDEA Lab. Bidders must ensure that the products offered meet or exceed the given specifications. **All equipment must be of high quality, from established brands, and include at least the minimum warranty period specified (refer to warranty clauses).** Equivalent or superior models from reputed brands will be

**AICTE IDEA LAB**  
Swami Keshvanand Institute of  
Technology Management & Graomthan  
Ramnagarla, Jatapura, JAIPUR-302017

Chief Mentor / Principal

accepted if the exact preferred brand/model is not available, provided they meet the specifications.

| Sr. No. | Equipment Name                                      | Specifications                           | Detailed Specifications   | Qty. |
|---------|---|--|---|------|
| 1       | Laser Cutter with software and standard accessories | Industrial CNC CO2 Laser Cutting Machine | <ul style="list-style-type: none"> <li>• Bed size (working area): 1300 X 2500 mm</li> <li>• Laser Power: 60W-150W (best)</li> <li>• Engraving Speed 0-800mm/s</li> <li>• Cutting Speed 0-300mm/s</li> <li>• Reposition Accuracy <math>\pm 0.01</math>mm</li> <li>• Suitable for Engraving and Cutting – materials like acrylic, plexiglass, stencil, rubber, plastics, synthetic material, decoration, architecture, furniture, wood and bamboo products, PC/PVC/PP, sound absorbed panel.</li> <li>• Data communication – Serial port, USB, RS-32 port</li> <li>• Supported Graphic Formats: PLT, CDR, AI, DWG, DST, DXF, BMP, JPEG, TIFF, GIF, PCX"</li> <li>• Supported S/w – AutoCAD, Corel Draw, PhotoShop, Fusion 360.</li> <li>• Specialities – Dust collection system, cooling system. auto positioning and alignment.</li> <li>• Tools &amp; standard Accessories</li> <li>• Machine Cover</li> <li>• Safety Instructions, Installation, Operation &amp;, maintenance manual.</li> <li>• 3 Year Manufacture Warranty and Support.</li> </ul> | 1    |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                       | Specifications                  | Detailed Specifications  | Qty. |
|---------|--------------------------------------|---------------------------------|--|------|
| 2       | Vinyl Cutter with stand and software | Graphtech Vinyl Cutting Plotter | <ul style="list-style-type: none"> <li>• Type – Roll type cutting plotter single blade</li> <li>• Cutting width – 670 mm [ max]</li> <li>• Mechanical Precision 0.025mm</li> <li>Material Compatibility: Over 300 materials, including delicate fabrics, paper, matboard, leather, and balsa wood</li> <li>Max Media Thickness: 2.4 mm</li> <li>Tools Supported: Compatible with 13 tools, including the Knife Blade for thicker materials, Rotary Blade for fabrics, and Quick Swap tools for scoring, engraving, debossing, and more</li> <li>• Min Cutting width- 1mm line width</li> <li>• Interface - RS-232C, USB, Wifi</li> <li>• Support win 10/Win 7/win8/ LinuxUI/oracle/mac</li> <li>• Adjustable Speed options</li> <li>• Steel / Aluminium Stand</li> <li>• Bucket tray</li> <li>• Tools &amp; standard Accessories</li> <li>• Machine Cover</li> <li>• Safety Instructions, Installation, Operation &amp;, maintenance manual. 3 Year Manufacture Warranty and Support.</li> </ul> | 1    |

**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jata pura, JAIPUR-302017

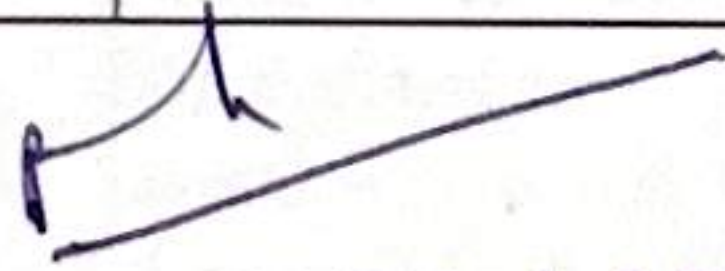
Chief Mentor / Principal

| Sr. No. | Equipment Name                                    | Specifications  | Detailed Specifications  | Qty. |
|---------|---|---|--|------|
| 3       | 3D Printer with Software and standard accessories | FDM (Fused filament type)<br>Preferable 3D Printer Creality and Bambu lab | Build Volume / Print Size = 350x350x350 mm <sup>3</sup> Single Extruder Nozzle with dual cooling fan Nozzle Diameter: 0.4mm (standard) Layer Resolution: • Minimum Layer Height: 0.1 - 0.35mm • XY resolution (precision) - 0.1mm Material Compatibility - PLA, TPU, PETG, ABS, PLA-CF, PETG-CF, CR-carbon Software and File Compatibility- Windows, Mac OS, Linux UI Languages: English, French, Portuguese, Turkish, German, Spanish, Italian, Russian, Japanese, Chinese. File Formats for Slicing: STL, OBJ, 3MF, AMF; Printing Accuracy - $\pm 0.2$ mm Print Speed - higher than 250 mm/s Calibration - Auto calibration Bed Alignment - Auto alignment check Connectivity - USB, SD card, WLAN, Type C, Ethernet, or other connection options. Additional Features • Heated bed or build plate • Enclosure (heated or controlled environment for certain materials) • Automatic bed leveling • Filament run-out sensor • Support removal system • Maintenance and Support • Ease of maintenance and part replacement • Availability of spare parts • Warranty and technical support terms • Training and documentation provided • Safety Features • Enclosed printing chamber (if necessary) • Ventilation or filtration systems for fumes • Tools & standard Accessories • Machine Cover • Safety Instructions, Installation, Operation &, maintenance manual. • 3 Year Manufacture Warranty and Support. | 2    |

**AICTE IDEA LAB**  
Swami Keshvanand Institute of  
Technology Management & Graomthan  
Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name   | Specifications   | Detailed Specifications  | Qty. |
|---------|--|--|--|------|
| 4       | 3D Scanner with software and standard accessories, battery, charger, carry bag<br>Make- Shining<br>Model- Optim Scan Q12(High-Precision 3D Inspection Scanner)<br>Make – Creality<br>Model Raptor X / Raptor Pro | Shining Optim Scan Q12 /<br>Creality Raptor X / Raptor Pro | 3D Scanner – Hand Held Full colour Scanning • Scanning Technology- Laser Triangulation, (Hybrid Blue laser-IR) • Wireless Scanning features • High speed Scanning • Accuracy: $\pm 0.02$ mm • 3D Resolution - 0.01 - 10 mm • Scan Speed – 60 fps (Up to 3,460,000 points/s) • Scan Volume (Field of View) – 400 x 400 mm • Part size range (recommended): 0.05 – 4 meter • Colour Mapping- Yes RGB • Camera Resolution: 1900x1200 • Portability - Handheld, • Connectivity- USB / Wi-Fi / Ethernet/App • Formats – STL, OBJ, PLY • Operating System- Windows 10/11 (64-bit), Android 10/11/12 • 3D Printing Compatible-yes • Calibration & Maintenance - Auto Calibration/Calibration board required. • Anti-Shaking features. • Colour – 24 bit Full colour scanning • Laser Safety Class-I • Tools & standard Accessories • Machine Cover • Safety Instructions, Installation, Operation &, maintenance manual. • 3 Year Manufacture Warranty and Support. | 1    |


  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagarla, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name  | Specifications                                  | Detailed Specifications  | Qty. |
|---------|---|---|--|------|
| 5       | CNC Router with motor software and standard accessories                 | Single Head Router                              | <ul style="list-style-type: none"> <li>• No of Axis – 3 X,Y,Z • Bed Size – 1200 mm x 1500 mm • Capacity – Z = 300 mm • Accuracy - +/- 0.05 mm • Resolution: 4500 • Spindle Power - 3.5 KW • Cutting speed- 60000 mm/Min • Spindle &amp; Guideway &amp; Gear Box – BEST GRADE • Formats – G codes, HPGL • Material – Wood, Plywood, MDF, Acrylics • Dust collection system, Alignment check module. • Alignment Calibration - Auto • OS Compatibility – Windows, Mac, Linux • Software Compatibility – Art Cam ,AutoCAD, CorelDraw , Aspire • Program G Code , MMG ,PLT, DXF, STL Object Fixture and holders required. • Tools &amp; standard Accessories • Collets &amp; Cutters –20 Types Bits for Cutting &amp; carving, 3mm-12mm Collets 6pcs clamps, Spanner set, 2D &amp; 3D, • Designs Data • Tools &amp; standard Accessories • Machine Cover • Safety Instructions, Installation, Operation &amp;, maintenance manual. • 3 Year Manufacture Warranty and Support.</li> </ul> | 1    |
| 6       | Mini Lathe cum Drilling Cum Milling with motor and standard accessories | Type – Mini Lathe Mill Drill Combination metric | Bed size – 600 mm Spindle hole dia 25 mm Max Work diameter 140 mm Max Work length 500 mm Spindle taper – MT4 metric thread pitch range/species: 0.5 – 3 mm /14 spindle rpm 160-1600rpm/ 6 speed Motor 1 H.P./ 220 V 50Hz Drilling and milling • Maximum drilling diameter – 20 mm • Distance from spindle end to worktable- 240-320mm • Drilling and milling spindle taper –MT3 • Spindle speed range/level – 125-1600 mm • Three jaw self-centring chuck. • Tools & standard Accessories • Tools & standard Accessories • Machine Cover • Safety Instructions, Installation, Operation &, maintenance manual. • 3 Year Manufacture Warranty and Support.  | 1    |

Swami Keshvanand Institute of Technology Management & Gramothan  
Ramnagarla, Jatapura, JAIPUR-302017

| Sr. No. | Equipment Name                   | Specifications                             | Detailed Specifications  | Qty. |
|---------|----------------------------------|--|--|------|
| 7       | Pillar Drilling M/c with         | Motor and standard accessories             | <ul style="list-style-type: none"> <li>• Drilling Capacity: 16 - 25 mm •</li> <li>Column Diameter: 80 mm • Spindle Hole Taper: MT-2 or MT3 • Spindle Speeds: 50-2000 RPM • No of speed - 8 • Spindle Travel -155 mm •</li> <li>Motor : 0.5 HP single phase 220V 50Hz. • Tools &amp; standard Accessories • Machine Cover • Safety Instructions, Installation, Operation &amp;, maintenance manual. • 3 Year Manufacture Warranty and Support.</li> </ul> | 1    |
| 8       | Bench Top Drill machine          | Bench Drill                                | <ul style="list-style-type: none"> <li>• Drill capacity - 13 mm • Motor - 250 watt • Spindle travel - 3 inch • Work table - 200 x 200 mm • Tools &amp; standard Accessories • Machine Cover • Safety Instructions, Installation, Operation &amp;, maintenance manual. 3 Year Manufacture Warranty and Support.</li> </ul>  | 1    |
| 9       | Handheld High Speed Drilling M/c | BOSCH GSB 600 Corded Electric Impact Drill | <ul style="list-style-type: none"> <li>• BOSCH GSB 600 Corded Electric Impact Drill, • 600 W Motor • Speed of 3000 RPM • Rated Torque of 1.4 Nm • Impact rate of 48000 BPM • Warranty from BOSCH - 3years expected • Tools &amp; standard Accessories • Machine Cover • Safety Instructions, Installation, Operation &amp;, maintenance manual. • 3 Year Manufacture Warranty and Support.</li> </ul>  | 2    |
| 10      | Benchtop Grinder Machine         | Bosch GBG 60-20 Bench Grinder              | <ul style="list-style-type: none"> <li>• Bosch 600W Heavy Duty Professional Bench Grinder, GBG 60-20 • Safety Instructions, Installation, Operation &amp;, maintenance manual. • 3 Year Manufacture Warranty and Support.</li> </ul>   | 1    |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name   | Specifications                                | Detailed Specifications  | Qty. |
|---------|--|---|--|------|
| 11      | Wood Lathe with motor and Accessories                      | Wood turning Lathe                            | Bed length - 1825mm Width of bed - 300 mm Height of centers - 203 mm Admit between centers - 1220mm Approx. spindle speed - 700 / 1400 / 2800 RPM Face plate diameter - 190mm Motor Power - 1 hp/1440 rpm, 3 phase Standard Accessories: Tool rest, Face plate, 3 pin centre, revolving - centre, V-belt, motor pulley, motor fixing stand, motor rail & m/c manual. • Machine Cover, Safety Instructions, Installation, Operation &, maintenance manual. • 3 Year Manufacture Warranty and Support.   | 1    |
| 12      | Portable Welding M/c                                       | AC/DC TIG-MMA Inverter Welding Machine        | Modes: AC-TIG, DC-TIG, MMA (Stick welding), Aluminum Welding. Max. O/P current: 220A Output Current Ranges: DC TIG: 10-160A ; AC TIG: 15-160A MMA: 20-160A Duty Cycle: 60Usable Electrodes: 1-5 mm Usable Tungsten Needles: 1-3.2 mm Gas Support: Argon (TIG), CO2 (MIG). Weldable Material: Mild steel, SS, Aluminum. Cooling System: Air/water-cooled. Digital Display: for precise settings. Additional Features: Hot Start; Built-in Anti-Stick; Built-in Arc Force; Built-in IGBT Technology; Built-in VRD (Voltage Reduction Device); Built-in Thermal Protection; Yes Insulation Class; F Protection Class. | 1    |
| 13      | Laser Welding machine (preferably great yuva make or ESAB) | Hand held Fibre Laser Welding Machine         | Type - hand held Fibre Laser Welding Laser Power - 1500 Watt Cooling - In built cooling system Metal (cutting/welding) - SS, MS, Al Cutting Thickness - SS (0.5mm), MS, Al (upto 3mm) Tools & standard Accessories Machine Cover, Instruction Operation, maintenance manual 3 years warranty   | 1    |
| 14      | Air Compressor   | ELGI Portable, Oil free silent air compressor | ELGI Portable, Oil free silent air compressor, 30 litres, 2 hp motor   | 1    |

Chief Mentor / Principal  
8

| Sr. No. | Equipment Name                          | Specifications   | Detailed Specifications   | Qty.  |
|---------|---|--|---|-------|
| 15      | Filament Dehydrator (Automated Control) | Filament Dehydrator                                    | Operating Temperature – 45 to 70 C<br>Hot Air circulation type Power – 150 – 200 W Dry time setting – (0 - 48 Hrs). | 1     |
| 16      | Table Saw                               | Bosch GTS 254  | Bosch GTS 254 1800 watt, 4300 rpm<br>10 inch saw included   | 1     |
| 17      | Hacksaw                                 | Taparia Hacksaw Frame HFSA-12                          | Taparia Hacksaw Frame HFSA-12<br>Blade Length 12 Inches Nylon Handle Hacksaw Frame                                  | 5     |
| 18      | Micro Chisel Set                        | HSS Micro Detailing wood working Chisel Set            | HSS Micro Detailing wood working Chisel Set with handle, 8-Piece-set size -10 inches                                | 3 set |
| 19      | Pilers                                  | Stanley STHT84405 3 PC PLIERS SET                      | With insulated grips  | 3 set |
| 20      | Cordless Drilling machines              | BOSCH GSB 183-Li Cordless Battery Powered Impact Drill | 18 Volts, 1815 RPM, Maximum Power 850 Watts, Torque 56 Nm   | 2     |
| 21      | Cordless Electric Screw Diver set       | Bosch GSR 12V-35 HX Cordless                           | Battery: Rechargeable Li ion, Torque: 30 Nm (max), Chuck size: 0.8 mm to 10 mm, Speed Range: 0-1500 rpm             | 2 set |
| 22      | Angle Grinder                           | BOSCH Professional GWS 600 Angle Grinder               | Power: 670W, No-load Speed: 11000 RPM, Disc Size: 100 mm (4"), M10 Grinding Spindle Thread                          | 1     |
| 23      | Jigsaw machines                         | BOSCH - GST 680 Corded Electric Jigsaw                 | Power: 500W Motor, Stroke rate: 800-3100 spm, Stroke Length: 20 mm, Cutting Depth (Wood): 68 mm                     | 2     |
| 24      | Power Circular Saw                      | Makita - HS7600 Circular Saw                           | 1,200 Watt, 185 mm Blade Diameter, Single Action Lever  | 2     |
| 25      | Random Orbit Sander                     | Black - Decker BEW210-QS                               | 230 V AC, 0-13000 rpm   | 1     |
| 26      | Files Set                               | Taparia Make; 12" Rough Finish- 8Pcs Set               | 8-Piece File Set, Rough Finish  | 2 set |
| 27      | File Handles                            | Taparia - Hard Handle with Soft Silicon Grip           | Ergonomic Handle for Files  | 5     |
| 28      | Needle Files                            | Black & Dekker 6Pcs Needle File Set                    | 6-Piece Mini File Set for Detailed Work   | 2 set |
| 29      | Pipe Vice                               | Taparia PV 01 Pipe Vice                                | Pipe Dia Capacity 10-60 mm, Cast-iron body, Drop-forged jaws  | 2     |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                  | Specifications                                   | Detailed Specifications  | Qty.      |
|---------|---------------------------------|--|--|-----------|
| 30      | Mini Hacksaw                    | TAPARIA - Model HJHW 6 Handy Wire Saw            | Handy Wire Saw with Blades and M.S Rod   | 5         |
| 31      | Ball Peen Hammer                | TAPARIA - 500 g                                  | Drop-forged carbon steel head, Hardened to 55-58 HRC, 350 mm wooden handle                         | 5         |
| 32      | Steel Shat Claw hammer          | TAPARIA - 450 g                                  | Forged carbon steel head, Tubular steel shaft with anti-slip rubber grip                           | 5         |
| 33      | Nylon Mallet                    | TAPARIA - 30 mm double-head                      | Double-head nylon mallet, 450 g, Wooden handle   | 5         |
| 34      | Rubber Mallet                   | TAPARIA - Head size 70 mm diameter               | Shock-absorbing black rubber head, Hardwood handle, Weight 680 g                                   | 5         |
| 35      | Allen Key Set                   | TAPARIA - 9-piece L-type metric set              | Sizes 1.5 mm to 10 mm, Cr-V steel, Black phosphate rust-resistant finish                           | 3 set     |
| 36      | Dremel multi tool kit           | Dremel 4000-2/32 Variable Speed Rotary Tool Set  | Rotary Tool for Engraving, Polishing, Grinding, Cutting, Includes 2 Attachments and 32 Accessories | 2 kit     |
| 37      | Double Ended spanner sets       | TAPARIA - 12 spanners set                        | Sizes 6-32 mm, Chrome vanadium steel, Nickel-chrome plated   | 2 set     |
| 38      | 12 Piece Open Ended Spanner set | TAPARIA - Open jaw on both ends                  | Sizes from 6x7 mm to 30x32 mm, Chrome plated, Conforms to IS standards                             | 2 set     |
| 39      | Belt and Disc Sanding machine   | Voltz - VZ-DS-500                                | 500W Bench-Mounted, 150 mm Abrasive Disc Sander  | 1         |
| 40      | Scroll Saw machine              | INGCO - 85 W Scroll Saw Machine SS852            | 85 W Power, 1450 rpm, For intricate cutting  | 1         |
| 41      | Tool Wall covering Perforator   | ALKON - MDB500 Multi Display Peg Board           | Peg Board for tools Accessories Organizer  | 3         |
| 42      | Dremel Moto Saw                 | Dremel Moto-Saw MS20-1/5 2in1 Compact Scroll Saw | 70Watt, 2in1 Compact Scroll Saw, 1 Attachment, 5 Accessories                                       | 1         |
| 43      | Power return measuring tape     | STANLEY - Length: 3 meters + 5 meter             | Blade Width: 13 mm, 19mm, For Light-duty measurement tasks   | 5         |
| 44      | Tri square 8 inches             | Generic - Size: 8 inches (200 mm)                | Blade length: 200 mm, Hardened & tempered stainless steel blade                                    | 5         |
| 45      | Stainless Steel Rule            | KRISTEEL steel - 1000mm, 300mm                   | Stainless Steel Ruler, Lengths: 1000mm and 300mm   | 5 pc each |

**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

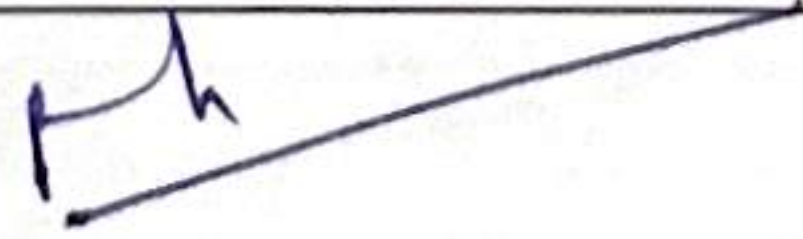
Chief Mentor / Principal

| Sr. No. | Equipment Name              | Specifications                                       | Detailed Specifications  | Qty.   |
|---------|-----------------------------|--|--|--------|
| 46      | Digital Vernier Caliper     | Mitutoyo Stainless Steel 500-196-30                  | Range: 0 -150 mm, Least count: 0.01 mm, Measures Outside, Inside, depth                            | 5      |
| 47      | Spirit Level                | TAPARIA - 300 mm                                     | Accuracy: 1.0 mm/m, Aluminum frame with rubber moldings, Magnetic base                             | 5      |
| 48      | Dremel Cordless Rotary Tool | Dremel Lite 7760 N/10 4V Li-Ion Cordless Rotary Tool | 4V Li-Ion, Variable Speed, USB Charging, For Light-Duty DIY & Crafting                             | 1      |
| 49      | Power Router                | Bosch GOF 130 Corded Electric Router                 | 1,300W Power, 28,000 rpm Maximum rotational speed  | 1      |
| 50      | Sewing Machine              | USHA Stitch Options                                  | 13 built-in stitches, 21 stitch functions, 60W motor, 860 stitches per minute                      | 1      |
| 51      | Impact Drill machine        | BOSCH GSB 600 Corded Electric Impact Drill           | 600 W Motor, Speed: 3000 RPM, Rated Torque: 1.4 Nm, Impact rate: 48000 BPM                         | 3      |
| 52      | Ratchet Set                 | Taparia SA46 Steel Socket Set (46-Pieces)            | 46-Piece Socket Set, Includes various sockets and ratchet  | 2 set  |
| 53      | Router Bit Starter Kit      | BOSCH - 15 Pc. Mixed Router Bit Set                  | 15 Piece Mixed Router Bit Set, 8mm Shank   | 1 set  |
| 54      | C-Clamp                     | TAPARIA - 2", 3", 4" each                            | C-Clamps in sizes 2", 3", and 4"   | 6 each |
| 55      | Ratchet Clamp               | Quick Release clamp - 8 inches/200mm                 | Quick Release Bar Clamp, 200mm capacity  | 10     |
| 56      | Baby Vice 60 mm             | REVOLVING CLAMP BASE-TABLE BABY VICE (60 MM)         | Professional Table Vice, 60 mm Jaw Width, Revolving Clamp Base                                     | 4      |
| 57      | Bench Vices                 | Taparia- BVSGM 3 VICE                                | Jaw Width: 75 mm (3 inches), Made from high-grade SG iron casting, Replaceable hardened steel jaws | 4      |
| 58      | Anvil - 8 KG                | Luxuro Horn Anvil for All Purpose                    | 8 KG Horn Anvil for General Metalworking   | 1      |
| 59      | Tin Cutter with Spring      | Taparia TCS-12 Tin Cutters- 12 INCH                  | 12-inch Tin Cutter with Spring Mechanism   | 5      |
| 60      | Hand Blower                 | Bosch GBL 650  | Power 650W, 220 V AC, For cleaning dust and debris   | 1      |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                            | Specifications                           | Detailed Specifications   | Qty. |
|---------|---|--|---|------|
| 61      | Precision Screw driver set                | Taparia Precision Screw Driver Set PSFP6 | Precision Screwdriver Set, Insulated Grip, ISO Standards  | 2    |
| 62      | Insulated Screw Driver                    | Taparia - type 938 I length 336 mm       | Insulated Screwdriver for Electrical Safety, Length: 336 mm   | 2    |
| 63      | Screw Driver Sets with Neon Bulbs         | Taparia - ProductNo. 812                 | Screwdriver Set with Neon Bulb for Voltage Testing  | 5    |
| 64      | Micrometer                                | Insize 0 -25 mm; Accuracy 0.01mm         | Outside Micrometer, Range: 0-25 mm, Accuracy: 0.01mm  | 2    |
| 65      | Pipe cutter machine                       | Bosch Metal Cut-Off Saw GCO 230          | 2300 W Power, 4100 RPM, For cutting metal pipes and profiles  | 1    |
| 66      | Professional Electric Planar machine      | Bosch - GH0 6500                         | Electric Planer, RPM 16500, 3 Year Manufacture Warranty   | 1    |
| 67      | Vacuum Cleaner with standard accessories  | Bosch GAS 15 PS Vacuum Cleaner           | Capacity 10-Litre, Suction pressure: 270 mbar, Power: 11000 Watt, Wet and Dry, Stainless Steel Drum                             | 1    |
| 68      | Hot Air Gun                               | BOSCH GHG 180 Professional Heat Gun      | Power: 1800 W, 3-Stage Temperature: 60/350/550 °C, Airflow 350-550 l/min  | 5    |
| 69      | Vernier Caliper Digital                   | Mitutoyo 500-754-10                      | Range: 0 - 300 mm, Least count: 0.01 mm, Digital Display  | 2    |
| 70      | Surface Plate with fabricated stand       | Luthra Granite Surface Plate             | Size: 450 x 450 x 63mm, Grade - 0, As per IS : 7327-2003  | 1    |
| 71      | Venier Height Gauge                       | Baker Vernier Height Gauge, VH300        | Range 0-300 mm, Accuracy: 0.02 mm   | 1    |
| 72      | Outside Micrometer digital                | Mitutoyo Waterproof Model                | Range: 0 - 50 mm, Accuracy: 0.001mm, Digital  | 2    |
| 73      | Inside Micrometer digital                 | Mitutoyo Waterproof Model                | Range: 0 - 50 mm, Accuracy: 0.001mm, Digital  | 2    |
| 74      | Dial Indicator with Stand                 | Mitutoyo 2046S                           | Least count & Range: 0.01mm X 10 mm, Stem: 8mm  | 1    |
| 75      | Thread pitch gauge (Metric screw threads) | SCREW PITCH GAUGE                        | 4 to 62 TPI, 0.25 to 6.0 mm, Combination with 55 degree and metric 60 degree  | 1    |
| 76      | Feeler gauge (metric) set                 | Feeler Gauge Set                         | 0.04-0.63 mm, 26 stainless steel blades   | 1    |
| 77      | Pipe Vices (Clamp-on type)                | Local make                               | Clamp-on pipe vice, opens up to 2" diameter pipes, Cast iron body, screw tightening, For holding pipes during cutting/threading | 5KG  |

  
**AICTE IDEA LAB**  
 Sri Sri Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                   | Specifications  | Detailed Specifications  | Qty.    |
|---------|----------------------------------|---|--|---------|
| 78      | Mini Hacksaw Frames (Junior)     | TAPARIA HFJP6 - Pistol Grip Plastic Handle 6" Inch Hacksaw Frame                        | Pistol Grip Plastic Handle, Light weight frame, Adjustable tension control, For light duty applications in plastic & wood cutting                | 5 units |
| 79      | Ball Peen Hammers                | Taparia WH 200 B Steel (200g) Ball Pein Hammer & STANLEY 54-114 Ball Peen Hammer-450gms | Ball end for riveting, poll for normal striking, High-carbon forged steel head, hardened and tempered, Various weights                           | 5 units |
| 80      | Claw Hammers                     | STANLEY 51-152 Claw Hammer with Steel Shaft   | 220 grams, For masonry, wood work, fittings, DIY, mechanic work, Robust structure, 5 tons force fit head, Ergonomic handle                       | 5 units |
| 81      | Nylon Mallets                    | Volo soft faced hammer with two nylon mallets (Color: Red)                              | Soft dual mallet faces, Non-slip rubber handle grip, Lightweight tubular steel handle, Replaceable mallet heads                                  | 5 units |
| 82      | Rubber Mallets                   | STANLEY STHT57527-8 Rubber Mallet Hammer-450Gms (Yellow & Black)                        | Rubber head minimizes marring and surface damage, Tough rubber head molded to wood handle, For striking where steel hammers would damage surface | 5 units |
| 83      | Allen Key Sets (Hex wrench sets) | amazon basics 36-Piece Allen Wrench/Hex Key Set - Inch/SAE and Metric                   | 36-piece set of hex keys, SAE and metric sizes, Made of durable chrome vanadium steel, Black oxide finish, 2 hinged cases                        | 3 sets  |
| 84      | Dual Laser Engraver              | xTool F1 2-in-1 Dual Laser Engraver   | Lightning speed portable laser engraving machine, Ultra HD fiber laser engraver for jewelry, metal, wood, leather, 0.00199mm motion accuracy     | 2       |
| 85      | Double-Ended Spanner Sets        | Stanley 70-380E 12-piece Matte Finish Chrome Vanadium Steel Double Open-End Spanner Set | Set of 12 spanners (6x7mm to 30x32mm), Chrome vanadium steel, Nickel Chrome coating, Anti-slip open ended jaw shape                              | 2 sets  |
| 86      | Open-Ended Spanner Set (12piece) | STANLEY 70-964E 12-Piece Chrome Vanadium Steel Combination Spanner Set                  | 12-Piece Combination Spanner Set (6mm to 22mm), Nickel chrome plating, Anti-slip open ended jaw shape, 15.5° angle for accessibility             | 2 sets  |

**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                      | Specifications   | Detailed Specifications  | Qty.                     |
|---------|-------------------------------------|--|--|--------------------------|
| 87      | Belt and Disc Sander (Bench Model)  | VOLTZ<br>VZ-BSH1510 New<br>400W Electric Belt<br>Grinder Sander<br>4"x 36" in. Belt &<br>Disc Sander | 400W motor, Belt size: 4" x 36",<br>Disc size: 6-inch, Adjustable sanding<br>table (0° to 90°), Belt speed: 310-450<br>RPM, Disc speed: 2000-2980 RPM  | 1 unit                   |
| 88      | Scroll Saw Machine (Fretsaw)        | Ingco 85W Scroll<br>Saw  | 85W power, No-load speed:<br>0-1450rpm, Max cutting depth:<br>50mm, Max cutting width: 410mm,<br>Table size: 375x250mm, Tilts 45°<br>left and right    | 1 unit                   |
| 89      | Anti-Static PCB Tray                | Anti-Static PCB<br>Tray Turnover<br>Rack With 25<br>Angled Slots For<br>Factory Storage              | Safe, organized storage for PCBs in<br>ESD-sensitive environments, 25<br>angled slots for stable placement,<br>easy access                             | 3                        |
| 90      | Dremel Moto-Saw (Mini scroll saw)   | Dremel Moto-Saw<br>MS20 or eq.   | Compact motorized scroll saw,<br>Detachable coping saw, Variable<br>speed control 1500-2250 SPM, For<br>precision cutting in wood, plastic             | 1 unit                   |
| 91      | Measuring Tapes (Retractable)       | FREEMANS<br>IKON 5m:19mm<br>Steel Inchi<br>Measuring Tape -<br>5m (Yellow &<br>Black)                | 5m length, Auto-lock mechanism,<br>Unbreakable ABS case, Soft grip<br>bi-material case, Belt clip, Dura<br>Coat Technology for abrasion<br>resistance  | 5 units<br>(Set of<br>5) |
| 92      | Tin cutter                          | Taparia TCS08<br>Tin Cutters with<br>Spring(Blue and<br>Silver)                                      | High-grade carbon steel, Drop forged<br>construction, Ergonomic handle with<br>non-slip grip, 3 spring mechanism<br>reduces hand fatigue, Sharp blades | 10                       |
| 94      | Tri-Square Set (Carpenter's square) | MODERN<br>Carpentry Try<br>Square 8",12" -<br>45deg Angle Cut  | 8" (200 mm) try square for marking<br>90° angles, Steel blade with marked<br>graduations, 8",12" - 2pcs set,<br>Precision scale                        | 6 units                  |
| 95      | Steel Rulers (Scale)                | Omega Stainless<br>Steel Scale/Ruler,<br>15,30,60cm - Pack<br>of 3                                   | Inch and cm marking, Stainless steel<br>with round safety edge, Set of 3<br>lengths (15cm, 30cm, 60cm)   | 5 units                  |
| 96      | Digital Vernier Calipers            | Caliper Mitutoyo<br>Digital Vernier<br>Caliper 150mm / 6<br>inch                                     | 150mm range, Digital display,<br>Advanced Onsite Sensor Absolute<br>Scale, High precision measurement  | 5 units                  |
| 97      | Spirit Levels (Bubble Level)        | STANLEY<br>STHT42264-812<br>Plastic Torpedo<br>Level Magnetic-<br>225mm/9"                           | High impact ABS plastic, 3 vials:<br>Horizontal, plumb and 45°, Size:<br>225mm/9", Magnetic, Limited<br>lifetime warranty                              | 5 units                  |

**AICTE IDEA LAB**  
Swami Keshvanand Institute of  
Technology Management & Graomthan  
Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                         | Specifications  | Detailed Specifications   | Qty.     |
|---------|--|---|---|----------|
| 99      | Handheld Power Router (Trimmer)        | Bosch GKF 550 Electric Hand / Palm Router   | 550W, 33,000 rpm, 6 mm bit, Variable speed, Soft grip, 1.4kg, Includes parallel, roller & template guides, spanners, straight bit       | 1 unit   |
| 100     | Ratchet Socket Set (Socket Wrench Kit) | STANLEY 94-190 1/4" and 1/2" Square Drive 6 Point Metric Set- 86pcs   | 86-piece set, 1/4" and 1/2" drive, Metric sizes, Double nickel chromium alloy coated tip, Locking mechanism retains sockets             | 3 sets   |
| 101     | Router Bit Set (for Wood Router)       | Bosch Professional 15 Pcs Router Bit Set With Mixed Bits, 1/4" Shank Bits   | 15-piece set, 1/4" shank, Carbide cutting edges, For soft wood, hard wood and wood composites, Various cutting geometries               | 1 set    |
| 102     | Side-Cutting Pliers (Wire Cutters)     | Taparia 1101-6 Econ Side Cutting Plier & OSFT Wire Cutters  | Precise cutting performance, Long cutting opening, Spring-loaded, PVC handgrips, Sharp but safe with protective cover                   | 10 units |
| 103     | Screwdriver Sets (Assorted)            | INGCO HKSDB0248 24 Pcs Screwdriver Set, INGCO 4V Electric Cordless Screwdriver, INGCO 13 IN 1 Ratchet Screwdriver Set | 24-piece set, Includes ratchet handle, bits, power sleeve, Cordless screwdriver: 4V, 4 N.m max torque, 240RPM                           | 2 sets   |
| 104     | Self-Healing Cutting Mats              | Anezus Self Healing Cutting Mat A3 Size, Polyvinyl Chloride, Green  | Grid cutting mat for craft/model making, Size: A3 ( 30 × 45 cm), 3-layer PVC, self-seals cuts, Protects tables during cutting           | 5 mats   |
| 105     | Hot Glue Guns                          | Themisto Hot Melt Glue Gun 60/100W Dual Wattage(Power) High Temp  | 60/100W dual wattage, Comes with 8 glue sticks, Glue stick diameter: 11mm, High quality plastic, sustains high pressure and temperature | 5 units  |
| 106     | Non-Contact Voltage Testers            | amiciTools Touchless Voltage Detector Pen ,Non-Contact Electrical Tester  | Detects live wires without contact, Beep and red light alerts, Covers 90V to 1000V AC voltage, Compact and portable design              | 5 units  |



**AICTE IDEA LAB**  
Swami Keshvanand Institute of  
Technology Management & Graomthan  
Ramnagar, Jatapura, JAIPUR-302017

| Sr. No. | Equipment Name           | Specifications   | Detailed Specifications   | Qty.    |
|---------|--------------------------|--|---|---------|
| 107     | Fish Tape (Cable Puller) | Fish Tape Electrical Wire Threader Wire Puller and Fish Tape Fastener tool 33 FT(10M)      | 33 FT (10M) length, PET material, strong traction, good flexibility, Anti-aging and high temperature resistant, For electrical wire pulling | 2 units |
| 108     | Glass Cutter             | STANLEY 0-14-040 Glass Cutter with Steel Wheel   | Handheld tool with hardened steel/tungsten carbide wheel, Suitable for scoring and cutting glass sheets, Ergonomic grip                     | 2Nos    |
| 109     | Wire Stripper            | INGCO Wire Stripper, 2 in 1 Cable Wire Stripper with Cutter                                | Stripping size range: 0.5mm 6mm diameter, With cutting function, Non-slip handle, Made of 65Mn material blade                               | 5 Nos   |
| 110     | Tongue and Groove Pliers | WORKPRO Water Pump Pliers, 33mm Wide Jaw Capacity Quick Adjustable Tongue and Groove Plier | 33mm jaw capacity, Quick adjustable with push-button, 12 adjustable positions, V-Jaw design for secure grip, Comfort grip handle            | 5 Nos   |
| 111     | Air Compressor           | Elgi, Bosch, Stanley, Makita   | Portable, oil-free/oil-lubricated type, Tank capacity: 25-50 liters, Operating pressure: 8-10 bar, Motor: 1-2 HP                            | 1Nos    |
| 112     | Hot Air Gun              | BLACK+DECKER Kx1800 Dual Temperature High Speed Heat Gun                                   | 1800 Watt, Up to 550°C, Airflow rate up to 750 L/min, 3 meter cable length, For paint removal, drying, shrink wrapping                      | 5 Nos   |
| 113     | Centrifugal Blower       | BOSCH GBL 650 Professional Blower  | 650 W motor, Airflow of 3.7 m <sup>3</sup> /min. Lightweight & ergonomic design, Compatible with multiple nozzle attachments, 1.7 kg        | 2 Nos   |
| 114     | Flashlights (Torch)      | PHILIPS 5 Mode Aircraft Aluminium Alloy LED Flashlight                                     | 650 lm brightness, 2000mAh, Rechargeable, 5 lighting modes, Aircraft-grade aluminum alloy, 19.2 cm length                                   | 2 units |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                     | Specifications   | Detailed Specifications   | Qty.     |
|---------|------------------------------------|--|---|----------|
| 115     | Servo Motors (Standard)            | Pro-Range OT5325M 7.4V 25kg.cm 180° Metal Gear Digital ServoMotor & TowerPro SG90 Continuous Rotation 360 Degree Servo Motor | Standard RC servo motors, 180° rotation, 5V operation, torque 1.5-25 kg-cm, For Arduino/robotics projects   | 10 units |
| 116     | DC Motors (High-Torque Metal Gear) | N20 Micro Gear 12V 100RPM DC Motor (High Torque) with Mounting Bracket and Motor Driver                                      | N20 Micro Gear 12V 100RPM DC Motor, High torque, metal gear, For robotics and small-scale applications, with mounting bracket and driver            | 10       |
| 117     | T Type GPIO Breakout               | Electrobot T Type GPIO Breakout board for Raspberry Pi   | Compatible with Raspberry Pi models, GPIO status LED, Independent LED driven by chip, Terminal block and header for all 40-pin GPIO                 | 4        |
| 118     | Breakout Board for Raspberry       | FREENOVE Breakout Board for Raspberry Pi   | Compatible with Raspberry Pi models, GPIO status LED, Terminal block and header for all 40-pin GPIO, GPIO name printed next to port                 | 2        |
| 119     | Raspberry Pi                       | Raspberry Pi 4 Model-B with 8 GB RAM   | 8GB LPDDR4 SDRAM, Desktop performance comparable to entry-level x86 PC systems, Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz | 5        |
| 120     | Raspberry Pi                       | Raspberry Pi 5 Model 8GB   | 8GB RAM, 64-bit quad-core Arm Cortex-A76 processor @ 2.4GHz, 2-3× increase in CPU performance compared to Pi 4, VideoCore VII GPU @ 800MHz          | 5        |
| 121     | Raspberry Pi MCU                   | Raspberry Pi Pico W  | RP2040 microcontroller chip, 2.4GHz 802.11n wireless LAN, 133MHz dual-core ARM Cortex-M0+ processor, 264KB of SRAM, 2MB of onboard flash memory     | 7        |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

| Sr. No. | Equipment Name                            | Specifications   | Detailed Specifications  | Qty. |
|---------|---|--|--|------|
| 122     | Teensy Development Board                  | Teensy 4.1 Development Board   | ARM Cortex-M7 processor @ 600MHz, NXP iMXRT1062 chip, 4x larger flash memory than 4.0, Ethernet PHY, SD card socket, USB host port   | 4    |
| 123     | Micro-HDMI (Male) to Standard HDMI (Male) | Official Micro-HDMI (Male) to Standard HDMI (Male) Cable for Raspberry Pi      | 1 meter long, Nickel plated connectors, Mylar-foil shielding, For Raspberry Pi 4 with Micro-HDMI ports                               | 7    |
| 124     | ESP32-S3-DevKitC-1                        | WeAct Studio ESP32-S3-DevKitC-1  | WiFi 802.11b/g/n, Bluetooth 5.0 and Bluetooth mesh, Xtensa-R 32-bit LX7 dual-core processor @ 240MHz, 512KB SRAM, 384KB ROM          | 5    |
| 125     | ESP32-C5-DevKitC-1                        | Espressif ESP32-C5-DevKitC-1-N8R4 Development Board                            | Dual-mode wireless connectivity with Wi-Fi 6, Bluetooth LE, Zigbee, and Thread, 8 MB flash, 4 MB PSRAM, ESP32-C5-WROOM-1-N8R4 module | 5    |
| 126     | 24/20 Pin ATX Breakout Board              | 24/20 Pin ATX Computer PC Power Supply Breakout Board Adapter Extension Module | Accommodates both 24-pin and 20-pin ATX power supplies, For PC power supply compatibility and troubleshooting                        | 5    |
| 127     | Prismatic LiFePO4 Battery                 | Highstar A Grade 3.2V 100Ah Prismatic LiFePO4 Battery                          | 3.2V 100Ah, High energy density, Long battery life, Fast charging, Lightweight & compact, Low self-discharge, Environmental friendly | 5    |
| 128     | 12.8V 100A Battery Management System      | TDT LiFePO4 LFP 4S 12.8V 100A Battery Management System                        | OverCharge Protect: 14.6V, OverDischarge Protect: 9.28V, Discharge Current: 100A, Discharge Current for 10sec: 300A                  | 2    |
| 129     | Battery Active Equalizer Module           | 4S 1.2A Lithium Battery Active Equalizer Module                                | For 4 lithium-ion cells in series, Balances charge levels, Current rating: 1.2A, Automatic balancing, For DIY battery packs          | 5    |
| 130     | 27000mAh Power Bank   160W Total Output   | boAt EnergyShroom PB600 PowerPulse 27000mAh Power Bank                         | 27000mAh capacity, 160W total output, 100W PD, PPS Fast Charging, 2xUSB-C, 2xUSB-A ports, Compatible with laptops, smartphones       | 2    |

| Sr. No. | Equipment Name  | Specifications  | Detailed Specifications   | Qty. |
|---------|---|---|---|------|
| 131     | 120watt USB PD Module Board                               | Punoscho 120watt USB PD Two way Fast charging Module  | Bidirectional PD sink and Source, Supports Fast charging protocols, Stable and all supported code are already encoded, Built in protection features, Supports wide range of charging voltages – 9V, 12V, 15V, 20V   | 2    |
| 132     | LiPo LiFe / Li-ion/ NiCd/NiMH/Pb Multi Charger/Discharger | HTRC C240 DUO AC 100-240V DC 11-18 V LiPo LiFe / Li-ion/NiCd/NiMH/Pb Multi Charger/Discharger | Adjustable digital DC Power, Built-in smart cooling fan, Multiple charging modes: Lipo/Lilo/LiFe/LiHv balance charge, charge, fast charge, storage, discharge; NiMH/NiCd: Charge, Discharge, Cycle; PB: Charge, Discharge, Battery Meter function, TVC, Lithium Battery internal Resistance Check, Data storage and loading | 2    |
| 133     | Lipo Battery Voltage Tester                               | 1-8S Lipo Battery Voltage Tester  | Input: 1S-8S Battery, Battery type: Lipo/LiFe/Li-ion/LiMn, Buzzer Alarm for low voltage indication, Measures each cell voltage, Cell Voltage Display Range: 0.5v-4.5v, Total Voltage Display Range: 3.7-36v, Alarm set values: Off or 2.7-3.8v  | 5    |
| 134     | Lithium-Polymer Rechargeable Battery                      | HIGH FLY 14.8V 4800mAh 4S 60C Lithium-Polymer Rechargeable Battery                            | 14.8V 4800mAh 4S 60C, XT60 connector, Stable 14.8V output with continuous current capacity up to 288A, For high-demand RC models  | 3    |
| 135     | Breadboard Jumper Wires                                   | 65pcs Flexible Breadboard Jumper Wires  | 65pcs flexible jumper wires, Ideal for creating circuits between microcontroller and breadboard, Reusable for fast prototype building, Flexible, durable, reusable, easy to trace   | 5    |
| 136     | Solderless Breadboard Jumper Cable Wire Kit               | 140 pcs U Shape Solderless Breadboard Jumper Cable Wire Kit                                   | 140 pcs U shape jumper wires, 14 different lengths and 8 colors, Lengths: 2,5,7,10,12,15,17,20,22,25,50,75,100, and 125 mm, Keeps projects neat and organized   | 5    |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

| Sr. No. | Equipment Name  | Specifications   | Detailed Specifications   | Qty. |
|---------|---|--|---|------|
| 137     | Solderless Breadboard   | Transparent 830 Points Solderless Breadboard   | 830 Solder-less Points, Compatible with resistance, diodes, transistors, LED's, Capacitors, Colored coordinates for easy components placement, Accept wire sizes 20-29 AWG            | 5    |
| 138     | USB 4 Type-C to Type-C Cable with 240W Power                      | Stuffcool Primus USB 4 Type-C to Type-C Cable with 240W Power and 40Gbps Data with 8K Video Transmission | USB 4.0, 40 Gbps data transfer, Supports USB 4.0, 3.2, 3.1, 3.0, and 2.0, 8K video transmission at 60Hz, 240W Power Delivery, 1.8-meter length, Gold-plated connectors, E-marker chip | 2    |
| 139     | Unbreakable 3A Fast Charging 1.5m Braided Type C Cable            | Ambrane Unbreakable 3A Fast Charging 1.5m Braided Type C Cable   | 3A fast charging, 480 Mbps data transfer, Supports Quick Charge 2.0/3.0, Compatible with all Type-C devices, Unbreakable braided design, 1.5-meter length                             | 5    |
| 140     | Unbreakable 60W / 3A Fast Charging 1.5m Braided Micro USB Cable   | Ambrane Unbreakable 60W / 3A Fast Charging 1.5m Braided Micro USB Cable                                  | 60W/3A fast charging, 480 Mbps data transfer, Supports Quick Charge 2.0/3.0, Compatible with all Micro USB devices, Unbreakable braided design, 1.5-meter length                      | 5    |
| 141     | Industrial USB to RS485 Converter Adapter   RS485 to USB   RS 485 | Spoincky Industrial USB to RS485 Converter Adapter   | Converts USB to RS-485 bidirectional signals, 5V operating voltage, Data rates: 300bps to 3Mbps, Stable transmission up to 1.2km, Protection circuits for industrial applications     | 2    |
| 142     | Official Raspberry Pi AI Camera                                   | Official Raspberry Pi AI Camera with SONY IMX500 Sensor  | 12MP Sony IMX500 Intelligent Vision Sensor, On-board AI processing, Neural network models run directly on camera, Offloads processing from host Raspberry Pi                          | 2    |
| 143     | Tinned Stranded Silicone Wire Kit - 5Colors X 10m(50m)            | Pro-Range 20AWG Extra Soft Tinned Stranded Silicone Wire Kit   | 20AWG, 5 colors x 10m (50m total), Temperature resistant: -60°C to 200°C, Rated voltage: 600V, For drones, lithium batteries, 3D printers, LED lighting                               | 5    |
| 144     | Tinned Stranded Silicone Wire Kit - 5Colors X 4m(20m)             | Pro-Range 16AWG Extra Soft Tinned Stranded Silicone Wire Kit   | 16AWG, 5 colors x 4m (20m total), Temperature resistant: -60°C to 200°C, Rated voltage: 600V, For drones, lithium batteries, 3D printers, LED lighting                                | 5    |

| Sr. No. | Equipment Name   | Specifications   | Detailed Specifications   | Qty. |
|---------|--|--|---|------|
| 145     | Color Sensor   | ACEBOTT Color Sensor   | Model: ACEBOTT QB105, RGB color recognition, I2C output, Detection distance: 3-10 mm, Two bright LEDs for low-light use   | 5    |
| 146     | Industrial Grade PH Sensor   | Industrial Grade Analog PH Sensor Kit                                      | Analog pH Sensor for Arduino, BNC connector, PH2.0 sensor interface, LED Power Indicator, Comes in compact plastic box with foam  | 5    |
| 147     | Turbidity Sensor Module  | Turbidity Sensor Suspended Turbidity Value Detection Module Kit            | Capacitive soil moisture sensor, Measures soil moisture by capacitive sensing, Corrosion-resistant material, Onboard voltage regulator: 3.3 5.5V  | 5    |
| 148     | Capacitive Soil Moisture Sensor                                    | Capacitive Soil Moisture Sensor  | Capacitive soil moisture sensor, Corrosion-resistant material, Operating voltage: 3.3 5.5V, Compatible with 3-pin "Gravity" interface   | 5    |
| 149     | MODBUS-RTU RS485 4-in-1 Soil Moisture, Temperature, pH & EC Sensor | DFRobot MODBUS-RTU RS485 4-in-1 Soil Moisture, Temperature, pH & EC Sensor | Measures soil temperature, humidity, electrical conductivity (EC), and pH, Power supply: 5-30V, RS485 data transmission, MODBUS-RTU protocol, IP68 protection, 316 stainless steel probe      | 5    |
| 150     | Analog TDS Water Conductivity Sensor Module                        | Techtonics Analog TDS Water Conductivity Sensor Module                     | TDS sensor for measuring TDS value of water, 0 1000ppm range, 3.3 5.5V wide voltage input, 0 2.3V analog voltage output, Compatible with Arduino boards                                       | 5    |
| 151     | Soil N.P.K. Sensor   | FirstRate FST100-2006E Soil N.P.K. Sensor                                  | Material: 316L stainless steel, Range: 0~1999mg/kg (mg/L), RS485 interface, Detects nitrogen, phosphorus and potassium content in soil  | 5    |
| 152     | K Type Thermocouple Sensor Measure                                 | MAX6675 Module+K Type Thermocouple Sensor Measure                          | MAX6675 module, Operating Voltage: 3.3 5.5VDC, Temperature Range: 0 to +1024°C, Cold Junction Compensation: -20 to +80°C, Resolution: 0.25°C, SPI serial output, Thermocouple break detection | 5    |
| 153     | M.2 NVMe Enclosure   | UGREEN M.2 NVMe Enclosure 10Gbps USB C 3.2 Gen 2                           | 10Gbps Speed, Supports NVMe M/B+M Key, Fits 2230/2242/2260/2280 SSDs up to 8TB, RTL9210 Chip, Aluminum Case with Thermal Pad, Multi-OS Compatible   | 2    |

| Sr. No. | Equipment Name  | Specifications  | Detailed Specifications   | Qty. |
|---------|---|---|---|------|
| 154     | Amazon Basics USB 3.0 to RJ45 Ethernet LAN Adapter                    | Amazon Basics USB 3.0 to RJ45 Ethernet LAN Adapter                                  | Up to 10/100/1000 Mbps, Compatible with Windows, Mac OS, Chrome OS, Linux OS, Plug and play, no drivers needed, Aluminum casing for heat dissipation  | 3    |
| 155     | Cat 6 Patch Cord for Modem (Grey, 2 m)                                | D-Link RJ45 Cat 6 Patch Cord for Modem (Grey, 2 m)                                  | 2 meter stranded type, Conductor: 24 AWG, Snagless cable, 1000base-t Ethernet transmission  | 5    |
| 156     | 750 V3 Bronze ATX 3.1 Power Supply                                    | Cooler Master MWE 750 V3 Bronze ATX 3.1 Power Supply                                | 750 Watt, 80 Plus Bronze Certified, Quiet HDB fan, Single +12V rail, DC-to-DC technology, ATX 3.1 support, Non Modular  | 2    |
| 157     | Official 27W adaptor for Raspberry Pi 5                               | Official 27W USB-C PD Power Supply for Raspberry Pi 5                               | 27W USB-C PD Power Supply, 5.1V, 5A output, Enables Raspberry Pi 5 to power wider range of peripherals, Increases USB port power limit to 1.6A  | 5    |
| 158     | Hi Link HLK-20M12 12V/20W Switch Power Supply Module                  | Hi Link HLK-20M12 12V/20W Switch Power Supply Module                                | 12V/20W output, AC input: 100 240V, Low ripple and low noise, Output overload and short circuit protection, High efficiency, Meets UL, CE requirements  | 10   |
| 159     | Hi Link HLK-20M05 5V/20W Switch Power Supply Module                   | Hi Link HLK-20M05 5V/20W Switch Power Supply Module                                 | 5V/20W output, AC input: 100 240V, Low ripple and low noise, Output overload and short circuit protection, High efficiency, Meets UL, CE requirements   | 10   |
| 160     | G5LE-14 DC5-OMRON ELECTRONIC COMPONENTS                               | G5LE-14 DC5-General Purpose Relay, G5LE Series                                      | Power, Non Latching, SPDT, 5 VDC, 10 A, Coil Resistance: 63ohm, Contact Voltage: 250VAC/30VDC, Contact Material: Silver Tin Oxide, Through Hole mounting  | 10   |
| 161     | 1500PCS 75 kinds specifications × 20PCS 1/4W Metal Film Resistor Pack | Pro-Range New 1500PCS 75 kinds specifications × 20PCS 1/4W Metal Film Resistor Pack | 1/4W Metal Film Resistor, Error 1%, 75 kinds specifications × 20PCS, Axial-lead metal film resistors, Better temperature stability than carbon, Lower noise, Better for high frequency applications | 10   |
| 162     | 600 pcs. Resistor Assorted kit – 30 Kinds                             | 600 pcs. Metal Film Resistor Assorted kit – 30 Kinds                                | 1/4W 1% Tolerance Metal Film Resistors, 5 color bands, 30 kinds, Great assortment for front ends and low power applications, Better temperature stability, Lower noise                              | 5    |


AICTE IDEA LAB

Swami Keshvanand Institute of

Technology Management & Graomthan  
Ramnagar, Jatapura, JAIPUR-302017

| Sr. No. | Equipment Name   | Specifications   | Detailed Specifications  | Qty. |
|---------|--|--|--|------|
| 163     | Touch Screen Module TFT Interface 240*320                  | 2.8 inch SPI Touch Screen Module TFT Interface 240*320     | 2.8 inch display, 240*320 resolution, Can be used in 8-bit and SPI modes, For 8-bit mode: 12 lines total, SPI mode: 5 pins total, 4 pins for touchscreen (2 digital, 2 analogs)                                    | 5    |
| 164     | 1.8 Inch LCD Module 128*160                                | 1.8 Inch ST7735 TFT LCD Module with 4 IO 128*160           | 1.8 inch display, 128*160 resolution, ST7735S driver IC, Serial peripheral interface, Working temperature: -20 70°C, Effective LCD area: 28.03 x 35.04 mm  | 5    |
| 165     | Radxa X4 Credit Card Size SBC                              | Radxa X4 Credit Card Size SBC                              | Intel N100 processor, 8GB RAM, No eMMC, Credit card-sized Single Board Computer, For developers, tech enthusiasts, and professionals   | 3    |
| 166     | 2230 500GB SSD PCIe Gen 4x4 R/W Internal Solid State Drive | SP Silicon Power UD90 2230 500GB SSD PCIe Gen 4x4          | 500GB capacity, M.2 2230 form factor, PCIe Gen 4x4, Read speeds up to 5,000MB/s, Write speeds up to 3,200MB/s, Ultra-efficient thermal design  | 2    |
| 167     | Transistor Tester Kit                                      | Soldered GM328A Transistor Tester DIY Kit                  | Tests NPN and PNP triode common emitter current amplification factor, Identifies Darlington transistors, Measures resistors and equivalent series resistance (ESR) for capacitors, Black English Version Assembled | 2    |
| 168     | 60/40 Tin/Lead Tin Lead Solder Wires                       | Saru 60/40 Tin/Lead Tin Lead Solder Wires                  | 60/40 Tin/Lead, No-clean flux cored wire, For electronics industry, Excellent wetting characteristic, Recommended for fast cycle time soldering, Low to medium post process residues                               | 5KG  |
| 169     | Aluminium Body Desoldering Pump                            | SOLDRON High Quality Black Aluminium Body Desoldering Pump | Aluminium metal body, Heat-resistant replaceable silicone tip, Strong suction, Durable build, Economical desoldering solution  | 5    |
| 170     | Portable Power Station                                     | EF ECOFLOW RIVER 2 Max                                     | 512Wh LiFePO4 Battery, 10 Year Lifespan, 0-100% Charge in 60min, 230V/50Hz AC Output (India), Powers up to 11 Devices, 5KG Weight, For Outdoor/Home Backup   | 1    |
| 171     | Laser Engraver   | Creality Falcon 2 22W Laser Engraver and Cutter            | 22W Diode Laser, 400x415mm Work Area, Built-In Air Assist, Safety Features, LightBurn/LaserGRBL Support  | 1    |

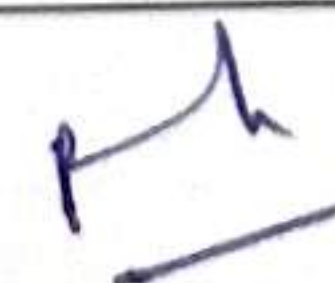
| Sr. No. | Equipment Name                           | Specifications   | Detailed Specifications  | Qty. |
|---------|--|--|--|------|
| 172     | Cooling Fan for Control Board            | Bambu Lab X1CC, P1P  | High-Performance Replacement Fan, For X1CC & P1P Control Board, Efficient Cooling, Easy Installation, Durable & Reliable | 1    |
| 173     | Infrared (IR) Handheld Temperature Meter | GM320 Non-Contact Infrared (IR) Handheld Temperature Meter | -50 to 330°C Range, $\pm 1.5\%$ or $\pm 1.5^\circ\text{C}$ Accuracy, 0.1°C Resolution, 3V DC Power                       | 2    |
| 174     | MicroSD Card                             | SanDisk 64GB High Endurance Video MicroSDXC Card           | 64GB, High Endurance, C10, U3, V30, 4K UHD, Harsh Condition Proof  | 3    |
| 175     | Multi-Card Reader                        | Digitek (DCR-007) USB-A 3.0 & Type C Multi-Card Reader     | Dual USB-A/Type C Ports, Supports SD/Micro SD variants, OTG Support, Compact   | 2    |
| 176     | 3D Scanner                               | Creality CR-Scan Ferret SE                                 | 0.02mm Accuracy, 5mm-2000mm Working Distance, 60fps Scan Speed, 24-bit Color, Anti-Shake                                 | 0    |
| 177     | Toolkit for 3D Printers                  | 3IDEA CR LCD Common Toolkit for 3D Printers                | Comprehensive Tool Set, Hassle-Free Maintenance, Durable Build, FDM Printer Compatible                                   | 1    |
| 178     | Filament Splicer                         | SunLu Filament Splicer                                     | Fuses Leftover Filaments, Multi-Color Fusion, Heats to 185°C in 3min, PLA/ABS/PETG Compatible                            | 3    |
| 179     | 3D Printer Camera for Creality           | 3 idea Imagine Create Print CR K1 AI Camera                | AI-Detection, Easy Installation, Time Lapse Filming, Compact Design  | 1    |
| 180     | 3D Printer Camera for Bambu Lab's        | X1CC CHAMBER CAMERA  | 1080p Full HD, 110° Lens, Real-Time Remote Monitoring, AI-Powered Spaghetti Detection                                    | 1    |
| 181     | Filament Storage                         | Creality CFS   | 16-Color Capacity, Auto Identification & Switching, Run-out/Tangle Detection, Moisture-proof                             | 1    |
| 182     | Heat Bed Single Cable                    | X1CC / P1P Heat Bed Single Cable                           | 6-Pin 1.25mm MX Connector, 555mm Length, For Temperature & Leveling, X1/P1 Series Compatible                             | 1    |
| 183     | EXTRUDER Unit                            | X1CC Hardened Steel EXTRUDER Unit                          | Hardened Steel Double Gears, High Extrusion Force, Abrasion Resistant, Filament Break Sensor                             | 1    |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017


| Sr. No. | Equipment Name                   | Specifications   | Detailed Specifications   | Qty. |
|---------|----------------------------------|--|---|------|
| 184     | Nozzle Wiper                     | X1CC & P1P Nozzle Wiper  | Easy Replacement, Secure PTFE Lock Screw, Efficient Cleaning, X1/P1 Series Compatible             | 1    |
| 185     | Activated Carbon AIR Filter      | BAMBULAB X1CC Activated Carbon AIR Filter                      | VOC Absorption, Honeycomb Structure, Hassle-Free Installation, Durable                            | 1    |
| 186     | Hardened Steel Nozzle (0.6mm)    | X1CC Complete HOTEND Assembly with HARDEND Steel Nozzle 0.6 MM | 0.6mm Hardened Steel Nozzle, Complete Assembly, High Durability, Improved Print Quality           | 1    |
| 192     | 3D Printer Filament Storage Rack | Indian Decor 56698 3D Printer Filament Storage Rack            | Holds 40 Spools, 3-Tier Metal Design, 80lbs/Tier Capacity, Powder-Coated, Stable Base             | 5    |
| 193     | ABS 3D Printing Filament         | FibReel-fab ABS (Multiple Colors)                              | Low-Cost, Durable, High Heat Resistance, Good Mechanical Properties, Toughness, Impact Resistant  | 3    |
| 194     | ABS FR 3D Printing Filament      | FibReel-fab ABS FR (Natural, Black)                            | Flame-Retardant, Toughness, Heat Resistance, Machinability, For Electronics/Automotive/Industrial | 3    |
| 195     | ASA 3D Printing Filament         | FibReel-fab ASA (White, Natural, Black)                        | UV Resistant, Impact Resistant, Temperature Resistant, Water-Resistant, Chemical Resistant        | 3    |
| 196     | HIPS 3D Printing Filament        | FibReel-fab HIPS (White, Black)                                | High Impact Resistance, Smooth Finish, Soluble Support Material for ABS, For Prototypes/Models    | 3    |
| 197     | HTPLA 3D Printing Filament       | FibReel-fab HTPLA (Multiple Colors)                            | Heat-Treatable, High Temperature Stability, Exceptional Finish, For Functional Prototypes/Parts   | 3    |
| 198     | PETG 3D Printing Filament        | FibReel-fab PETG (Multiple Colors)                             | Durable, Moisture Resistant, Minimal Warping, Food-Safe, For Mechanical Parts & Outdoor Use       | 3    |
| 199     | PLA 3D Printing Filament         | FibReel-fab PLA After Glow (Green, Blue, Yellow)               | Glow in the Dark, Phosphorescent, Requires Charging by Light, Fun & Decorative Applications       | 3    |
| 200     | PLA Glass 3D Printing Filament   | FibReel-fab PLA Glass (Multiple Colors)                        | Semi-Translucent, Chemically Stable, High Temperature Resistance, Acid Resistant                  | 3    |
| 201     | PLA Marble 3D Printing Filament  | FibReel-fab PLA Marble (PLA Marble)                            | Marble-like Appearance, Unique Aesthetic, Easy to Print, Special Pigments & Binding Polymers      | 3    |

| Sr. No. | Equipment Name                         | Specifications  | Detailed Specifications   | Qty. |
|---------|--|---|---|------|
| 202     | PLA Silk 3D Printing Filament          | FibReel-fab PLA Silk (Multiple Colors)  | Silky-Smooth Finish, Reflective, Satin-like, Stronger Than Standard PLA, Excellent Layer Adhesion | 3    |
| 203     | PLA Solid 3D Printing Filament         | FibReel- fab PLA Solid (Grey, Red, Orange, Black, Pearl White, White)           | Easy to Print, Low Printing Temperature, Biodegradable, Sweet Aroma, Versatile, Beginner Friendly | 3    |
| 204     | PLA Wood 3D Printing Filament          | FibReel- fab PLA Wood (PLA Wood)  | 40% Recycled Wood Fibers, Realistic Wood Color/Finish/Smell, Infinite Design Possibilities        | 3    |
| 205     | Double sided FR4 Copper Clad PCB Board | DiT LAB 6x4 inch (15x10 cm) Double sided FR4 Copper Clad PCB Board              | FR4 Material, 6"x4", Double-Sided, 1oz Copper Thickness, 2 pieces                                 | 30   |
| 206     | Single Sided Copper Clad FR4 Board     | DiT LAB 12 x 12 inch (30cm x 30cm) Copper Clad FR4 GLASS EPOXY                  | FR4 Material, 12"x12", Single-Sided, 1oz Copper Thickness, 1 piece                                | 50   |
| 207     | Steel Wool                             | Kaden Apparel Grade 0000 Steel Wool Fine 1.50m Wire Roll Pad                    | Super Fine Grade, Low-Carbon Steel, For Ultra-Fine Polishing/Cleaning of Metal/Glass/Wood         | 10   |
| 208     | Universal PCB Prototype Board          | 8 x 12 cm Universal PCB Prototype Board Single-Sided 2.54mm Hole Pitch          | 8cmx12cm, Single-Sided, 2.54mm Hole Pitch, 1mm Hole Size, Perfboard/Protoboard                    | 50   |
| 209     | Twist Drill Kit                        | 10pcs Twist Drill Kit, 2x each size: 0.5mm 1.0mm 1.5mm 2.5mm 3.0mm              | HSS Material, Sizes: 0.5, 1.0, 1.5, 2.5, 3.0mm (2 each), 3.17mm Shank, For Rotary Tools           | 5    |
| 210     | Twist Drill Kit                        | 10pcs Twist Drill Kit, 2x each size: 0.7mm 8.0mm 1.0mm 1.2mm 1.4mm              | HSS Material, Sizes: 0.7, 8.0, 1.0, 1.2, 1.4mm (2 each), 3.17mm Shank, For Rotary Tools           | 5    |
| 211     | Masonry Drill Bit Set                  | Taparia MDS8 Masonry Drill Bit 3 mm, 4 mm, 5 mm, 6 mm, 7 mm, 8 mm, 9 mm & 10 mm | Carbide Tip, Sizes: 3,4,5,6,7,8,9,10mm, Round Shank, 8 pieces                                     | 5    |

| Sr. No. | Equipment Name                         | Specifications  | Detailed Specifications  | Qty. |
|---------|--|---|--|------|
| 212     | Mini Electronic Drill Chuck            | 2.3mm Mini Electronic Drill Chuck Range 0.5-3.2mm Shank Shaft Adapter | 0.5-3.2mm Capacity, 2.3mm Shank, Adapter for Small Tools/Dremels                         | 5    |
| 213     | Mini Drill Chucks For Rotary Tools     | 7pcs 3.17mm Mini Drill Chucks For Rotary Power Tools                  | 3.17mm Shank, Dedicated Sizes: 0.5, 1.0, 1.5, 2.5, 3.0mm, 7 pieces                       | 5    |
| 214     | ST Link V2 Programmer                  | ST Link V2 Programmer For STM8 and STM32                              | For STM8/STM32, SWIM/SWD/JTAG Interfaces, 20-pin JTAG & 4-pin SWD, USB 2.0               | 5    |
| 215     | STM32F103C8T6 Minimum System Board     | STM32F103C8T6 Minimum System Board Microcomputer STM32 ARM Core Board | STM32F103C8T6 MCU, ARM Cortex-M3, 64KB Flash, 20KB RAM, 72MHz, 37 I/O Pins               | 5    |
| 216     | STM32F411CEU6 Minimum System Board     | STM32F411CEU6 Minimum System Board Microcomputer STM32 ARM Core Board | STM32F411CEU6 MCU, ARM Cortex-M4 with FPU, 512KB Flash, 128KB RAM, 100MHz, USB OTG       | 5    |
| 217     | MPU9250 9-Axis Sensor Module           | MPU9250 9-Axis Attitude Gyro Accelerator Magnetometer Sensor Module   | 9-Axis (Gyro+Accel+Mag), I2C/SPI Interface, 3.3V, Motion Tracking                        | 5    |
| 218     | HW-290/GY-87 10DOF Sensor Module       | HW-290/GY-87 10DOF (MPU6050, HMC5883L, BMP180)                        | 10-DoF (Gyro, Accel, Mag, Baro), I2C Interface, 3-5V, Attitude/Heading/Altitude Sensing  | 5    |
| 219     | VL53L1X Lidar Sensor Module            | Holybro ST VL53L1X Lidar Sensor Module                                | VL53L1X ToF Sensor, Long-Range Detection, I2C Interface, 2.6V-3.5V, Distance Measurement | 5    |
| 220     | W25Q128 Flash Storage Module           | W25Q128 Large Capacity Flash Storage Module                           | 128Mb (16MB) Capacity, SPI Interface, 2.7V-3.6V, Non-volatile Data Storage               | 5    |
| 221     | 2.4GHz NRF24L01 PA LNA Wireless Module | NRF24L01+PA+LNA SMA Wireless Transceiver                              | 2.4GHz, NRF24L01 with PA & LNA, +20dBm Output, Range: 1000m+, SMA Antenna, 3.3V          | 5    |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

| Sr. No. | Equipment Name                    | Specifications   | Detailed Specifications   | Qty. |
|---------|-----------------------------------|--|---|------|
| 222     | EBYTE E01-2G4M27D Wireless Module | EBYTE E01-2G4M27D Ebyte NRF24L01 PA LNA 27dBm 2.4GHz Wireless Transceiver Module | NRF24L01+ with High-Power Front-End, +27dBm Output, Very Long Range, SPI, 5V for RF         | 5    |
| 223     | DSP PLL FM Transmitter Module     | DSP PLL 87-108Mhz Stereo FM Transmitter Module                                   | 87-108MHz FM Band, DSP & PLL, LCD Display, Stereo Audio Input, Low Power                    | 5    |
| 224     | RF Wideband Amplifier LNA Module  | 0.1-2000mhz RF Wideband Amplifier Gain 30db Low-Noise Amplifier LNA Board Module | 100kHz-2000MHz Range, 30dB Gain, Low-Noise, Boosts Weak RF Signals                          | 5    |
| 225     | 5D Rocker Joystick                | 5D Rocker Joystick for Arduino, MCU, AVR Game Projects                           | Analog X/Y Axis, Digital Pushbutton, 3.3V-5V, For Games, Robotics, RC Controllers           | 5    |
| 226     | Micro SD Card Reader Module       | Micro SD Card Reader Module  | SPI Interface, Micro SD & SDHC Support, 3.3V Regulator & Level-Shifting, 6-pin              | 5    |
| 227     | Outemu Mechanical Switches        | Outemu Mechanical Switches for Swappable Keyboards (Pack of 20)                  | MX-Style, 3-Pin, Various Colors (Actuation Type Varies), Pack of 20, For Hot-Swap Keyboards | 5    |

  
**AICTE IDEA LAB**  
 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal

| Sr. No. | Equipment Name                | Specifications   | Detailed Specifications  | Qty. |
|---------|-------------------------------|--|--|------|
| 228     | PCB Milling/Prototype Machine | PCB Milling  | A complete Design and Implementation solution from concept to prototype EDWinXP Design software 01 user, it should be capable of 1. Circuit Design (Schematic Capture). 2. Circuit Simulation using ED spice. 3. Microcontroller co-simulation. 4. PCB layout Design. 5. Thermal Analysis of PCB layout. 6. EMI /EMC and signal integrity Analysis of PCB layout. 7. Fabrication Manager for exporting Manufacturing Data. 8. Fabrication Manager should be able to open & view Gerber files package EDWinXP to offer seamless integration in different modules. PCB Router Machine Features required: Effective working travel (X, Y, Z): 230 (X) mm *170 (Y)mm * 25(Z) or better Max PCB Size: 200*140mm or better Operation supported: Single sided and double sided PCB Spindle motor: 12000 RPM/Min, Air cooling Spindle or better Principal axis collet: ER11/3.175 mm or better Positional accuracy: 0.05 mm or better Maximum Speed: 4000 mm/min or better Travel Speed X/Y: 40 mm/sec or better Operating Voltage: 220V-240V / 50 Hz or better Software: TrackMaker with USB Dongle License Computer interface: USB | 1    |
| 229     | Soldering Station Electric    | Weller WE 1010 Series                                    | 70W power, 450°C max temperature, Digital interface with LCD screen, ESD safe, Temperature stability: +/- 2°C  | 3    |
| 230     | Hot Air Rework Station        | Atten ST-862D 1000W Lead Free Hot Air SMD Rework Station | 1000W power, Temperature: 100-480°C, Three programmable channels, Adjustable airflow up to 120L/min, Brushless motor   | 2    |
| 231     | Desoldering Machine/Pump      | YIHUA 948D-III Soldering Desoldering Station             | 2-in-1 desoldering rework station, 110W soldering iron, Wide temperature range, Digital display, ESD-Safe  | 1    |

| Sr. No. | Equipment Name                         | Specifications   | Detailed Specifications  | Qty. |
|---------|--|--|--|------|
| 232     | Magnifying Lamp with Stand             | Bakon 22W desktop magnifying glass with light stand BK500 5x | 22W power, 5x magnification, Adjustable stand, Ideal for detailed inspection and manipulation  | 2    |
| 233     | Mixed-Signal Oscilloscope (MSO)        | Teledyne LeCroy T3DSO3354-PROMO-1                            | 4 Channel / 350MHz, Mixed Signal Oscilloscope w/ MSO Probe, Serial bus decoders for I2C, SPI, UART, CAN, etc.  | 1    |
| 234     | Digital Storage Oscilloscopes          | Hantek DSO 4254C 4CH oscilloscope                            | 4-channel, 250MHz bandwidth, 1GS/s sampling rate, 7-inch TFT color display, Built-in 25MHz function generator  | 3    |
| 235     | Function/Signal Generator              | UNI-T UTG1022X Function/Arbitrary Waveform Generator         | High-performance function generator, Resolution: 1µHz, Max output frequency: 20MHz, Sample rate: 200MSa/s  | 1    |
| 236     | DC Regulated Power Supplies            | OWON SPE6102 1 CH DC Power Supply                            | 60V, 10A, 200W, 4½-digit digital multimeter, Over-voltage and over-current protection, Programmable output sequences   | 3    |
| 237     | Multimeter                             | Fluke 17B Max  | Input Alert Audible and Visual Alarm—Increased Safety Standard Test Leads with Fine Tips – Insight One-Key Wake-Up — High Efficiency Comes with TL75, TL31 & 80BK-A Probes Frequency and temperature measurement | 2    |
| 238     | Multimedia Projector                   | Samsung SPLFF3CLAXXXL (2300 lm)                              | 2300 lm brightness, Wireless, Remote Controller, HDR 10+, Wi-Fi, 360 Degree Sound, Compact Smart LED Projector   | 1    |
| 239     | Heavy-Duty Color Laser Printer         | Ricoh IM C2010 Color Multifunctional printer                 | Prints up to 20 ppm, 12x18 colour multifunction, 6 GB memory, 256 GB SSD, Automatic duplex printing, ADF for scanning  | 1    |
| 240     | Interactive Smart Board Display        | MSI MAG 321UPX QD-OLED 31.5 Inch 4K UHD Flat Gaming Monitor  | 31.5" 4K UHD, Quantum Dot OLED Panel, 240Hz refresh rate, 0.03ms response time, 99% DCI-P3, DisplayHDR True Black 400  | 1    |
| 241     | Desktop Computers (Tower Workstations) | Custom Built Tower Workstation PC                            | CPU: Intel Core i7 (13th Gen or newer), Memory: 32 GB RAM, Storage: 1TB SSD + 2TB HDD, Dedicated GPU 4 GB  | 5    |

| Sr. No. | Equipment Name                                    | Specifications   | Detailed Specifications   | Qty.                 |
|---------|---|--|---|----------------------|
| 242     | All-in-One Desktop PCs                            | Apple 2024 iMac All-in-One Desktop Computer with M4 chip                       | M4 chip with 10-core CPU and 10-core GPU, 60.96 cm (24") Retina Display, 16GB Unified Memory, 256GB SSD Storage                     | 3                    |
| 243     | Vacuum Cleaner (Wet & Dry)                        | EUREKA FORBES Euroclean WD X2 Wet & Dry Vacuum Cleaner                         | Wet and dry cleaning, Reusable dust bag, Smart LED indicator, On-board accessory storage, Auto clean feature                        | 1                    |
| 244     | Electronic Testing Kit (LCR meter & Variac)       | UNI-T UT622E Handheld LCR Meter & RS PRO 1 Phase 480VA Variac                  | LCR Meter: Handheld, test frequency up to 100kHz; Variac: 480VA, 240V input, 0-240V/0-270V output, Single phase                     | 1 set (2 items)      |
| 245     | 3D Printer Filament (Assorted)                    | FibReel-fab All type of material and all colour Filament Scroll(Assorted)      | Assorted 1.75 mm filament spools: PLA, ABS, PETG, TPU, PLA+ or PLA-CF, PEEK or Nylon, Total 12 spools (1 kg each)                   | 12 spools            |
| 246     | 3D Printer Resin (Assorted)                       | Any good quality UV resin  | Photopolymer resins for SLA printer: Standard resin (gray or clear), Flexible (elastic) resin, Tough or high-temp resins            | 15 bottles (approx.) |
| 247     | Acrylic Sheets                                    | Cast acrylic sheets  | Clear or colored acrylic sheets for laser cutting, Thickness: 2mm, 3mm, 4mm, 5mm, Size: Standard sheet 8x4ft, 2 sheets of each type | 2 each type          |
| 248     | Foam Sheets (for prototyping)                     | High-density foam boards   | Rigid foam sheets (e.g., sunboard or depron), Thickness: 5 mm, Size: 8x4ft, For making quick prototypes, carving                    | 2 sheets             |
| 249     | Assorted Fasteners (Nuts, Bolts, Screws, Washers) | 1110PCS Nuts and Bolts Assortment Kit, Stainless Steel Hardware Assortment Kit | 1110PCS hardware assortment, Stainless steel 304, corrosion resistant, Includes various sizes of screws, nuts, washers              | 100 each             |
| 250     | Studs   | Standard metal hardware  | 6mm, 8mm, various lengths   | 5 each               |
| 251     | Adhesives (Epoxy, Glue)                           | M-Seal, Feviquick, Fevi Bond etc.  | Epoxy adhesive tubes (two-part, 5 min fast setting), Super glue (cyanoacrylate), General-purpose synthetic glue (Fevicol)           | 10 packs             |
| 252     | Double-Sided Tape (Foam and clear)                | Scotch Double Sided Tape by 3M (1m holds 4.5Kgs)                               | For indoor hanging applications, Double-sided transparent tape for crafts, 10 rolls of each type (20 rolls total)                   | 20 rolls total       |

| Sr. No. | Equipment Name                       | Specifications   | Detailed Specifications  | Qty.     |
|---------|--------------------------------------|--|--|----------|
| 253     | PVC Pipes (for prototyping frames)   | PVC conduit pipes  | PVC pipe sections, diameter: 0.75", 1", 1.5", 2.5", 3", Length: 10ft   | 1 Each   |
| 254     | Aluminum Channel Sections            | 12 Feet Aluminium Channel                                    | Thickness: 2 mm, Size: 12 Feet, Finishing: Mill Finish, Material: Aluminium                                    | 2 Each   |
| 255     | Solder Flux Paste                    | Soldron Soldering and Desoldering Flux - 200ml               | Non-corrosive and non-conductive flux, Ideal for all soldering applications, 200ml jars                        | 5 jars   |
| 256     | Desoldering Wick (Solder Braid)      | Desoldering Wick 1.5m Copper                                 | Copper threads braided together, Effective for faster and cleaner desoldering, Used with heated soldering iron | 10 rolls |
| 257     | PCB Power Drill machine              | Generic (mini machine)                                       | Rotary tool with collets, Versatile for cutting, grinding, polishing, engraving, or drilling                   | 3 units  |
| 258     | Breadboard                           | Generic High Quality   | High-quality breadboard for prototyping circuits, secure connections, reusable                                 | 10 units |
| 259     | Refrigerator (for Materials Storage) | LG/Samsung or equivalent (Domestic)                          | Double-door frost-free, Capacity: 250-300 L, Stabilizer-free operation, Adjustable shelves                     | 1        |
| 260     | Electric Oven (Convection)           | Usha / Bajaj OTG or equivalent                               | Convection heating oven, Capacity: 30-40 L, Temperature: Up to 250°C, Comes with baking tray and grill rack    | 1        |
| 261     | Microwave Oven                       | Any standard brand (LG/Samsung)                              | Solo microwave, Capacity: 20 L, Power: 700-800 W, For lab use (not for food once used with lab items)          | 1        |
| 262     | Magnifying Lamp with Stand           | Bakon 22W desktop magnifying glass with light stand BK500 5x | 22W power, 5x magnification, Adjustable stand, Ideal for detailed inspection and manipulation                  | 2        |
| 263     | Digital Microscope (USB)             | Amici Tools HDMI Digital Microscope                          | 1600X magnification, 1080p Full HD video record, 25.65 cm (10.1 inch) LCD display, HDMI output                 | 1        |
| 264     | Laser Printer (USB)                  | Canon LBP2900B Laser Printer                                 | 1 Year warranty from Canon, 15 kg volumetric weight, Cartridge no.: 303  | 4        |
| 265     | Scanner                              | Canon LBP2900B 12ppm Laser Printer                           | Scanning Technology: CCD, Scanning Resolution: 600 dpi, Interface: USB   | 2        |


**AICTE IDEA LAB**

 Swami Keshvanand Institute of  
 Technology Management & Graomthan  
 Ramnagar, Jatapura, JAIPUR-302017

## Important Note

If any item above is quoted as a different make/model, the bidder must clearly specify the brand and model and provide supporting technical brochures to demonstrate equivalence or superiority. All quantities specified are the minimum required; the bidder should supply exactly these quantities (any voluntary additional items or higher quantities may be considered gratis). Accessories that are standard with the equipment should be included (power cords, adapters, software, basic kits, etc.). All equipment must be new and unused and comply with relevant safety standards.

## Terms and Conditions

The following Terms and Conditions apply to all bidders and shall be part of the contract. By submitting a bid, the bidder agrees to these terms in full:

## General Information

All goods and materials must be supplied in the quantities and specifications mentioned in the purchase order. Delivery of all items shall be at Swami Keshvanand Institute of Technology, Management & Gramothan, Ramnagaria Jagatpura Jaipur, Rajasthan - 302017 (exact department/lab address will be provided in the P.O.). The supplier is responsible for onsite installation and commissioning of applicable equipment. The entire supply and installation process should be completed within 30 days from the date of purchase order. The tender/contract shall remain valid for a period of 3 months from the date of award, during which orders may be placed. Bids must remain valid for at least 90 days from the final bid submission date. The purchaser reserves the right to increase or decrease quantities (up to  $\pm 10\%$ ) at the time of order. Partial bids (quoting only for some items) are not permitted and will be rejected – the bid must cover ALL items in the equipment list.

## Bid Submission Guidelines

Bids should be submitted in two parts: Technical Bid and Financial Bid, each in separate sealed envelopes (or separate PDF files if submitted via email). The envelopes/files should be clearly marked "Technical Bid AICTE IDEA Lab Equipment" and "Financial Bid AICTE IDEA Lab Equipment," respectively. Both should then be enclosed in a single sealed outer envelope addressed to The Chief Mentor & Principal Swami Keshvanand Institute of Technology, Management & Gramothan, Ramnagaria Jagatpura Jaipur, Rajasthan - 302017. If submitting by email, the documents should be password-protected and emailed to the designated official email (to be provided), with instructions to share the password after the tender opening time.

**Deadline:** The bids must reach the above address (or email inbox) on or before 14/10/2025, 3:00 PM. Late submissions will not be considered. In the case of hardcopy submissions, the bidder should sign and stamp each page of the tender document (including all annexures) as acceptance of terms. The Financial Bid must be in a separate sealed cover and include the price for each item and total in the given format. No pricing information should appear in the Technical Bid.

## Technical Documentation and Compliance

The Technical Bid must include detailed technical literature, brochures, and data sheets for each quoted equipment/model. The bidder should provide a compliance statement against each specification in the tender's equipment list, clearly indicating any deviations. Supporting documentation for compliance (such as highlighted catalog pages) is required. The Technical Bid should also include:

- Filled Technical Specifications Compliance Sheet (as per the format, if provided).
- List of any optional accessories or upgrades suggested (with technical details, but without prices in technical bid).
- Past performance/installation references: a list of at least 3 institutions where similar equipment has been supplied (optional but preferable).
- Any other documents needed to demonstrate the product quality (ISO certificates, safety standard compliances, etc.).

The bidder must ensure that all quoted items meet the minimum required specifications. Mere mention of "complied" without supporting evidence may be treated as non-compliance. The purchaser reserves the right to verify specification claims through demonstration (if needed) before finalizing the award.

## Eligibility and Qualification Criteria

Bidders must be Original Equipment Manufacturers (OEM) or authorized distributors & dealers of the OEM for the items quoted. Valid authorization letters from OEMs should be enclosed in the Technical Bid for all major equipment. The bidder should have a legal presence in India and must not have been blacklisted by any government or PSU in the last 5 years (a self-declaration to this effect should be provided). The bidder should have experience in supplying and installing similar laboratory equipment – supporting documents such as purchase orders or completion certificates may be included. The bidder must be financially sound (the purchaser may ask for financial statements or IT returns for the last 3 years from the winning bidder for verification). The Institute may also require the bidder to arrange a demonstration of certain equipment (such as 3D printer, CNC, PCB etc.) if needed, prior to final technical qualification – inability to demonstrate basic functionality as claimed can lead to disqualification.

## Warranty and Support

The supplied equipment shall carry a comprehensive onsite warranty of at least 3 years from the date of installation (or as specified in the equipment list, whichever is greater). During this warranty period, the vendor must provide free repair/replacement of any defective components or entire unit as necessary. Warranty service shall be onsite, meaning the vendor will arrange for technicians to come to the Institute to diagnose and repair, or if the item must be taken off-site, the vendor will handle logistics at no extra cost. All software (if any, like CNC controller software, CAD/CAM, etc.) should be licensed and updated to latest version at the time of installation. The bidder should also guarantee

availability of spare parts for at least 5 years from date of supply. In case of any critical equipment failure, the vendor should respond within 48 hours of complaint during the warranty period. For items like 3D printers, CNC, etc., training must be provided on operation and basic maintenance to lab staff at the time of installation (this will be arranged in coordination with the institute's schedule). Bidders are encouraged to quote separately (as an option) for Annual Maintenance Contract (AMC) beyond the warranty period for future support – however, AMC charges will not be included in evaluation, since it is optional.

## Evaluation of Bids

The evaluation will be carried out in two stages – Technical and Financial. The Technical Committee will first evaluate the Technical Bids for compliance with the required specifications and eligibility criteria. Only those bids that are technically qualified (meeting all essential specs and terms) will proceed to the financial evaluation. The Financial Bids of technically qualified bidders will then be opened. The contract shall be awarded to the lowest priced bid (L1) among the technically compliant bids. The L1 will be determined on the total cost of all items combined (inclusive of all taxes, duties, and any other charges). During financial evaluation, if there is any arithmetic error in totals, the unit prices shall be considered correct and totals re-calculated. The purchaser reserves the right to negotiate with the L1 bidder if the prices of certain items are found unreasonable. If the lowest bidder is unable to supply all items or is found technically non-responsive, the next lowest bidder (who is technically compliant) may be considered for award. The Institute also reserves the right to accept or reject any or all bids, or to annul the tender process, without assigning any reason and without incurring any liability to the affected bidders. The decision of the tender evaluation committee shall be final and binding on all participants.

## ✉ Contact Information & Important Notice

For any clarifications regarding this tender, bidders may contact the following office:

👤 **Dr. Nilam Choudhary**

IDEA Lab Coordinator

Swami Keshvanand Institute of Technology, Management & Gramothan  
Ramnagaria Jagatpura Jaipur, Rajasthan - 302017

📱 Mobile: +91 9829803880

✉ Email: [nilam@skit.ac.in](mailto:nilam@skit.ac.in)

*(For query purposes only; not for bid submission)*

  
**AICTE IDEA LAB**  
Swami Keshvanand Institute of  
Technology Management & Gramothan  
Ramnagaria, Jagatpura, JAIPUR-302017

Chief Mentor / Principal

**⚠ Important Notice:**

- All queries must be made in writing (email) at least 3 days before the last submission date.
- Responses to significant queries will be communicated to all prospective bidders by email or posted on the institute website.
- Bidders are requested to study the tender document thoroughly and ensure they submit **all required information**.

Issued by:



Principal &amp; Chief Mentor

Swami Keshvanand Institute of Technology, Management & Gramothan  
Jaipur, Rajasthan

Date: 06/10/2025

**AICTE IDEA LAB**  
Swami Keshvanand Institute of  
Technology Management & Gramothan  
Ramnagar, Jatapura, JAIPUR-302017

Chief Mentor / Principal