

**PREJHA Foundation**

**Reference:1346-**

**PREJHA03/23/206**

## **REQUEST FOR QUOTATION**

**FOR**

**Partner Empanelment & Supply Of Specialty Manufacturing Training Equipments**

**Dated: 17<sup>th</sup> March 2023**

**PanIIT Alumni Reach For Jharkhand Foundation**

**A Non-profit Special Purpose Joint Enterprise between agencies of Department of Welfare,  
Government of Jharkhand and  
PanIIT Alumni Reach For India  
Foundation,Kalyan Complex, Balihar  
Road, Morabadi,  
Ranchi - 834008, Jharkhand**

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## DISCLAIMER

The information contained in this Request for Quotation ("RFQ") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of PanIIT Alumni Reach For Jharkhand Foundation (hereinafter "PREJHA") is provided to interested parties on the terms and conditions set out in this RFQ and such other terms and conditions subject to which such information is provided.

This RFQ is not an agreement and is neither an offer nor an invitation by PREJHA to interested parties who submit their quote (henceforth "Bidders") in response to this RFQ. The purpose of this RFQ is to provide Bidders with information that may be useful to them in preparing and submitting their proposals ("Proposal") for selection as supply agency with PREJHA Foundation as per notified norms.

PREJHA Foundation makes no representation or warranty and shall have no liability to any person or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFQ or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFQ and any assessment, assumption, statement or information contained herein or deemed to form part of this RFQ or arising in any way from this process.

A Bidder must warrant that all the information provided by it to PREJHA Foundation at the time of application & subsequently, is true to the best of its knowledge and belief, and specially warrants that it has duly complied with the provisions of laws applicable to it. Bidder indemnifies PREJHA Foundation from any liabilities arising out of error or default or negligence or contravention in regard to any of the applicable laws, including, but not limited to, submission of statutory forms & other such documents.

The issue of this RFQ does not imply that PREJHA Foundation is bound to select any Bidder(s) or select any Bidder(s) for any project. PREJHA Foundation may accept or reject any proposal in its discretion and may ask for any additional information or vary its requirements, add to or amend the terms, procedure and protocol set out in RFQ for bona fide reasons, which will be notified to all the Bidders invited to tender. Further PREJHA Foundation hereby reserves its right to annul the process at any time prior to issuance of Purchase Order without incurring any liability towards the Tenderers.

The Bidder shall bear all costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by PREJHA Foundation or any other costs incurred regarding or relating to its Bid. All such costs and expenses will remain with the Bidder and PREJHA Foundation shall not be liable in any manner for the same or for any other costs or expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of this RFQ and related processes.

## **SECTION 1: LETTER OF INVITATION**

PanIIT Alumni Reach for Jharkhand (PREJHA) Foundation invites proposals from reputed bidders for supply of specialty manufacturing training equipment for PREJHA Foundation's Gurukuls & Kaushal College in Jharkhand.

A bidder will be selected based on Lowest Cost Method (L1 basis) from suitable agencies qualifying the criteria as per described in this RFQ.

The content of this RFQ enlists the requirements of PREJHA Foundation. It includes the **Bidding Terms& selection** procedure which details out all that may be needed by the potential bidders to understand the financial terms and bidding process and explains the contractual terms that PREJHA Foundation wishes to specify at this stage.

The RFQ includes the following sections:

**Section 1 - Letter of Invitation**

**Section 2 - Instructions to Bidders (including pre-qualification criteria)**

**Section 3 - Standard Forms**

The information may be submitted online only at the following website.

<https://eprocurement.mjunction.in/EPSV2Web/org/PREJHA/home.action>

The information may be viewed online at the following website.

<https://www.jharkhand.gov.in/paniit>

Yours faithfully,

Authorized signatory

**PanIIT Alumni Reach For Jharkhand Foundation,  
Kalyan Complex, Balihar Road, Morabadi,  
Ranchi – 834008, Jharkhand**

## **PREFACE**

### **About PREJHA Foundation**

Agencies of Department of Welfare, Government of Jharkhand and PanIIT Alumni Reach for India Foundation have partnered to form PanIIT Alumni Reach for Jharkhand (PREJHA) Foundation, a not-for-profit joint enterprise to implement and scale sustainable welfare initiatives. The initiative will replicate the PanIIT Skill Gurukul model of learning for skill development across all the districts of Jharkhand state and thus provide a network of ITI and sub-ITI institutions accessible to school dropouts, underprivileged and those who are from the lower strata of socio-economic background.

PREJHA Foundation sets up Rural Skill Gurukuls and Kaushal colleges to impart vocational Education to deserving candidates.

### **Purpose of RFQ**

The objective of this assignment is to procure specialty manufacturing training equipment required for PREJHA Foundation's Gurukuls & Kaushal Colleges. The supplying agency should adopt a process that is not only transparent, competitive but should also be quick and timely.

## **Section 2: Instructions to Bidders**

The evaluation criteria for the bidders is based on Lowest Cost Method (L1 basis) price bid subject to the bidders submitting and satisfying the basic qualification mentioned. **Each Bidder must submit a single proposal only.**

PREJHA foundation shall endeavor to adhere to the following schedule but reserves the right to alter the same:

**Time schedule of Tender:**

Sl.No.	Particulars	Date
1.	Tender e-Publication date	17.03.2023
2.	Start date for seeking Clarification	17.03.2023
3.	Last date for seeking clarification	20.03.2023
4.	Bid submission start date (only on-line bid accepted)	17.03.2023
5.	Bid submission end date	31.03.2023 (08:00PM)
6.	Schedule date for Technical bid opening	31.03.2023
7	Comparative statement preparation by the system	31.03.2023

**General terms & Conditions:**

***1. Detailed BOQ***

Sl. No	Item Description	UoM
1	<b>DIGITAL POWER SUPPLY (0-30)V / 5A</b> <b>DC Power Supply</b> <b>Output Voltage 0-30 V</b> <b>Output Current 0-5 A</b> <b>Power Supply 220 V <math>\pm</math> 10% AC , 50 Hz <math>\pm</math>2 Hz</b> <b>Load Regulation CV <math>\leq</math>0.01% +3 mV</b> <b>Load Regulation CC <math>\leq</math>0.2% +3 mA</b> <b>Line Regulation CV <math>\leq</math>0.01% +1 mV</b> <b>Line Regulation CC 0.2% +1 mA</b> <b>Ripple and Noise <math>\leq</math>0.5 mV(RMS)</b> <b>Display 3 Digit, LED</b> <b>Protection Current limit &amp; short circuit protection n:</b> <b>Make - MetroQ/HTC/Scientific/Aplab</b>	No
2	<b>DIGITAL MULTIMETER</b> <b>Display 3½ digit</b> <b>Counts 3100</b> <b>AC Voltage Range 1mV to 1000V</b> <b>DC Voltage Range 10µV-1000V</b> <b>AC Current Range 1µA-10A</b> <b>DC Current Range (Amp) 100nA-10A</b> <b>Capacitance Range (F) 10pF - 30µF</b> <b>Frequency Range (Hz) 0.1 Hz - 100 KHz</b> <b>Operating Temperature -10 C -50 C</b>	No



	<p>Storage Temperature -25 C - 70 C</p> <p>Altitude 2000 m</p> <p>Includes 1 multimeter,1 Probe Set,1 copy of operating instructions,1 test certificate,1 rubber holster with tilt stand and carrying strap,warranty card,1 set of extra fuses.</p> <p>Power Input 9V</p> <p>Type of Product Digital Multimeter</p> <p>Dimensions 84x195x35 mm</p> <p>Weight (g) Approx. 0.35 Kg with battery:</p> <p>Make - Rishubh/HTC/Mextech/Scientific/Fluke</p>	
3	<p>LCR METER</p> <p>Display : 3 1/2 Digit Large LCD Display</p> <p>Resistance : 200ohm / 2Kohm / 20Kohm / 200Kohm / 2Mohm / 20Mohm</p> <p>Resistance Accuracy : +/- (0.8% + 5digit)</p> <p>Capacitance : 2nF/20nF/200nF/2uF/20uF/200uF/1000uF</p> <p>Capacitance Accuracy : +/- (5% + 5digit)</p> <p>Inductance : 2mH/20mH/200mH/2H/20H</p> <p>Inductance Accuracy : +/- (5% + 5digit)</p> <p>Count : 2000</p> <p>Key Features : Full Protection function, capacitor with the function F</p> <p>Self discharge Auto Power FF :</p> <p>Make - METRAVI/HTC/METROQ/MEXTECH/SCIENTIFIC</p>	No
4	<p>SOLDERING STATION</p> <p>FEATURES</p> <p>ESD safe.</p> <p>Sleep Mode.</p> <p>Micro controller Based control unit.</p> <p>Easy Replaceable bits.</p> <p>Rubber grip for non-slippery use.</p> <p>MCH heater for long life.</p> <p>Temperature Controlled Digital Soldering Station With Fully Digital Control, Temperature Range: 200-450 deg C</p> <p>Display: LED</p> <p>Wattage 60 Watts:</p> <p>Make - SOLDRON/METROQ/SCIENTIFIC</p>	No
5	<p>SMD REWORK STATION:</p> <p>FEATURES</p> <p>ESD safe.</p> <p>Micro controller Based.</p> <p>Integrated blower within hand held unit.</p> <p>Built in temperature Sensor for precise measuring.</p> <p>Digitally Controlled.</p> <p>Built-in cut off sensor when placed on Cradle.</p> <p>Rubber grip for non-slippery use.</p> <p>MCH heater for long life. 2-in-1 design, compact structure.</p> <p>Temperature Range: Hot Air: 200-480 deg C</p> <p>Soldering Iron: 200-450 deg C</p> <p>Power: 60 W:</p> <p>Make - SOLDRON/METROQ/SCIENTIFIC/WELLER/</p>	No

6	<b>SOLDER POT</b> Tin pot diameter(mm): 50mm Temperature range: 200-480°C Melted solder capacity: 500g Power 150W Input voltage: AC220v 50Hz: Make - UNIVOLT/WELLER/SUMITRON	No
7	<b>OSCILLOSCOPE</b> 100Mhz with 2Channel Digital Storage Oscilloscope, 25MHz ~ 100MHz Bandwidth, FFT function, Autoscale function, Min.500MS/s real time sample rate, Display Size 8 inches color TFT LCD display, Dual channels plus External trigger, 20 auto measurements, PC communication through the USB or RS232 port for real-time data transmission, Advanced trigger: Edge trigger, Video trigger and Alternate trigger: Make - Owon/MetroQ/HTC/Scientific/Aplab	No
8	<b>SIGNAL GENERATOR ,</b> - Advanced DDS technology, 25MHz frequency output - 125MSa/s sample rate, and 32 bits frequency resolution - Vertical Resolution : 14 bits, 8K arb waveform length - Comprehensive waveform output: 5 basic waveforms, and 25 built-in arbitrary waveforms - Comprehensive modulation functions: AM, FM, PM, FSK, PWM, Sweep, and Burst - Newly supported SCPI and frequency counter function - 4 inch high resolution (480 × 320 pixels) TFT LCD display: Make - Owon/MetroQ/HTC/Scientific/Aplab	No
9	<b>VRIAC - VARIABLE TRANSFORMER,</b> Input Voltage : 240 Volts 1 Phase A.C. 50 HZ, Output Voltage : 0-270 Volts, Max. rated at 8A for constant current loads, Power Rating Max. 2kVA Knob Rotation Clockwise Number of Phases 1 Number of Outputs 1 Weight approx. 10kg Dimensions approx 200 x 175 x 160 mm Construction Enclosed Continuously variable AC output voltage with overvoltage tap Heavy duty construction High efficiency & excellent regulation No wave form distortion Smooth linear output Negligible maintenance Trouble free long life	No
10	<b>DIGITAL IC TESTER:</b> Easy-operating Tester, Supported Device : 74 / 40 / 45 / 41 / 44 Serial. Small, portable, light and power-saving, Average search time: 0.8 second, ZIF: 28 pin DIP ZIF socket.	No
11	<b>TRANSISTOR TESTER</b>	No

	<b>Features:</b>  Measure rich DC parameters of manifold semiconductors, e.g. diode, transistor, controlled silicon, FET. Measure capacitor, varistor, DC voltage signal source Measure 78 and 79 three terminal voltage regulator Data hold, low battery warning Complete with carry case and six 1.5V AA batteries. Make - METRAVI/HTC/METROQ/MEXTECH/SCIENTIFIC	
12	<b>ANTI STATIC ESD WRIST HAND STRIAP BAND</b>	No
13	<b>TRUE RMS CLAMP METER,</b> Digital AC-DC Clamp Meter, AC Current - 600/6000 $\mu$ A/60/600/1200 A, AC Voltage - 600mV/6/60/600/750 V, DC Voltage - 600mV/6/60/600/1000 V, DC Current - 600/6000 $\mu$ A/60/600/1200 A, Counts: 6000, Jaw Opening: 30 mm, Special Functions: Diode Test, Continuity, Data Hold, Accessories - Supplied with a pair of test leads, Battery (Installed), Instruction Manual & Carrying Case. Make - MECO/ HTC/FLUKE/MEXTECH/	No
14	<b>INSULATION TESTER: Display: approx 60 x 32mm LCD, Max reading: 1999 counts.</b> 1. 500V DC, 20-1000M Ohm 2. 1000V DC, 20-2000M Ohm Make - MECO/ HTC/FLUKE/MEXTECH/	No
15	<b>Powe Guard</b> Type Digital Display Type LCD Material Bronze, Plastic, True RMS-Volt, True RMS-Current, Power, Power Factor, Energy Usage Time, Energy Consumption, Smart Three Pin Socket, Primary Functions Ac Current 195 - 265 Vrms, 50/60Hz, RMS AC CURRENT 0.02 - 10Arms, Active Energy 5 ~ 2200 W. Backlight - Yes; Make - MICO/ HTC/MEXTECH/EQUIVALENT	No
16	<b>THERMOMETER GUN (LASER TEMPERATURE GUN)</b> Temperature Range: -50 ° C to 750 ° C(- 58 ° F to 1382 ° F) Laser Target Pointer Selection Accuracy: $\pm 2\%$ or $\pm 2$ °C/ $\pm 4$ °F Automatic shutdown Storage temperature: -10~60°C Large temperature measuring range switch between fahrenheit and celsius temperature scales The distance to spot ratio is 12:1; Make - MICO/ HTC/MEXTECH/	No
17	<b>HOT AIR REWORK STATION</b> <b>FEATURES</b> ESD safe. Micro controller Based. Integrated blower within hand held unit. Built in temperature Sensor for precise measuring. Digitally Controlled. Built-in cut off sensor when placed on Cradle.	No

	<b>Rubber grip for non-slippery use.</b> <b>MCH heater for long life. 2-in-1 design, compact structure.</b> <b>Temperature Range: Hot Air: 200-480 deg C</b> <b>Soldering Iron: 200-450 deg C</b> <b>Power: 60 W: Make - SOLDRON/METROQ/SCIENTIFIC/WELLER</b>	
18	<b>PCB Resistor Cut &amp; Bend Machine</b> <b>Features.</b> <b>Suitable to be used as to various resistors, diodes.</b> <b>Cutting legs and bending can be finished at the same time,</b> <b>Lead length and span can be adjusted as per need.</b> <b>low cost and won't be effected by power supply.</b> <b>It is suitable for mass production.</b> <b>Low noise generation and rugged design. Working - Manually, Cutting</b> <b>Capability: 40000-50000 Pcs/hr, Output: 110 pcs/min</b> <b>Approx Size: 180mm (L) x 130mm (W) x 140mm (H)</b> <b>Weight: 3 Kg approx.</b>	No
19	<b>Automatic Dip Soldering Machine</b> <b>Capacity (products per hours): 200</b> <b>Output Current (Ampere): 0-100</b> <b>Automatic Grade: Semi-Automatic</b> <b>Features and Specifications</b> <ul style="list-style-type: none"> <li>• Digital Temperature Controller for Solder Bath</li> <li>• Electronic Timer for setting dwell ( solder) time</li> <li>• Easy Mechanical Adjustment for depth setting</li> <li>• Versatile PCB Carrier for fixing multiple PCBs</li> </ul> <b>Bath Size: 14*14</b> <b>Solder Capacity: 35 Kg</b> <b>Power Supply: 220 V AC, 50Hz</b> <b>Heater Power: 3.2 KW</b> <b>Heat up Time :35 min</b> <b>Bath Depth: 50 mm</b> <b>Dimensions: 690 * 460 * 360 mm</b> <b>Weight (without solder): 45 Kg</b> <b>Standard Accessories: PCB Camer-1 no</b> <b>Scraper 1 no</b> <b>L/N Key Kit-1 no</b>	No
20	<b>Wire Cutting Machine</b> <b>Product Details:</b> <b>Length: 360 mm</b> <b>Width: 360 MM</b> <b>Height: 300 mm</b> <b>Frequency: 50 Hz</b> <b>Voltage (Volt): 220 Volt</b> <b>Weight (Kilogram): 5kg</b>	No
21	<b>Crimping Press</b> <b>Product Details:</b> <b>Automatic Grade Automatic</b> <b>Design Standard</b> <b>Machine Type Hose/Pipe Crimping Machine, Sheet Crimping Machine,</b> <b>Cap Crimping Machine, Cable Crimping Machine</b>	No

	<b>Power Source Electric</b> <b>Machine Structure Horizontal</b> <ul style="list-style-type: none"> <li>• High performance</li> <li>• Low maintenance and</li> <li>• Durability</li> </ul>	
22	<b>Small Single Wave Soldering Machine</b> <b>Product Details:</b> <b>Wave Width: 200 mm</b> <b>Solder Bath Capacity: 95 Kg Max.</b> <b>Wave Height: 0-8mm</b> <b>Warm up Time: 60 min</b> <b>Material: SS</b> <b>Automatic Grade: Automatic</b>	No
23	<b>Digital Soldering Station</b> <b>Product Details:</b> <b>Power: 60 w , 80 w and 100 w</b> <b>Material Type: Bar, Wire</b>	No
24	<b>Paste Glue Stencil Printer</b> <b>Product Details:</b> <b>Type: SMT stencil printer</b> <b>Plate: Type Screen Printer</b> <b>Color and Page: Single Color</b> <b>Automatic Grade: Manual</b>	No
25	<b>Wire Stripping Cum Twisting Machine</b> <b>Weight: Upto 45 kg</b> <b>Air Cylinder Diameter: Upto 63 mm</b> <b>Air Pressure: 3-7 kg/cm sq</b> <b>Power: 220 V AC</b> <b>Frequency: 50 hz</b>	No
26	<b>Manual IC Lead Forming Machine</b> <b>General Name: Lead Straightener</b> <b>Dimension: 50x60x70 mm</b> <b>Width: 0.6 - 0.7 mm</b>	No
27	<b>PCB Manual Cut &amp; Bend Machine for Taped Axial</b> <b>Product Details:</b> <b>Weight: 3 Kg</b> <b>Height: 155 mm</b> <b>Width: 160 mm</b> <b>Length: 3300 mm</b> <b>Material Stainless Steel</b>	No
28	<b>Universal Manual Forming Machines</b> <b>Product Details:</b> <b>Weight: 1.2 Kg</b> <b>Type Table: Top Machine</b> <b>Length: 165 MM</b> <b>Width: 105 mm</b> <b>Height: 100 mm</b>	No
29	<b>Illuminated Magnifier</b> <b>Product Details:</b>	No

	<b>Bulb: 1 bulb</b> <b>Magnification: 12D (4X)</b> <b>Light Source: Electric</b> <b>Lens Material: Glass</b> <b>Frequency: 50 hz</b>	
30	<b>Ultrasonic Cleaner</b> <b>Technical description:</b> <ul style="list-style-type: none"> <li>• <b>Ultrasonic Frequency: 42000 Hz</b></li> <li>• <b>Tank Material: Stainless Steel SUS304</b></li> <li>• <b>Tank Capacity: 2500 ml</b></li> <li>• <b>Timer: Digital timer with 5 cycles</b></li> <li>• <b>(180/280/380/480/90 seconds)</b></li> <li>• <b>Power Supply: AC 220V, 50/60 Hz</b></li> <li>• <b>Power: 170W</b></li> <li>• <b>Lengthened Tank</b></li> <li>• <b>Radiator fan</b></li> <li>• <b>Stronger transducer</b></li> <li>• <b>Wet-proof PCB</b></li> <li>• <b>5 Cycles digital timer</b></li> </ul>	No
31	<b>PLC BASED ELECTRO PNEUMATIC Trainer Kit</b> <b>Specification:</b> <b>Pneumatic Double Acting Cylinders</b> <ul style="list-style-type: none"> <li>• <b>Flow Control valve</b></li> <li>• <b>5/2 Single Solenoid Pilot Valve</b></li> <li>• <b>5/2 Double Solenoid Pilot Valve</b></li> <li>• <b>Limit Switch ( Sensor )</b></li> <li>• <b>Stepper Motor With Interface Card</b></li> <li>• <b>Push Button</b></li> <li>• <b>Banana Connector</b></li> <li>• <b>FRL</b></li> <li>• <b>Inbuilt Power Supply</b></li> <li>• <b>Metal Panel Mounted Stand</b></li> <li>• <b>PLC downloading software</b></li> <li>• <b>Program downloading cable</b></li> <li>• <b>Detailed experiment manual</b></li> <li>• <b>Compressor Provision Direct Connect</b></li> </ul>	No
32	<b>PLC Trainer Kit</b> <b>Specification: Case/Structure - Extruded Aluminum, Power supply - 100~240VAC / 2A fuse / power switch with indicator, PLC - DELTA, Programmer - Standard Serial cable –RS232, Programming Software - WLP Soft 2.0, Programming Language - Ladder Logic, Communication Interface - RS-232C, Digital Number of Inputs - 12, Digital Number of Outputs - 16, Analog Input Channels - 4, Input interface - Banana terminal and simulation switch with automatic and manual reset functions, Output interface - Banana terminal, Application Peripherals: Display module - 5.7" Inches Colored   Touch screen LED display - 8 of 23 mm high-brightness LED (in red, yellow, and green) Stepper Motor - Unipolar Input switches - 4 NC Push button   4 NO Push button   8 Toggle</b>	No

	switches Variable frequency Driver - 0.4 Kwatt AC Relay - 8 Relays   10A DC Motor - 24V, 100 RPM Motor Servo Motor - DC Digital Servo Contactor - 10A	
33	Hydraulic Control Station with Accessories: Specification: <ul style="list-style-type: none"> <li>• 4/2 Way Hand Lever Valve</li> <li>• 4/3 Way Hand Lever Valve With bypass position</li> <li>• Pressure Relief Valve(Direct acting)</li> <li>• Pressure Sequence Valve (Direct Acting)</li> <li>• Pressure Reducing Valve (Direct Acting)</li> <li>• One Way Flow Control Valve</li> <li>• Non-Return Valve- De Lockable</li> <li>• Double Acting Cylinder (40/18/150)</li> <li>• Weight</li> <li>• Non Return Valve</li> <li>• Single Acting Cylinder (Spring Return40/18/150)</li> <li>• Shut Off Valve</li> <li>• Pressure Gauge</li> <li>• Hoses 900mm</li> <li>• Hoses 1200mm</li> <li>• Hoses 1500mm</li> <li>• Shuttle Valve</li> <li>• Hydraulic Power Pack</li> <li>• Quick Release Coupling 1Set</li> <li>• Branch Tee Three</li> </ul>	No
34	Electro Pneumatic Trainer kit with air compressor. Specification :- 40 dia x 100 mm stroke double acting cylinder - AM 40-100 - 1 no each 5/3 hand over operated valve – 1 no Quick exhaust valve – 1 no Flow control valve with push fit - 1 no ¼” 5/2 solenoid spring valve with 230 V AC illuminated Solenoid coil FRL unit - 1 no ¼” , 3/2 hand slide valve with push fit connectors 5/3 solenoid valve – AC – 1 no Make : Mercury Air compressor 20 Ltr capacity	No
35	Instrumentation Trainer Kit Trainer Kit must be equipped with latest industrial sensor like LVDT , RTD THERMOCOUPLE, STRAIN GAUGE/LOAD CELL, SMOKE SENSOR , SPEED SENSOR.	No
36	ADVANCED HYDRAULIC TRAINER (Includes Hydraulic Motor & Accumulator)	No
37	ADVANCED CUSTOMIZED HYDRAULIC TRAINER (FOR ITI)	No

38	<b>Hydraulic Trainer Kit</b> <b>Features:</b> <b>To study Hydraulic Power pack &amp; its components.</b> <b>To study the operation of different Hydraulic Direction Control Valves.</b> <b>To study the operation of Hydraulic Check Valve.</b> <b>To study the operation of Flow Control Valve.</b> <b>To study the operation of Pressure Relief Valve.</b> <b>To study the operation of Linear Actuators.</b> <b>To study speed control of Linear Actuators</b>	No
39	<b>Hydraulic Control Trainer Kit</b>	No
40	<b>Anti static Mat - 2.5 ft roll &amp; 5mm Width</b>	No
41	<b>Single Phase Inverter arc Welding Machine</b>	No
42	<b>Single Phase Mig Welding Machine</b>	No
43	<b>Single Phase Tig Welding Machine</b>	No
44	<b>3 d printing Machine Min Spec :- Modelling Technology - FDM (Fused Deposition Modelling); Printing Size - 220*220*250mm; Machine Size - 440*410*465mm; Pkg Wt - 8.6kg; Max Travelling Speed - 180mm/s; Filament - 1.75mm PLA, TPU, ABS; Input - AC 100-265V, 50-60 Hz; Output - DC 24V, 15 A, 360 W; Layer Thickness - 0.1-0.4mm; Mozzle Dia - 0.4mm; Precision - +/- 0.1mm; File Format - STL, OBJ, G-code; Working Mode - Online or SD offline; Max Nozzle Temp - 255 deg C; Max Hot Bed Temp - 110 deg C</b>	No
45	Electric pipe threading machine H.S.S 1/2-4' 140C Voltage 230 V: Speed (RPM) 24/10 rpm, Frequency 50Hz, dies including (inch.) BSPT or NPT 1/2'-3/4', 1' -2' and 2 1/2-4', Size 1/2-4'; Make - Ridgid/Rothenberger/Mophorn or equivalent	NO
46	G.I Grooving Machine Capacity 2 Inch to 12 Inch; Motor 750 W; Voltage 220V-240V/50 Hz; Upper roller 2"-6"-1Pc; Upper roller 8"-12"-1Pc; Knurling roller 2"-3"-1Pc; Knurling roller 4"-6"-1Pc; Knurling roller 8"-12"-1Pc; Make - Rothenberger/Ridgid/Mophornt or equivalent	No

## 2. Definitions

- **"Buyer"** means PREJHA Foundation
- **"Bidder"** means suppliers or contractors who have participated in tender
- **"The Vendor"** means the supplier or contractor or service provider to whom the Order is addressed.
- **"The Purchase Order"** means terms and conditions signed between Buyer and the Vendor governing the subject matter of this Order
- **The Goods / Services** means the goods or services to be supplied under the Order.

## 3. Amendment of RFQ

At any time before the submission of Proposals, PREJHA Foundation may amend the RFQ by issuing an addendum in writing or by standard electronic means. The addendum shall be uploaded on the <https://eprocurement.mjunction.in/EPSV2Web/org/PREJHA/home.action> and will be binding on them. To give Bidders reasonable time in which to take an amendment into account in their Proposals, PREJHA Foundation may, if the amendment is substantial, extend the deadline for the submission of Proposals.



#### **4. Bidding**

**(to be solely done through portal)**

**<https://eprocurement.mjunction.in/EPKV2Web/org/PREJHA/home.action>**

- a) Offer to be submitted only on e-procurement portal. Hard copy of offer is **not required** to be submitted to PREJHA Foundation. Any offer received in Hard copy shall **not be accepted** and will stand disqualified
- b) Mode of Submission of offer: Being e-tender, offer will be solely submitted online through e-tender portal: <https://eprocurement.mjunction.in/EPKV2Web/org/PREJHA/home.action> through following Application Service Providers (ASPs) appointed by PREJHA:

M/s Mjunction Services Limited, 6thFloor, Tata Centre.43 J N Road,  
Kolkata – 700 071,

**Contact Person: Helpdesk Officer** Sumant Kumar Choudhary  
9163348104, [sumant.choudary@mjunction.in](mailto:sumant.choudary@mjunction.in)

- c) They may obtain further information regarding this tender from the office of PREJHA, Kalyan Gurukul, Kumarbagh Road, Arsande, Kanke, Ranchi – 834006 from 10:00 hours to 17:00 hours on all working days till the date of bidding is open.

Contact Person: Shekhar Kumar, Procurement, PREJHA  
Contact No.: 9835932882  
Email-ID:[shekhar.k@parfi.org](mailto:shekhar.k@parfi.org)

- d) Bidders are expected to adequately apprise themselves regarding the procedure and provisions available on the e-procurement portal **operated/ maintained** by M/S. Mjunction services limited. Buyer shall not be responsible for any issues related to timely or proper uploading/submission of the bid.

#### **5. Validity of Proposal**

Bidders' proposals must remain **valid for a period of min** 180 days after the submission of proposal. Should the need arise, PREJHA Foundation may request Bidders to extend the validity period of their proposals. If a bidder is selected as vendor, his proposal will remain same for whole of the delivery schedule.

#### **6. Submission of proposal**

The Proposal as well as all related correspondence exchanged by the bidders and PREJHA Foundation, shall be only through the portal of mjunction and electronic means.

The offer shall be submitted as per the instructions of tender document and as detailed in this RFQ. Price shall be furnished in the relevant price schedule only. In case of any clarification, bidder may contact the concerned contact persons at m junction Services or PREJHA as listed above

## **7. Latest updates**

Latest updates on the critical dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc. to Tender Specifications will be hosted on PREJHA-mjunction webpage. Bidders to keep themselves updated with all such information. Bidders may please visit <https://eprocurement.mjunction.in/EPKV2Web/org/PREJHA/home.action> for document submission.

## **8. Technical Bid (incl. Pre-Qualification Criteria)**

Sl. No	PQR Condition	Bidder Remarks
1	Have previously supplied similar items to any institutional buyers preferably listed private or public sector companies or training enterprises within past 2 years. A copy of purchase order is required to be submitted as a documentary proof.  or, Authorized dealer of the similar items	

Bidder should submit the prequalification documents at the portal

## **9. Financial Proposal**

Financial Proposal must be submitted in the format shared in this RFQ. Financial proposal must be shared in the same format as provided else it shall be declared non-responsive.

## **10. Empanelment followed by Letter of Award**

1. The technical bid (incl. pre-qualification criteria) will be verified by PREJHA Foundation. The Procurement System will determine the lowest financial bid including on a possible line-item basis among the technically qualified bidders.
2. PREJHA Foundation shall award the Empanelment Contract possibly with SOR to successful bidders and then issue a purchase award that will be deemed as the Letter of Award (LOA) for the estimated order value along with terms & Conditions governing the Award and notify the same to the bidder through email.
3. The selected bidder is expected to commence the assignment on the date and at the location specified in the LOA/ Contract.
4. If the selected bidder does not sign the Contract within the stipulated period, the LOA may be cancelled, and the next lowest bidder will be considered for award of Contract.
5. If at any stage in the bidding process including after bid opening or Issuance of Purchase orders pertaining to this RFQ, PREJHA believe that the Bidders do not meet the requisite Technical criteria set out in the Bid Document or delivery schedule or that the rate quoted exceeds its own estimates for the supply value, PREJHA reserves the right to cancel the tender or particular line item(s) without incurring any obligation or liability towards the tenderers.
6. PREJHA Foundation reserves the right to issue a part order of any 'line item' or sets of line

items from BoQ in the bid to another empaneled vendor based on cost, time & quality considerations at its sole discretion. The transport cost in such cases will be on actual basis.

7. Purchase Orders & Delivery details Over the validity of this RFQ, purchase orders with specified quantity & delivery details would be issued as per requirements
8. Delivery time is the essence of this order and must be strictly adhered to. If the vendor fails to deliver the goods in time, the Buyer may, at its sole discretion:
  - Treat the order as cancelled at any time and recover any loss or damage from the vendor by invoking Security Deposit;
  - purchase the goods ordered or any part thereof from other sources on the vendor's account, in which case, the Vendor shall be liable to pay the Buyer not only the difference between the price at which such goods have been purchased and the price calculated at the rate set out in this order, but also any other loss or damage the Buyer may suffer;

### **11. Indicative Delivery Schedule**

- Goods to be delivered at our Gurukul as per following as needed:

Sl. No	Delivery Location	Delivery Schedule
1	Kaushal College Tharpkhana (Ranchi)	Within 15 days of release of PO

### ***12. Payment Terms***

- a. 100% within 60 days of delivery on submission of invoice & delivery challan for each unit. If the vendor delivers goods within 7 days of order confirmation, 100% payment will be done within 45 days.
- b. If a vendor fails to deliver the goods as per the delivery schedule. PREJHA foundation is entitled to delay payment by 2 days for each day delay in delivery. If such delay extends beyond 7 days, it could lead to possible forfeiture of security deposit.

### ***13. Unloading***

- a. Unloading is in Vendor's scope, cost & arrangement will be borne by Vendor.
- b. The risk of all materials till receipt at location will be in vendor's scope.

### ***14. Quality of goods and services.***

The Vendor should warrant to PREJHA that:

- The Goods and Services would conform in all respects to the Order and to recognized Indian or equivalent standards and codes (where applicable) and be at the complete satisfaction of Buyer.
- The said good/services processed and delivered by the Vendor shall be made from good quality bought out components/materials, as acceptable to the Buyer and it should have standard/excellent workmanship and fit for their intended purpose.

### ***15. Warranty/ Guarantee***

- a) The said goods/services delivered by the Vendor should be identical to the sample/specification given

by the Vendor.

- b) Where the said goods/services delivered by the Vendor to the Buyer is according to sample as well as certain specification/description, if any, the said goods/services processed and delivered, shall match not only with the said sample, but also with the said specification/description.
- c) If deficiency is identified before or during the transfer of risk or during the Guarantee/warranty Period, the Vendor must at its own expense and at the discretion of the Buyer either repair the deficiency or provide re-performance of the Services or replacement of delivery. This provision also applies to delivery subject to inspection by sample test. The discretion of the Buyer shall be final.

### ***16. Inspection***

- a) All materials supplied against the order should conform strictly to the specifications laid down by the Buyer, and should be new, merchantable quality, fit for their intended purpose and should be in line with "Quality Assurance Plan", if any, which must be approved in advance by the Buyer. All such materials will be subject to inspection and approval by the Buyer, either at the Vendor's premises and/or at the place of delivery indicated by the Buyer.
- b) The Buyer reserves the rights to inspect the material at any stage during manufacture or supply and reject the same if found defective or not in conformity with the specifications or not fit for their intended purpose without invalidating the remainder of the order, if so desired by the Buyer.
- c) All rejected material from the Buyer's site store shall be removed by the vendor at their own cost positively within 15 days from the date of rejection note / intimation issued by the Buyer to them. In case of any failure to remove the same by the vendor within the stipulated period, the Buyer shall have all rights to remove the rejected materials/goods from their premises and discard it. Any cost on this account would be debited to vendor's account.
- d) The Buyer under no circumstances will be liable or held accountable for any damage, loss, deterioration of the rejected materials/goods for discarding the material/goods, or for any value for it.

### ***17. Damage or loss in transit***

- a) Subject to the terms of the Order, the Vendor undertakes at its own expense to replace goods lost or damaged in transit.
- b) The delivery will not be deemed to have taken place until replacement items are delivered to the satisfaction of the Buyer.

### ***18. Ownership and risk***

Subject to the terms of the delivery and without prejudice to PREJHA Foundation's other rights under the Conditions of the Order:

- a) Ownership in the Goods shall pass to PREJHA on delivery and acceptance.
- b) Risk in the Goods shall pass to PREJHA on delivery, save where the Order includes installation, in which

case risk shall not pass to PREJHA until completion of the installation work.

### ***19. Fraud/Corruption***

PREJHA Foundation requires that the bidders participating in the selection process adhere to the highest ethical standards, both during the selection process and throughout the execution of the Contract.

PREJHA Foundation will terminate the Contract, if already awarded and will declare the bidder ineligible, either indefinitely or for a stipulated period, to be awarded a Contract, if at any time it determines that the bidder has in contravention to the undertaking given in the Bid document and/or contract, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Contract as enshrined in the undertaking in bidding document and contract

### ***20. Conflicting relationships***

Bidder has an obligation to disclose as part of the bid document any situation of actual or potential conflict that impacts their capacity to serve the best interest of PREJHA Foundation, or that may reasonably be perceived as having this effect. Failure to disclose the said situations may lead to the disqualification of the bidder or the termination of its Contract

### ***21. Jurisdiction.***

- The disputes if any between the parties shall be subject to the exclusive jurisdiction of the courts in Ranchi alone.

## STANDARD FORMS

TECH FORMS	FORM NAME	Mention list of all supporting documents attached (if any)
TECH-1	Letter of proposal submission	Pls scan & attach
TECH-2	Bidder's organization and experience	Pls Put details during bid submission online
TECH-3	Techno commercial offer	Pls Put details during bid submission online
Fin - 1	Financial Bid Format	Pls Put details during bid submission online

**Form Tech 1: Letter**

**(On Bidder's Letter-head)**  
**Letter of Proposal Submission**

To,  
Executive Director  
**PanIIT Alumni Reach For Jharkhand Foundation**  
**Kalyan Complex, Balihar Road, Morabadi,**  
**Ranchi - 834008, Jharkhand**

We, the undersigned, offer to supply speciality manufacturing training equipments for PREJHA Foundation, in accordance with your Request for Quotation dated 17.03.2023. We are hereby submitting our proposal, which includes this Technical Proposal, and the Financial Proposal as indicated

We undertake the total responsibility for supply of the goods, if awarded to us.

We hereby declare that all the information and statements made in this proposal are true and accept that any misrepresentation contained in it may lead to our disqualification.

We understand that **PREJHA Foundation** is not bound to accept any proposal it receives.

We further state that we understand that PREJHA Foundation will terminate the Contract, if already awarded and will declare the bidder ineligible, either indefinitely or for a stipulated period, to be awarded a Contract, if at any time it determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing a Contract

Yours faithfully,

\*Authorized Signatory [*In full and*  
*Designation*]: Name and Title of Signatory:  
Name of  
Bidder:  
Address:

**Form Fin1: Financial Bid Proforma**

<b>TENDER PROFORMA for Commercial</b>							
<b>PREJHA Reference No</b>							
<b>Name of Bidder</b>							
<b>SN</b>	<b>Item Description</b>	<b>Estimated Qty</b>	<b>Unit Rate</b>	<b>Estimated Value</b>	<b>Tax %</b>	<b>Tax</b>	<b>Freight</b>
1	<b>DIGITAL POWER SUPPLY (0-30)V / 5A</b> <b>DC Power Supply</b> <b>Output Voltage 0-30 V</b> <b>Output Current 0-5 A</b> <b>Power Supply 220 V ± 10% AC , 50 Hz ±2 Hz</b> <b>Load Regulation CV ≤0.01% +3 mV</b> <b>Load Regulation CC ≤0.2% +3 mA</b> <b>Line Regulation CV ≤0.01% +1 mV</b> <b>Line Regulation CC 0.2% +1 mA</b> <b>Ripple and Noise ≤0.5 mV(RMS)</b> <b>Display 3 Digit, LED</b> <b>Protection Current limit &amp; short circuit protection n:</b> <b>Make - MetroQ/HTC/Scientific/Aplab</b>	6					
2	<b>DIGITAL MULTIMETER</b> <b>Display 3½ digit</b> <b>Counts 3100</b> <b>AC Voltage Range 1mV to 1000V</b> <b>DC Voltage Range 10µV-1000V</b> <b>AC Current Range 1µA-10A</b> <b>DC Current Range (Amp) 100nA-10A</b> <b>Capacitance Range (F) 10pF - 30µF</b> <b>Frequency Range (Hz) 0.1 Hz - 100 KHz</b> <b>Operating Temperature -10 C -50 C</b> <b>Storage Temperature -25 C - 70 C</b> <b>Altitude 2000 m</b> <b>Includes 1 multimeter,1 Probe Set,1 copy of operating instructions,1 test certificate,1 rubber holster with tilt stand and carrying strap,warranty card,1 set of extra fuses.</b> <b>Power Input 9V</b> <b>Type of Product Digital Multimeter</b> <b>Dimensions 84x195x35 mm</b> <b>Weight (g) Approx. 0.35 Kg with battery:</b> <b>Make -</b> <b>Rishubh/HTC/Mextech/Scientific/Fluke</b>	5					
3	<b>LCR METER</b> <b>Display : 3 1/2 Digit Large LCD Display</b> <b>Resistance : 200ohm / 2Kohm / 20Kohm / 200Kohm / 2Mohm / 20Mohm</b>	6					



	Resistance Accuracy : +/- (0.8% + 5digit) Capacitance : 2nF/20nF/200nF/2uF/20uF/200uF/1000uF Capacitance Accuracy : +/- (5% + 5digit) Inductance : 2mH/20mH/200mH/2H/20H Inductance Accuracy : +/- (5% + 5digit) Count : 2000 Key Features : Full Protection function, capacitor with the function F Self discharge Auto Power FF : Make - METRAVI/HTC/METROQ/MEXTECH/SCIENTIFI C						
4	<b>SOLDERING STATION</b> <b>FEATURES</b> ESD safe. Sleep Mode. Micro controller Based control unit. Easy Replaceable bits. Rubber grip for non-slippery use. MCH heater for long life. Temperature Controlled Digital Soldering Station With Fully Digital Control, Temperature Range: 200-450 deg C Display: LED Wattage 60 Watts: Make - SOLDRON/METROQ/SCIENTIFIC	5					
5	<b>SMD REWORK STATION:</b> <b>FEATURES</b> ESD safe. Micro controller Based. Integrated blower within hand held unit. Built in temperature Sensor for precise measuring. Digitally Controlled. Built-in cut off sensor when placed on Cradle. Rubber grip for non-slippery use. MCH heater for long life. 2-in-1 design, compact structure. Temperature Range: Hot Air: 200-480 deg C Soldering Iron: 200-450 deg C Power: 60 W: Make - SOLDRON/METROQ/SCIENTIFIC/WELLER/	5					
6	<b>SOLDER POT</b> Tin pot diameter(mm): 50mm Temperature range: 200-480°C Melted solder capacity: 500g Power 150W Input voltage: AC220v 50Hz:	1					

	<b>Make - UNIVOLT/WELLER/SUMITRON</b>						
7	<b>OSCILLOSCOPE</b> <b>100Mhz with 2Channel Digital Storage Oscilloscope,</b> <b>25MHz ~ 100MHz Bandwidth, FFT function, Autoscale function, Min. 500MS/s real time sample rate,</b> <b>Display Size 8 inches color TFT LCD display, Dual channels plus External trigger, 20 auto measurements, PC communication through the USB or RS232 port for real-time data transmission, Advanced trigger: Edge trigger, Video trigger and Alternate trigger:</b> <b>Make - Owon/MetroQ/HTC/Scientific/Aplab</b>	1					
8	<b>SIGNAL GENERATOR ,</b> <b>- Advanced DDS technology, 25MHz frequency output</b> <b>- 125MSa/s sample rate, and 32 bits frequency resolution</b> <b>- Vertical Resolution : 14 bits, 8K arb waveform length</b> <b>- Comprehensive waveform output: 5 basic waveforms, and 25 built-in arbitrary waveforms</b> <b>- Comprehensive modulation functions: AM, FM, PM, FSK, PWM, Sweep, and Burst</b> <b>- Newly supported SCPI and frequency counter function</b> <b>- 4 inch high resolution (480 × 320 pixels) TFT LCD display:</b> <b>Make - Owon/MetroQ/HTC/Scientific/Aplab</b>	1					
9	<b>VRIAC - VARIABLE TRANSFORMER,</b> <b>Input Voltage : 240 Volts 1 Phase A.C. 50 HZ, Output Voltage : 0-270 Volts, Max. rated at 8A for constant current loads, Power Rating Max. 2kVA</b> <b>Knob Rotation Clockwise</b> <b>Number of Phases 1</b> <b>Number of Outputs 1</b> <b>Weight approx. 10kg</b> <b>Dimensions approx 200 x 175 x 160 mm</b> <b>Construction Enclosed</b> <b>Continuously variable AC output voltage with overvoltage tap</b> <b>Heavy duty construction</b> <b>High efficiency &amp; excellent regulation</b> <b>No wave form distortion</b> <b>Smooth linear output</b>	5					

	Negligible maintenance Trouble free long life						
10	DIGITAL IC TESTER: Easy-operating Tester, Supported Device : 74 / 40 / 45 / 41 / 44 Serial. Small, portable, light and power-saving, Average search time: 0.8 second, ZIF: 28 pin DIP ZIF socket.	3					
11	TRANSISTOR TESTER Features:  Measure rich DC parameters of manifold semiconductors, e.g. diode, transistor, controlled silicon, FET. Measure capacitor, varistor, DC voltage signal source Measure 78 and 79 three terminal voltage regulator Data hold, low battery warning Complete with carry case and six 1.5V AA batteries. Make - METRAVI/HTC/METROQ/MEXTECH/SCIENTIFI C	5					
12	ANTI STATIC ESD WRIST HAND STRIAP BAND	30					
13	TRUE RMS CLAMP METER, Digital AC-DC Clamp Meter, AC Current - 600/6000 $\mu$ A/60/600/1200 A, AC Voltage - 600mV/6/60/600/750 V, DC Voltage - 600mV/6/60/600/1000 V, DC Current - 600/6000 $\mu$ A/60/600/1200 A, Counts: 6000, Jaw Opening: 30 mm, Special Functions: Diode Test, Continuity, Data Hold, Accessories - Supplied with a pair of test leads, Battery (Installed), Instruction Manual & Carrying Case. Make - MECO/ HTC/FLUKE/MEXTECH/	2					
14	INSULATION TESTER: Display: approx 60 x 32mm LCD, Max reading: 1999 counts. 1. 500V DC, 20-1000M Ohm 2. 1000V DC, 20-2000M Ohm Make - MECO/ HTC/FLUKE/MEXTECH/	2					
15	Powe Guard Type Digital Display Type LCD Material Bronze, Plastic, True RMS-Volt, True RMS-Current, Power,Power Factor, Energy Usage Time, Energy Consumption, Smart Three Pin Socket,	2					

	<b>Primary Functions Ac Current 195 - 265 Vrms, 50/60Hz, RMS AC CURRENT 0.02 - 10Arms, Active Energy 5 ~ 2200 W. Backlight - Yes; Make - MICO/ HTC/MEXTECH/EQUIVALENT</b>						
16	<b>THERMOMETER GUN (LASER TEMPERATURE GUN)</b> Temperature Range: -50 ° C to 750 ° C(- 58 ° F to 1382 ° F) Laser Target Pointer Selection Accuracy: ±2% or ±2 °C/± 4°F Automatic shutdown Storage temperature: -10~60°C Large temperature measuring range switch between fahrenheit and celsius temperature scales The distance to spot ratio is 12:1; Make - MICO/ HTC/MEXTECH/	2					
17	<b>HOT AIR REWORK STATION FEATURES</b> ESD safe. Micro controller Based. Integrated blower within hand held unit. Built in temperature Sensor for precise measuring. Digitally Controlled. Built-in cut off sensor when placed on Cradle. Rubber grip for non-slippery use. MCH heater for long life. 2-in-1 design, compact structure. Temperature Range: Hot Air: 200-480 deg C Soldering Iron: 200-450 deg C Power: 60 W: Make - SOLDRON/METROQ/SCIENTIFIC/WELLER	5					
18	<b>PCB Resistor Cut &amp; Bend Machine Features.</b> Suitable to be used as to various resistors, diodes. Cutting legs and bending can be finished at the same time, Lead length and span can be adjusted as per need. low cost and won't be effected by power supply. It is suitable for mass production. Low noise generation and rugged design. Working - Manually, Cutting Capability: 40000-50000 Pcs/hr, Output: 110 pcs/min Approx Size: 180mm (L) x 130mm (W) x 140mm (H)	1					

	<b>Weight: 3 Kg approx.</b>						
19	<b>Automatic Dip Soldering Machine</b> <b>Capacity (products per hours): 200</b> <b>Output Current (Ampere): 0-100</b> <b>Automatic Grade: Semi-Automatic</b> <b>Features and Specifications</b> <ul style="list-style-type: none"> <li>• Digital Temperature Controller for Solder Bath</li> <li>• Electronic Timer for setting dwell ( solder) time</li> <li>• Easy Mechanical Adjustment for depth setting</li> <li>• Versatile PCB Carrier for fixing multiple PCBs</li> </ul> <b>Bath Size: 14*14</b> <b>Solder Capacity: 35 Kg</b> <b>Power Supply: 220 V AC, 50Hz</b> <b>Heater Power: 3.2 KW</b> <b>Heat up Time :35 min</b> <b>Bath Depth: 50 mm</b> <b>Dimensions: 690 * 460 * 360 mm</b> <b>Weight (without solder): 45 Kg</b> <b>Standard Accessories: PCB Camer-1 no</b> <b>Scraper 1 no</b> <b>L/N Key Kit-1 no</b>	1					
20	<b>Wire Cutting Machine</b> <b>Product Details:</b> <b>Length: 360 mm</b> <b>Width: 360 MM</b> <b>Height: 300 mm</b> <b>Frequency: 50 Hz</b> <b>Voltage (Volt): 220 Volt</b> <b>Weight (Kilogram): 5kg</b>	1					
21	<b>Crimping Press</b> <b>Product Details:</b> <b>Automatic Grade Automatic</b> <b>Design Standard</b> <b>Machine Type Hose/Pipe Crimping Machine, Sheet Crimping Machine, Cap Crimping Machine, Cable Crimping Machine</b> <b>Power Source Electric</b> <b>Machine Structure Horizontal</b> <ul style="list-style-type: none"> <li>• High performance</li> <li>• Low maintenance and</li> <li>• Durability</li> </ul>	.001					
22	<b>Small Single Wave Soldering Machine</b> <b>Product Details:</b> <b>Wave Width: 200 mm</b> <b>Solder Bath Capacity: 95 Kg Max.</b> <b>Wave Height: 0-8mm</b>	.001					

	Warm up Time: 60 min Material: SS Automatic Grade: Automatic						
23	Digital Soldering Station Product Details: Power: 60 w , 80 w and 100 w Material Type: Bar, Wire	6					
24	Paste Glue Stencil Printer Product Details: Type: SMT stencil printer Plate: Type Screen Printer Color and Page: Single Color Automatic Grade: Manual	.001					
25	Wire Stripping Cum Twisting Machine Weight: Upto 45 kg Air Cylinder Diameter: Upto 63 mm Air Pressure: 3-7 kg/cm sq Power: 220 V AC Frequency: 50 hz	1					
26	Manual IC Lead Forming Machine General Name: Lead Straightener Dimension: 50x60x70 mm Width: 0.6 - 0.7 mm	1					
27	PCB Manual Cut & Bend Machine for Taped Axial Product Details: Weight: 3 Kg Height: 155 mm Width: 160 mm Length: 3300 mm Material Stainless Steel	1					
28	Universal Manual Forming Machines Product Details: Weight: 1.2 Kg Type Table: Top Machine Length: 165 MM Width: 105 mm Height: 100 mm	1					
29	Illuminated Magnifier Product Details: Bulb: 1 bulb Magnification: 12D (4X) Light Source: Electric Lens Material: Glass Frequency: 50 hz	10					
30	Ultrasonic Cleaner Technical description: • Ultrasonic Frequency: 42000 Hz • Tank Material: Stainless Steel SUS304	1					

	<ul style="list-style-type: none"> <li>• Tank Capacity: 2500 ml</li> <li>• Timer: Digital timer with 5 cycles</li> <li>• (180/280/380/480/90 seconds)</li> <li>• Power Supply: AC 220V, 50/60 Hz</li> <li>• Power: 170W</li> <li>• Lengthened Tank</li> <li>• Radiator fan</li> <li>• Stronger transducer</li> <li>• Wet-proof PCB</li> <li>• 5 Cycles digital timer</li> </ul>						
31	<b>PLC BASED ELECTRO PNEUMATIC Trainer Kit</b> <b>Specification:</b> <b>Pneumatic Double Acting Cylinders</b> <ul style="list-style-type: none"> <li>• Flow Control valve</li> <li>• 5/2 Single Solenoid Pilot Valve</li> <li>• 5/2 Double Solenoid Pilot Valve</li> <li>• Limit Switch ( Sensor )</li> <li>• Stepper Motor With Interface Card</li> <li>• Push Button</li> <li>• Banana Connector</li> <li>• FRL</li> <li>• Inbuilt Power Supply</li> <li>• Metal Panel Mounted Stand</li> <li>• PLC downloading software</li> <li>• Program downloading cable</li> <li>• Detailed experiment manual</li> <li>• Compressor Provision Direct Connect</li> </ul>	.001					
32	<b>PLC Trainer Kit</b> <b>Specification:</b> Case/Structure - Extruded Aluminum, Power supply - 100~240VAC / 2A fuse / power switch with indicator, PLC - DELTA, Programmer - Standard Serial cable – RS232, Programming Software - WLP Soft 2.0, Programming Language - Ladder Logic, Communication Interface - RS-232C, Digital Number of Inputs - 12, Digital Number of Outputs - 16, Analog Input Channels - 4, Input interface - Banana terminal and simulation switch with automatic and manual reset functions, Output interface - Banana terminal, Application Peripherals: Display module - 5.7” Inches Colored   Touch screen LED display - 8 of 23 mm high-brightness LED (in red, yellow, and green) Stepper Motor - Unipolar Input switches - 4 NC Push button   4 NO Push button   8 Toggle switches Variable frequency Driver - 0.4 Kwatt AC Relay - 8 Relays   10A	1					

	DC Motor - 24V, 100 RPM Motor Servo Motor - DC Digital Servo Contactor - 10A						
33	<b>Hydraulic Control Station with Accessories:</b> <b>Specification:</b> <ul style="list-style-type: none"> <li>• 4/2 Way Hand Lever Valve</li> <li>• 4/3 Way Hand Lever Valve With bypass position</li> <li>• Pressure Relief Valve(Direct acting)</li> <li>• Pressure Sequence Valve (Direct Acting)</li> <li>• Pressure Reducing Valve (Direct Acting)</li> <li>• One Way Flow Control Valve</li> <li>• Non-Return Valve- De Lockable</li> <li>• Double Acting Cylinder (40/18/150)</li> <li>• Weight</li> <li>• Non Return Valve</li> <li>• Single Acting Cylinder (Spring Return 40/18/150)</li> <li>• Shut Off Valve</li> <li>• Pressure Gauge</li> <li>• Hoses 900mm</li> <li>• Hoses 1200mm</li> <li>• Hoses 1500mm</li> <li>• Shuttle Valve</li> <li>• Hydraulic Power Pack</li> <li>• Quick Release Coupling 1Set</li> <li>• Branch Tee Three</li> </ul>	1					
34	<b>Electro Pneumatic Trainer kit with air compressor.</b> <b>Specification :-</b> 40 dia x 100 mm stroke double acting cylinder - AM 40-100 - 1 no each 5/3 hand over operated valve – 1 no Quick exhaust valve – 1 no Flow control valve with push fit - 1 no ¼" 5/2 solenoid spring valve with 230 V AC illuminated Solenoid coil FRL unit - 1 no ¼" , 3/2 hand slide valve with push fit connectors 5/3 solenoid valve – AC – 1 no Make : Mercury Air compressor 20 Ltr capacity	1					
35	<b>Instrumentation Trainer Kit</b> Trainer Kit must be equipped with latest industrial sensor like LVDT , RTD THERMOCOUPLE, STRAIN GAUGE/LOAD CELL, SMOKE SENSOR , SPEED	1					



	<b>SENSOR.</b>						
<b>36</b>	<b>ADVANCED HYDRAULIC TRAINER (Includes Hydraulic Motor &amp; Accumulator)</b>	<b>1</b>					
<b>37</b>	<b>ADVANCED CUSTOMIZED HYDRAULIC TRAINER (FOR ITI)</b>	<b>.001</b>					
<b>38</b>	Hydraulic Trainer Kit Features: To study Hydraulic Power pack & its components. To study the operation of different Hydraulic Direction Control Valves. To study the operation of Hydraulic Check Valve. To study the operation of Flow Control Valve. To study the operation of Pressure Relief Valve. To study the operation of Linear Actuators. To study speed control of Linear Actuators	<b>1</b>					
<b>39</b>	<b>Hydraulic Control Trainer Kit</b>	<b>.001</b>					
<b>40</b>	<b>Anti static Mat - 2.5 ft roll &amp; 5mm Width</b>	<b>1</b>					
<b>41</b>	<b>Single Phase Inverter arc Welding Machine</b>	<b>1</b>					
<b>42</b>	<b>Single Phase Mig Welding Machine</b>	<b>1</b>					
<b>43</b>	<b>Single Phase Tig Welding Machine</b>	<b>1</b>					
<b>44</b>	3 d printing Machine Min Spec -: Modelling Technology - FDM (Fused Deposition Modelling); Printing Size - 220*220*250mm; Machine Size - 440*410*465mm; Pkg Wt - 8.6kg; Max Travelling Speed - 180mm/s; Filament - 1.75mm PLA, TPU, ABS; Input - AC 100-265V, 50-60 Hz; Output - DC 24V, 15 A, 360 W; Layer Thickness - 0.1-0.4mm; Mozzle Dia - 0.4mm; Precision - +/- 0.1mm; File Format - STL, OBJ, G-code; Working Mode - Online or SD offline; Max Nozzle Temp - 255 deg C; Max Hot Bed Temp - 110 deg C	<b>1</b>					
<b>45</b>	Electric pipe threading machine H.S.S 1/2-4' 140C Voltage 230 V: Speed (RPM) 24/10 rpm, Frequency 50Hz, dies including (inch.) BSPT or NPT 1/2'-3/4', 1' - 2' and 2 1/2-4', Size 1/2-4'; Make - Ridgid/Rothenberger/Mophorn or equivalent	<b>1</b>					
<b>46</b>	G.I Grooving Machine Capacity 2 Inch to 12 Inch; Motor 750 W; Voltage 220V-240V/50 Hz; Upper roller 2"-6"-1Pc; Upper roller 8"-12"-1Pc; Knurling roller 2"-3"-1Pc; Knurling roller 4"-6"-1Pc; Knurling roller 8"-12"-1Pc; Make - Rothenberger/Ridgid/Mophornt or equivalent	<b>1</b>					

(\*- Freight – Ex Ranchi)

\*\*- for estimation purpose only