



သိပ္ပံနှင့်နည်းပညာဝန်ကြီးဌာန

နည်းပညာ၊ သက်မွေးပညာနှင့် လေ့ကျင့်ရေးဦးစီးဌာန

၂၀၂၆-၂၀၂၇ခုနှစ်၊ ဘဏ္ဍာရေးနှစ်အတွက်

အိတ်ဖွင့်တင်ဒါခေါ်ယူခြင်း

၁။ သိပ္ပံနှင့်နည်းပညာဝန်ကြီးဌာန၊ နည်းပညာ၊ သက်မွေးပညာနှင့် လေ့ကျင့်ရေးဦးစီးဌာန အောက်ရှိ အစိုးရနည်းပညာကောလိပ်များ၊ အစိုးရစက်မှုလက်မှုသိပ္ပံများ၊ အစိုးရနည်းပညာ အထက်တန်းကျောင်းများ၊ အခြေခံပညာနှင့် စက်မှု၊ စိုက်ပျိုး၊ မွေးမြူရေးအထက်တန်းကျောင်း များနှင့် သက်မွေးပညာသင်တန်းကျောင်းများအတွက် လိုအပ်သော သင်ကြားရေးသုံး သင်ထောက်ကူစက်ပစ္စည်းများ၊ ရုံးသုံးစက်ကိရိယာများနှင့် ပရိဘောဂများအား မြန်မာကျပ်ငွေ ဖြင့် ဝယ်ယူလိုပါကြောင်း ဖိတ်ခေါ်အပ်ပါသည်။

၂။ အိတ်ဖွင့်တင်ဒါပုံစံများကို ၂၁-၄-၂၀၂၆ ရက်နေ့မှစ၍ ၄-၅-၂၀၂၆ ရက်နေ့အထိ ရုံးချိန် အတွင်း အစိုးရနည်းပညာကောလိပ်(မန္တလေး)၊ အစိုးရစက်မှုလက်မှုသိပ္ပံ(နေပြည်တော်)နှင့် အစိုးရစက်မှုလက်မှုသိပ္ပံ(အင်းစိန်)တို့တွင် ဝယ်ယူနိုင်ပြီး ၄-၅-၂၀၂၆ ရက်နေ့မှ ၅-၅-၂၀၂၆ ရက် နေ့ထိ ညနေ(၄:၀၀)နာရီ နောက်ဆုံးထား၍ အိတ်ဖွင့်တင်ဒါပုံစံဝယ်ယူခဲ့သော ကျောင်းသို့ တင်ဒါ များ တင်သွင်းရမည်ဖြစ်ပါသည်။

၃။ အဆိုပါ သင်ကြားရေးသုံး သင်ထောက်ကူစက်ပစ္စည်းများ၊ ရုံးသုံးစက်ကိရိယာများနှင့် ပရိဘောဂများအား သက်ဆိုင်ရာဌာနနှင့် ကျောင်းများသို့အရောက် ပေးပို့တပ်ဆင်ပေးနိုင်ရမည်။ လိုအပ်ပါက နည်းပညာဆိုင်ရာသင်တန်းပေး ဆောင်ရွက်နိုင်ရမည်။

၄။ အိတ်ဖွင့်တင်ဒါလျှောက်လွှာပုံစံ၊ စည်းကမ်းချက်များနှင့် အသေးစိတ်အချက်အလက် များကို ရုံးချိန်အတွင်း ဖုန်းနံပါတ်-၀၆၇၃၄၀၄၅၀၅(ဦးစီးဌာန၊ ရုံးချုပ်)၊ ၀၉၈၉၇၆၅၃၃၇၅ အစိုးရ နည်းပညာကောလိပ်(မန္တလေး)၊ ၀၉၈၈၇၆၄၅၅၈၀/၀၉၇၅၇၂၀၄၀၇ အစိုးရစက်မှုလက်မှုသိပ္ပံ (နေပြည်တော်)နှင့် ၀၉၄၀၁၀၈၄၀၉၃ အစိုးရစက်မှုလက်မှုသိပ္ပံ(အင်းစိန်)တို့တွင် ဆက်သွယ် စုံစမ်းနိုင်ပြီး Website ဖြစ်သော www.most.gov.mm နှင့် www.dtv.gov.mm တွင်လည်း ဝင်ရောက်ကြည့်ရှုနိုင်ပါသည်။

နည်းပညာ၊ သက်မွေးပညာနှင့် လေ့ကျင့်ရေးဦးစီးဌာန



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၂၀၂၆-၂၀၂၇ ဘဏ္ဍာရေးနှစ် ငွေလုံးငွေရင်းအသုံးစရိတ်ခွင့်ပြုရန်ပုံငွေဖြင့် ဝယ်ယူမည့်

သင်ထောက်ကူစက်ပစ္စည်းများ၊ ရုံးသုံးစက်ကိရိယာများနှင့်ရုံးသုံးပရိဘောဂပစ္စည်းများအတွက်

တင်ဒါဖောင်ကြေးစာရင်း

စဉ်	ဘာသာရပ်	တင်ဒါဖောင်ကြေး (ကျပ်)
၁	Electronics Engineering Test Equipment	၁၅,၀၀၀
၂	Electrical Power Engineering Test Equipment	၁၅,၀၀၀
၃	Information Technology Equipment	၃၀,၀၀၀
၄	Mechanical Engineering Test Equipment	၃၀,၀၀၀
၅	Civil Engineering Test Equipment	၃၀,၀၀၀
၆	Building Technology	၁၀,၀၀၀
၇	Electronics Technology	၁၀,၀၀၀
၈	Machining Technology	၁၅,၀၀၀
၉	Electrical Technology	၁၀,၀၀၀
၁၀	Naypyitaw Polytechnic Institute ကျောင်းအတွက်သင်ထောက်ကူပစ္စည်းများ	၃၀,၀၀၀
၁၁	Office Equipment	၁၀,၀၀၀
၁၂	Furniture	၃၀,၀၀၀



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
1	Analog Multimeter	<ul style="list-style-type: none"> - AC Voltage : 10V /50V/250V/1000V - DC Voltage : 2.5V/10V/50V/250V/1000V - DC Current: 100uA/2.5 mA/25mA/250mA/2.5A - Resistance :1/10/100/1k/10k
2	Digital Multimeter	<ul style="list-style-type: none"> • AC/DC Voltage: Measures up to 1000V. •AC/DC Current: Measures up to 20A. •Resistance: Tests resistance up to 60MΩ. •Capacitance: Measures capacitance up to 60mF. •Frequency: Measures frequency up to 60MHz. •Continuity: Audible continuity test •Diode Test: Checks diode functionality.
3	Voltage Regulator(AC)(Variac)	<ul style="list-style-type: none"> -Input voltage: AC 220V -Frequency: 50/60Hz -Adjustable voltage: 0-300V -Max power: 1000W -Max current: 12A
4	Variable DC Power Supply	(DC 0 to 30V variable dc) Input voltage: 220 VAC/ 50Hz Adjustable Output Voltage: 0 ~ 30V Current: 0 ~ 5 A 4-Digits LED Display, 5V/2A USB Interface Load Regulation: <0.01% + 3mV Line Regulation: <0.01% + 3mV Ripple & Noise: <1mVrms
5	Digital Clamp Meter	DC Voltage: 400mV / 4V / 40V / 400V / 600V - best accuracy: +/- (0.8%+1) AC Voltage: 4V / 40V / 400V / 600V - best accuracy: +/- (1%+5) DC Current: 40A / 400A - best accuracy: +/- (2%+3) AC Current: 40A / 400A - best accuracy: +/- (2.5%+5) Resistance: 400 Ohm / 4 kOhm / 40 kOhm / 400 kOhm / 4 MOhm / 40 MOhm -best accuracy: +/- (1%+2) Frequency: 10Hz - 1MHz - best accuracy: +/- (0.1%+3)



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
6	Spectrum Analyzer	<p>Frequency Range: 9 kHz to 3.2 GHz</p> <p>Resolution Bandwidth (RBW): Minimum of 10 Hz</p> <p>Displayed Average Noise Level (DANL): -161 dBm (Typical, with preamplifier on)</p> <p>Phase Noise: -98 dBc/Hz (Typical, at 10 kHz offset)</p> <p>Level Measurement Uncertainty: <0.8 dB (Nominal)</p> <p>Display: 8-inch WVGA (800x480 pixels) high-definition TFT LCD display</p>
7	Logic Analyzer	<p>Analog Bandwidth: 100MHz(upgradeable to 350MHz)</p> <p>Analog Channels: 2 (standard), upgradeable to 4</p> <p>Digital Channels: 16 (with PLA2216 probe)</p> <p>Sample Rate: Up to 8 GSa/s (single channel)</p> <p>Memory Depth:100Mpts(standard),upgradeable to200 Mpts</p> <p>Screen: 9-inch capacitive multi-touch screen with 256-level intensity grading</p> <p>Technology: Rigol's UltraVision II technology</p>
8	Antenna Analyzer	<p>Network Analyzer</p> <ul style="list-style-type: none"> •Frequency Range: 300 kHz to 6 GHz •Ports: 2 •Dynamic Range: Up to 118 dB (or up to 124 dB) second <p>Trace Noise: 0.005 dB RMS at a 10 Hz bandwidth</p> <p>Source Power: -20 dBm to +6 dBm</p> <p>Interface: USB 2.0</p> <p>Dimensions: 286 × 174 × 61 mm, Weight: 1.9 kg</p>
9	Antennas Trainer	<p>Composed of : Yagi antenna, basic panel with generator, Lecher line, RF detector, mobile receiver, supporting base for receiver, reflector, locking knob, shielded connecting cable between the Lecher line and the detector, coaxial support for antenna (mast) with turning base, monopoles with banana terminations, ground-plane antenna, folded & simple dipole antenna, coaxial cableRG59 with F/F BNC, M/M and F/F adapters De Lorenzo Working frequency: from 860 to 950 MHz. Input power supply: - 15 Vdc, 200 mA</p>



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
10	Arduino Strater Kits	Microcontroller: Arduino Uno R4 Wifi ESP 32 Breadboard Sensors: Temperature (digital and analog), Gas, Flame, Hall effect, Soil Moisture, Proximity (Inductive and Capacitance), Flex, Ultrasonic, Light, PIR, Humidity,Photoresistor, Air Pressure Sensor, Rain Drop Sensor,Sound Sensor, Gyroscope & acceleate sensor, Potentiometers Jumper wires(male to male, male to female,female to female) LEDs (Light Emitting Diode), Relay Modules, Resistors (220 ohm, 330Ohm, 1Kohm and 10Kohm), Key Pad, LCD 16, Push buttons, bluetooth module, LED (red yellow green), Buzzer Switch, Module: Amplifier module, Speaker, TF card reader, 2 channel relay module, 9g servo Jumper Wire
11	Surface Mounted Devices (SMD) Rework Station	control warm (Temperature Adjustable) Hand piece Length: 196MM 110V 220V available anti-static
12	Electronic Tools Kit	1PK-1900NB contents 103-132C Utility component storage box PM-736 Long nose plier 135mm PM-737 Diagonal cutting plier 113mm PM-754 Flat nose plier 135mm PM-755 Bent nose plier 130mm 1PK-051DS Dual Color Lineman's Plier 1PK-108T Reverse action tweezzer 1PK-500B-2 Super drill set w/adaptor 220V 9S002A/B/C 3 pcs soldering aid tools 1PK-362D Soldering iron stand with sponge 1PK-H026 Adjustable wrench 6" SI-130B-20 Ceramic Soldering Iron 220V 19412 Screwdriver handle and etc.



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
13	Analog and Digital Trainer System	Fixed DC output: $\pm 5V$, 1A Variable DC output: 0 to $\pm 15V$, 1A Frequency range: 1Hz–10Hz, 10Hz–100Hz, 100Hz–1kHz, 1kHz–10kHz, 10kHz–100kHz Amplitude–Sine wave output: 0–10 Vpp variable Triangle wave output: 0–10 Vpp variable Square wave output: 0–10 Vpp variable TTL mode output: 4 Vpp OTHER STANDARD ACCESSORIES: (1) Power cord (2) Pin: 10pcs (3). User manual
14	Raspberry Pi 5 & Accessories	Raspberry Pi 5 8G Features <ul style="list-style-type: none"> • 2.4GHz quad-core 64-bit Arm Cortex-A76 CPU • 512KB per-core L2 caches, 2MB L3 cache • VideoCore VII GPU • 4Kp60 HEVC decode • LPDDR4X-4267 SDRAM • Dual-band 802.11ac Wi-Fi 1xPi 5 8GB Board, 1xABS Case with Armor Lite V5 Cooler, 1x27W USB C Power Supply, 1x 64GB Card with Card Reader, 2x Micro HDMI Cables, 1x Storage Box
15	Analog Lab Unit	Fixed DC: +5V, +12V, -12V –Maximum Current Output: 0.3A, Dual DC Power Supply: 0 ~ +25V and 0 ~ -25V –adjustable AC power Supply, voltage Range: 2V-0V-2V, 12V-0V-12V, 15V-0V-15V, –Maximum Current Output: 500mA
16	Digital Logic trainer	– Power Supply – +5V/1A, $\pm 12V/1A$ – Display – 2 Digit BCD to Decimal Display – TTL Clocks – 1Hz to 1MHz – Indication of Outputs – Single/Dual Color High Intensity LED



1. Electronics Engineering Test Equipment

SR NO.	Description	Specification
17	Sensor Kits	
18	Fiber Optic Splicer	<ul style="list-style-type: none"> - Fiber optice Splicer - Battery pack - AC adapter - AC power cord - USB cable - Fusion splicer strap - Electrodes(spare) - Fiber holder set plate - Carrying case, Work tray, Tripod screw, Carrying case strap - Alcohol dispenser - Stripper.
19	Programmable Logic Controller S7-1200 with Desktop Computer	<p>CPU 1215 (AC/DC/RLY)</p> <ul style="list-style-type: none"> - Power Supply: AC 85-264 V AC at 47-63 Hz - Output Type: 10 Bits Relay outputs. - Digital Input: 14 Bits 24V DC Inputs. - Analog Input: 2 Channels Analog 0-10 V DC input. - Analog Output: 2 Channels Analog 0-20mA DC output. - Storage: Program/data memory 125 KB - Communication interface: 2 PROFINET ports <p>Desktop Intel Core i7 processor</p> <ul style="list-style-type: none"> - 8 GB DDR4 2666 MHz Memory - 1TB 7200rpm SATA Hard Disk Drive (or) 512GB SSD - NVIDIA GeForce® GT 730, 2GB Graphic - Windows 10 (64bit) Keyboard and Mouse - Monitor : 24-inch <p>1250 VA UPS</p> <ul style="list-style-type: none"> - Capacity (1250 VA) - Build in Power Factor 0.65 input 140~275 Volt - Output 195~245 Vac Backup Time 16 minutes~25 minutes <p>Frequency 45~55 Hz Battery 2x12 V 8.2Ahm</p>



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
20	LOGO ! 8 with Power Supply and Desktop Computer	LOGO!: 12/24 RCE - Logic module with display - Power supply: 24 V AC/DC/relay - 8 digital inputs (4 usable as analogue) - 4 digital outputs - Memory: 400 blocks Desktop Intel Core i7 processor: - 8 GB DDR4 2666 MHz Memory - 1TB 7200rpm SATA Hard Disk Drive (or) 512GB SSD - NVIDIA GeForce® GT 730, 2GB Graphic - Windows 10 (64bit) Keyboard and Mouse - Monitor : 24-inch 1250 VA UPS: - Capacity (1250 VA) - Build in Power Factor 0.65 input 140~275 Volt - Output 195~245 Vac Backup Time 16 minutes~25 minutes Frquency 45~55 Hz Battery 2x12 V 8.2Ahm Stabilized power supply - Input: 100~240 V AC - 1 phase - Output: 24 V DC/4 A - 96 watts - Protection class: IP20 - DIN rail mounting
21	Development Board for PIC Microcontroller with Desktop Computer	- Easy PIC with I/O clicks and TFT designer - PIC 18F45k22 and 8 MHz crystal - 16x2 Character LCD - 128x64 Graphical LCD - 8-Bit D/A Converter - USB input/ outputs module click: GSM, Wifi 3, 7 segment, light,current , 8x8 , stepper motor 5Vwith driver,Blue tooth,ADC,DC motor(5V),GPS,motion sensor,proximity sensor, fram, DAC, IR Thermo, fiber optic (5V),accelerometer



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
21		Desktop Intel Core i7 processor: - 8 GB DDR4 2666 MHz Memory - 1TB 7200rpm SATA Hard Disk Drive (or) 512GB SSD - NVIDIA GeForce® GT 730, 2GB Graphic - Windows 10 (64bit) Keyboard and Mouse Monitor : 24-inch 1250 VA UPS: - Capacity (1250 VA) - Build in Power Factor 0.65 input 140~275 Volt - Output 195~245 VacBackup Time 16 minutes~25 minutes Frequency 45~55 Hz Battery 2x12 V 8.2Ahm
22	Router	- 4 ports router - Supports Gigabit Ethernet, PoE, PoE+ Networking - Memory: 4 GB RAM, - Flash Memory: 4 GB, - Ports/Connectors: (4)GE LAN,(1)GE WAN,(1)GE/SFP combo WAN,Integrated USB 3.0 AUX/console, - Routing Protocol: OSPF, EIGRP,GRE,HSRP,IGMPv3,IS-IS, PIM-SM, PIM-SSM, PBR, RIP-1, RIP-2, RSVP, Static routing,VRRP,BGP,Bidirectional Forwarding Detecting (BFD),DVMRP,Remote Management over SNMP,RMON, SYSLOG, CLI, Telnet -Protocols:Networking Protocol,Remote Management Protocol -Supports IEEE 802.11a/b/g/n/ac Wave 2,IEEE 802.11g, IEEE 802.11n,DHCP,DNS,IPSec,Ethernet, Fast Ethernet, Gigabit
23	Unifi AP LR	802.11ac Wave 1 WiFi technology - 5 GHz band with 867 Mbps throughput rate - 2.4 GHz band with a 450 Mbps throughput rate - Signal transmission up to 183 meters (600 feet) - (1) GbE RJ45 port - Powered by PoE+* or 24V passive PoE



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
24	Fiber optic cable ethernet converter	<p>Complies with IEEE802.3 (10BASE-T) and IEEE802.3u (100BASE-TX/FX) standards</p> <ul style="list-style-type: none"> -Electrical port supports Auto-Negotiation for 10Mbps or 100Mbps, full duplex or half duplex data. - Automatic MDI/MDI-X crossover - Distances up to: 2 km Multimode, 25-120 km Single Mode - ST, SC, FC LC, SFP Slots optical connectors <p>AC/DC powered</p> <ul style="list-style-type: none"> - Status LED's for TX,FX LINK/ACT, POWER, 100M to easily monitor network status
25	Wireless Router	<ul style="list-style-type: none"> - Dual-Concurrent 2.4/5GHz AP - Wireless 2.4 GHz standards 802.11b/g/n - Wireless 5Ghz standards 802.11a/n/ac - Five Ethernet Ports - PoE-out on port 5 - USB for 3G/4G support - CPU core count 1 - Operating System Router OS
26	Customer Premises Equipment (CPE)	<ul style="list-style-type: none"> - 20 x 10GBASE-T ports - Power Supply: (PoE) 24V, 0.5A - Max. Power Consumption: 8W - Operating Frequency: 2412-2462 MHz - Gain: 10.4-11.2 dBi - Networking Interface: (2) 10/100 Ethernet - Memory: 32 MB SDRAM, 8 MB Flash - Frequency: 2.4 GHz
27	Solar Crimping Tool Kit	<p>Fixed DC output: $\pm 5V$, 1A</p> <p>Variable DC output: 0 to $\pm 15V$, 1A</p> <p>Frequency range: 1Hz-10Hz, 10Hz-100Hz, 100Hz-1kHz, 1kHz-10kHz, 10kHz-100kHz</p> <p>Amplitude-Sine wave output: 0-10 Vpp variable</p> <p>Triangle wave output: 0-10 Vpp variable</p> <p>Square wave output: 0-10 Vpp variable</p> <p>TTL mode output: 4 Vpp</p> <p>OTHER STANDARD ACCESSORIES: (1) Power cord</p> <p>(2) Pin: 10pcs</p> <p>(3). User manual</p>



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
28	Digital Communications 1	LabVolt Series 91022-20(FESTO) <ul style="list-style-type: none"> - Pulse-Amplitude Modulation - PAM Time-Domain Multiplexing - Pulse-Time Modulation (PWM and PPM) - Pulse-Code Modulation and Time-Division Multiplexing of PCM Signals - Delta Modulation - Channel Effects operation and function Sampler - Sample/Hold, Adder, Ramp Generator, Comparator, Limiter, Filter, CODEC, PLL, Compressor, Expander, Integrator, Differentiator, Latched Compare, Speaker Amplifier, Channel Simulator
29	Digital Communications 2	LabVolt Series 91023-20(FESTO) <ul style="list-style-type: none"> - NRZ, RZ, and Manchester Encoding and Decoding - Clock Synchronizer - Frequency-Shift Keying (FSK) Generation - FSK Asynchronous and Synchronous Detection - Phase-Shift Keying (PSK) Generation - PSK Asynchronous and Synchronous Detection - Amplitude-Shift Keying (ASK) Generation - ASK Asynchronous and Synchronous Detection - Channel Effects - FSK Modem The circuits found on this board include: <ul style="list-style-type: none"> - Line Encoding - Modulators - Channel Simulator - Sync Detector - Modem
30	Fiber Optic Communications	LabVolt Series 91025-20(FESTO) <ul style="list-style-type: none"> - FACET base unit or stand-alone operation - Interface with the 32-Bit Microprocessor module - ST connections - Multimode 62.5/125 cm cable - High-speed 820 nm transmitter



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
30		<ul style="list-style-type: none"> - Integrated PIN photodiode and trans-impedance receiver - Digital and analog communications channels - Full handshake RS232 interface using time-division multiplexing (TDM) and Manchester coding - On-board microphone and speaker - Built-in microphone amplifier, power supply, audioamplifier and photo transmitter - LED block
31	Quadrature Phase Shift Keying (QPSK), Offset Quadrature Phase Shift Keying (OQPSK), Differential Phase Shift Keying (DPSK)	<ul style="list-style-type: none"> - NRZ Generator - S/P Converter & Delay - DPSK Encoder - Power Supply/Regulator - Channel Simulator - Carrier & Phase Shift - QPSK Modulator_I - QPSK Modulator_Q - Adder - DPSK Decoder - QPSK Demodulator_I - QPSK Demodulator_Q - Amplifier - P/S Converter
32	Optical Fiber Test Kits	Power Meter <ul style="list-style-type: none"> - 1310/1550 Single mode Source - 850/1300 Multimode Source - Visual fault locator VFL - FI-500 Fiber Inspector Micro - Inspection Probe Tips (LC,SC,1.25mm and 2.5mm Universal) - Find Fiber Remote ID Source - SC power Meter Adapter - ST power Meter Adapter - LC power Meter Adapter - Magnetic Strap Attachment - Carrying Case - NFC-kit-BOX Fiber Cleaning kit



1. Electronics Engineering Test Equipment

SR. NO.	Description	Specification
33	Surface Mount Device (SMD) Rework Station	<ul style="list-style-type: none"> - Voltage :220V - Temperature: 100 to 480°C - Air Flow : 120L/min - Rated Input power: 720W - Mainframe size : 235*186*125mm - Display type: LED display - Type: 4 in 1 Hot Air Rework station soldering Electronic soldering iron vaccum - Gun Type: Brushless Fan - soldering, de soldering welding
34	Bluetooth Speaker (8")	<ul style="list-style-type: none"> Battery Rechargeable Battery Built in FM radio Live Record Function Wireless Mic 2 Ports USB/TF card solt , Mic & guitar Input Dimension 350x360x430mm
35	Dual Channel Digital Tablet Oscilloscope	<ul style="list-style-type: none"> Real Time Sampling - 1GSa/s Bandwidth - 100-349MHz Power Supply - Lithium battery,6000mAh Display Size - 7 Inches & Above Display resolution - 800*480 Pixels Max Waveform Capture Rate - 30,000wfms
36	Oscilloscope	<ul style="list-style-type: none"> - 2 Channel - Bandwidth 200 MHz - Sample rate: 1Gs/s - Rise time : ≤1.7ns - Vertical sensitivity 1mV/div~10V/div - Time-Based Range - 10ns/div~50s/div - Trigger Modes - Edge, Pulse, Video, Alternate,Slope - Interface - USB OTG, Pass/Fail
37	Function Generator	<ul style="list-style-type: none"> - Bandwidth : 120MHz 2CH Function Generator - sampling rate of 1.25GSa/s. - Function Generation - Arbitrary Waveform Generation - Pulse Generation



1. Electronics Engineering Test Equipment

SR NO.	Description	Specification
37		<ul style="list-style-type: none"> - 15 Analogue and Digital Modulation - Supported modulation... AM, FM, PM, ASK, FSK, PSK,BPSK, QPSK, 3FSK, 4FSK, OSK & PWM etc. - Power cord - USB cable - BNC cable with crocodil clips
38	Desktop Computer	<p>Processor: -14th Generation Intel® Core™ i7-14700</p> <p>Processor (E-cores up to 4.20 GHz P-cores up to 5.30GHz), Memory: 8 GB DDR5-5600MT/s (UDIMM)</p> <p>Storage: 512 GB SSD M.2 2280 PCIe Gen4 QLC</p> <p>OS : Windows 11 Pro License</p> <p>Office 2019 Professional Plus License</p> <p>Graphic: Intel® Arc™ A310 4GB GDDR6 At Least:</p> <p>1 x HDMIOutput and 1 x DisplayPort Output</p> <p>Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1</p> <p>Front Ports 1xUSB-C(USB 5Gbps / USB 3.2 Gen 1), with 15Wcharging 4xUSB-A(USB 5Gbps/USB 3.2Gen 1), 1x headphone / microphone combo jack (3.5mm) 1x microphone (3.5mm)</p> <p>Rear ports 4x USB-A(Hi-Speed USB / USB 2.0)1xHDMI 2.1 TMDS 1x VGA 1x Ethernet (RJ-45), 1x line-out (3.5mm) 1x DisplayPort 1.4 a (HBR2) 1x parallel* 2x PS/2* 2x serial*USB Keyboard & Mouse ,UPS 1250VA</p>



2. Electrical Power Engineering Test Equipment

SR NO.	Description	Specification
1	Electrical and Electronic System Trainer	<p>Master Unit with DC, AC & Wave Shaping Circuit Experiment Panel(P2), Semiconductor & Power Semiconductor Devices Experiment Panel(P3), Digital Logic Gates Experiment Panel(P12)</p> <p>SPECIFICATIONS OF MASTER UNIT</p> <ul style="list-style-type: none"> - Built in Power Supply DC Supply : 5V / 1A. & \pm 12V, 1A. 0 to 15V DC (Variable), 100 mA (Isolated), 0 to 30V DC (Variable), 100 mA (Isolated), High Volt DC 15V to 110V, 100mA AC Supply : 12-0-12V AC,150 mA. Short circuit Protected. - Built in Function Generator O/p Waveform : Sine, Triangle & TTL O/Ps Output Frequency : 1 Hz to 1MHz in 6 ranges, with amplitude & frequency control pots. O/P Voltage 20Vp-p max. (Sin/TRG) Modulation I/P : AM : - I/P voltage + 5V (100% modulation) O/P - For 0V (min),+5V(max.)-5V(Phase reversal of O/P) FM : I/P voltage + 400mV (+50% modulation) - Clock Generator : 10 MHz TTL clock. - Data Switches (10 No.) & bi-colour LED status indicators 10X2 Nos, for High/Low indication. - Pulser switches (2 Nos.) with four deboun - BNC to 2 channel banana adapter 2No. - Logic probe to detect High/Low level pulses upto 1MHz, with bi-colour LEDs to indicate status. - 2 / 4 digit 7 segment display with BCD to 7 segment decoder. -Onboard DPMs provided with mode/range selection. (A) DC volt : 2V/200V - 1No. (B) DC current : 2mA/200mA - 1No. (C) DC Volts/Current : 20V/200mA - 1No. - Onboard moving iron meters provided for (A) AC Current : 1 AMP - 1No. (B) AC Voltage : 15V - 1No. - Onboard speaker : 8 Ohms, 0.5 Watt (1No.) - Onboard POTS : 1K - 1No. 1M - 1No



2. Electrical Power Engineering Test Equipment

SR. NO.	Description	Specification
2	Expansion Module (SIMATIC S7-1200)	SM 1221(Digital Input) 8DI, 24V DC
3	Expansion Module (SIMATIC S7-1200)	SM 1222(Digital Output) 8DO, Relay 2A
4	LOGO! DM16 Expansion Module	12/24V DM16, 8 Input & 8 Output, SIEMENS LOGO!
5	Smart Power System Trainer & RTU unit with HMI (XPO-SPS)	1) SCADA components: PC & SCADA Software, RTUs 2) Power engineering stations/ Setups 3) Transformers: 4) Accessories SPS system consists of: 4 nos. of power engineering set up viz; Generation, Synchronisation, Double Bus Bar, Transmission & Distribution, 4 Nos. of integrated Numeric protection relays like Generator Protection, Synchronisation relay, distance protection, Transformer protection, 3 nos. of RTU with Ethernet & RS485/MODBUS ports, 3 nos. of touch panel local station HMI's, 1 No. of supervisory controller / touch panel PC with latest SCADA software, preformed patch cords/cables to integrate seamlessly various parts into single system, 8 nos of aluminum profile tables with under trolleys / drawers etc.
6	Analog Multimeter	DCV - 0.1(20k Ω /V)0.25/2.5/10/50 (20k Ω /V)/ 250/1000V (9k Ω /V)YX 360 TRF, ACV- 10/50/250/750(9k Ω /V), Resistance-2k/20k/200k/2M Ω (x1/x10/x100/x1k)200M Ω (x100k)
7	Digital Multimeter	DCV-60m/600m/9.999/99.99/999.9V, ACV-60m/600m/9.999/99.99/999.9V DCA-600 μ /6000 μ /60m/600m/6/10A ACA-600 μ /6000 μ /60m/600m/6/10A Resistance-600/6k/60k/600k/6M/60M Ω Capacitance-60n/600n/6 μ /60 μ /600 μ /6m/25mF Frequency-15Hz~50kHz Buzzer sounds at between 20 Ω and 300 Ω



2. Electrical Power Engineering Test Equipment

SR. NO.	Description	Specification
8	Single Phase Transformer Application Module Set (AEL-SPTT)	<ul style="list-style-type: none"> - N-VPS01. AC 3PH Variable Power Supply. - N-MED09. AC Ammeter (0-2.5 A). (2 units) - N-MED22. AC Voltmeter (0-400 VAC). - N-MED32. 1-Phase Wattmeter 230 V. - N-MED65. Digital Multimeter. - TRA31. 1 kVA Single - Phase Transformer. - N-REV. Variable Resistor. • N-CON. Capacitor Module. - N-IND. Inductance module. - EM-SCADA. Control and Data Acquisition System Software for Electrical Machines, with SCADA. - ECM-SOF. EDIBON Classroom Manager (Instructor Software). - ESL-SOF. EDIBON Student Labsoft (Student Software). - N-RACK-M. (2 units).
9	Three Phase Transformer Application Module Set (AEL-TPPT)	<ul style="list-style-type: none"> • N-VPS01. AC 3PH Variable Power Supply. • N-MED09. AC Ammeter (0-2.5 A). (2 units) • N-MED22. AC Voltmeter (0-400V). • N-MED33. 3-Phase Balanced Wattmeter 440 V. • TPPT. Three - phase Power Transformer Unit. • N-REVT/1K. 1kW Three-Phase Resistors Module. • N-CONT/1K. 1kVA Three-Phase Capacitors Module. • N-INDT/1K. 1 kVA Three - Phase inductances module. • N-ARR12. Direct Starter Module. • TPPT. Three - phase Power Transformer Unit. • EM-SCADA. Control and Data Acquisition System Software for Electrical Machines, with SCADA. • ECM-SOF. EDIBON Classroom Manager (Instructor Software). • ESL-SOF. EDIBON Student Labsoft (Student Software). • N-RACK-B. (6 units).



2. Electrical Power Engineering Test Equipment

SR. NO.	Description	Specification
10	Intermediate Relay	Coil Voltage 24VDC with Base 10PCS Intermediate Relay Miniature Control Small With Base Socket Copper Coil DC 12V 24V AC 110V 220V HH52P/53P/54P HH62P HH63
11	Electrical Machine Trainer	Consisting of - Load Switch -2x Motor Circuit Breaker 0----0, 63A -Automatic Circuit Breaker 2A -5x Auxiliary Contactors -3 phase Motor Simulation -3 Phase CEE Adapter to 4mm Safety Jacks
12	Sectioned 3 phase Transformer Electrical Transformer Trainer(3 phase)(With complete Accessery)	Output Voltage: 3 x 22-38V via selector available in the front panel Maximum Output Power: 300 VA Output Connections: Simultaneous output 2mm sockets and 4mm safety sockets
13	Analog Lab Unit	Fixed DC: +5V, +12V, -12V -Maximum Current Output: 0.3A,Dual DC Power Supply: 0 ~ +25V and 0 ~ -25V -adjustable AC power Supply,voltage Range: 2V-0V-2V, 12V-0V-12V, 15V-0V-15V, -Maximum Current Output: 500mA
14	Digital Lab Unit (Digital Lab Trainer)	DC Power Supply - +5V at 1A,0V to +15V and 0V to -15V variable at upto 300mA, Full short protection is provided as is a mains switch with power on indicator. Function Generator - Five frequency ranges, Sine wave output: 0 to 8V peak to peak variable, Triangle wave output: 0 to 6V peak to peak variable



2. Electrical Power Engineering Test Equipment

SR. NO.	Description	Specification
15	Professional KNX Trainer Set with unlimited participants and software,	Professional version of KNX/EBI Bus, ABB/Schneider, ETS 5 KNX license software-Dongle, Output Switch Actuator, 8 ch, 20A, USB Inter-face, din rail mount KNX Power supply, 30V, 38.4watt, 640mA Dimmer Actuator-2ch, Shutter Actuator-2ch, Touch Button-8 fold Binary Input -4 channel KNX Comfort Touch Screen Universal Inter- face with laptop i7 series,10th gen, ram8GB, graphic 2GB, ssd 512GBHD, Dell USB Cable Interface KNX to PC, 5 mtr Motorized Blind Controlled by Motor
16	Digital Multi tester	DCV:400m/4/40/400/600V - 0.1mV / + -0.7% ACV: 4/40/400/600V - 0.001mV / + -1.6% DCA: 40m/400mA- 0.01mA / + D59812 Month-2.2% ACA: 40m/400mA '- 0.01mA / + '-2.8% Ω resistor: 400/4k/40k/400k/4M/40M Ω - 0.1 Ω /+ -1.5% Capacitor F: 50n/500n/5u/50u/100uF'- 0.01nF/+5% Hz frequency: 5Hz ~ 100kHz - + -0.5% Hz frequency: 5Hz ~ 100kHz - + -0.5% Check diode, continuous monitoring of circuit Source: R6Px2 , Weight: 340g
17	Solar System	-Deye SUN-20KSG05LP3-EU 20KVA Hybrid Inverter -Shark Top Sun 51.2V 300Ah LifeP04 Battery -Longi 650W Solar Panel -Panel Box Accessories -16KW
18	Motor-Generator Set, AC Induction Motor 3HP, 415V, 1500rpm Coupled with DC Shunt Generator 2KW, 220V, 1500rpm	AC-415V, 3HP, 50-60Hz, 1500rpm, Induction Motor, coupled, DC Generator-2KW, 220V, 1500rpm motor-generator set-
19	Sectioned DC Machine which is 90 degree cut away to show commutator, brushes, rotor, stator, winding , ball-bearings	Rated power 1.0 kW Dimensions 465 x 300 x 310 mm Shaft height 162 mm Weight 40 kg , all set of accessories for educational demonstration



2. Electrical Power Engineering Test Equipment

SR. NO.	Description	Specification
20	Sectioned Synchronous Machine	<p>which is 90 degree cut away to show slip-rings, brushes, rotor, stator, winding , poles, ball-bearings</p> <p>Rated power 1.0 kW</p> <p>Dimensions 465 x 300 x 310 mm</p> <p>Shaft height 162 mm</p> <p>Weight 35 kg , all set of accessories for educational demonstration</p>
21	Sectioned Induction Motor Squirrel Cage	<p>which is 90 degree cut away to show rotor, stator, winding, poles, fan, ball-bearings</p> <p>Rated power 1.1 kW</p> <p>Dimensions 355 x 300 x 310 mm</p> <p>Shaft height 162 mm</p> <p>Weight 15 kg , all set of accessories for educational demonstration</p>
22	PLC S7-1500 with Input, Output Module, DELL laptop corei7, 11Gen, Ram8G	<p>Resistance (Ω)-20Ω/200Ω/2kΩ/20kΩ/200kΩ/2MΩ/ 20MΩ/200MΩ/2000MΩ</p> <p>-Capacitance (F) - 200pF / 2 nF/ 20nF/200nF/2μF/20μF/200μF/2mF/20mF</p> <p>-Inductance (H)-2mH/20mH/200mH/2H/20H/200H</p>
23	SIMATIC Human Interface Machine(HMI)	HMI 9"
24	Manual Motor with Thermostat and Touch Screen GVS	<p>0.63-1A</p> <p>ABB,6128/28-84- 500(Include Coupler)</p> <p>CHTF -5.0/15.4</p> <p>Manual Motor Starter Rotary</p> <p>Handle 0.63-1A Frame Size</p> <p>32A Ex9S32A1A</p> <p>Min/Max Current: 0.63-1A</p> <p>Frame Size: Up to 32A at 600 Vac</p> <p>Protection Type: Thermal-Magnetic</p> <p>Product Details: Manual Motor Starter Rotary Handle</p> <p>0.6- 1 A Frame</p> <p>Size 32A/ Ex 9532 A1A</p> <p>Part No: Ex 9532 A1A</p> <p>Product Type: Manual Motor StarterExtended Product</p>



2. Electrical Power Engineering Test Equipment

SR. NO.	Description	Specification
24		6128/28-84-500 Product ID: 2CKA006134A0334 Catalog Description: 6128/28-84-500RTC Control element 2/4g Long Description: With labelling field. For ABB i-bus® KNX bus coupler 6120/12-101, 6120/13. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). Master/slave configuration. With base-load operation. 5.0/15.3.22(Silver), Color: Black White 5" IPS touch panel, resolution 480*854, aluminum faceplate, built-in temperature & proximity sensor, vertical/horizontal version available. Full KNX functions: 15 control pages including switch, dimming, shutter, scene control, value sending, RGB, HVAC, AC, floor heating, ventilation, audio control, energy metering, air quality display.
25	NI ELVIS II with Laptop (11th Generation)	(Core i7, 8GB RAM) NI (ELVIS II) + Prototyping Board ELIVS II With Power Supply Oscilloscope Type : Multifunctional Prototyping Board Number of Channels 18 Features : Portable, Oscilloscope Prototyping Maximum Bandwidth: 5 MHz
26	Three Phase Induction Motor	1.Main unit (1) Type: Forward reverse driving type (2) Usage: For inverter driving (3) Output: 1HP(0.75KW) (4) Voltage: 220/440 (5) Number of poles:4



2. Electrical Power Engineering Test Equipment

SR. NO.	Description	Specification
27	Oscilloscope	Bandwidth 70MHz Sample rate (Real time) 1GSa/s Horizontal Scale(S/div)2ns/div~100s/div,step by 1~2~5 Rise time (at input, typical)≤5ns Channels Dual Display 8" color LCD, TFT display , 800*600 pixels, 65535 colors Input impedance 1MΩ±2%in parallel with 15pF±5pF Channels Isolation 50Hz: 100 : 1, 10MHz: 40 : 1 Max. input voltage 400V (PK-PK) DC + AC PK-PK DC gain accuracy ±3% DC accuracy (Average) Average≥ 16:± (3% reading+ 0.05div) for ΔV Probe attenuation factor 1X, 10X, 100X, 1000X LF respond (AC, -3dB)≥5Hz (at input, AC coupling, -3dB)
28	Single Phase AC Motor, 1HP, 4 pole	Output Power-1 HP (0.75 kW) Input Voltage- 220VAC Frequency- 50Hz RPM - 1440r/min Current - 7.7 A Shaft Diameter - 24mm Size - 400 x 270 x 260 mm Weight -20kg
29	Function Generator	Channel single, Frequency Output 5MHz, Sample Rate 125MS/s, Vertical Resolution 14 bits Waveform Standard Sine, Square, Pulse, Ramp, and Noise Arbitrary Waveform Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform. Frequency (resolution 1μHz) Sine 1μHz - 5MHz Square 1μHz - 5MHz Pulse 1μHz - 5MHz Ramp 1μHz - 1MHz Noise 5MHz (-3dB) (typical) Arbitrary Waveform 1μHz - 5MHz Memory 64M byte Communication Interface USB device



3. Information Technology Equipment

SR NO.	Description	Specification
1	Variable DC Power Supply	(DC 0 to 30V variable dc) Input voltage: 220 VAC/ 50Hz Adjustable Output Voltage: 0 ~ 30V Current: 0 ~ 5 A 4-Digits LED Display, 5V/2A USB Interface Load Regulation: <0.01% + 3mV Line Regulation: <0.01% + 3mV Ripple & Noise: <1mVrms
2	Arduino Strater Kits	Microcontroller: Arduino Uno ၊ ESP 32 Breadboard Sensors: Temperature (digital and analog), Gas, Flame, Hall effect, Soil Moisture, Proximity (Inductive and Capacitance), Flex, Ultrasonic, Light, PIR, Humidity, Photoresistor, Potentiometers Jumper wires (male to male,male to female,female to female) LEDs (Light Emitting Diode), Relay Modules, Resistors (220 ohm, 330Ohm, 1Kohm and 10Kohm), Key Pad, LCD 16, Push buttons, bluetooth module, LED (red yellow green), Buzzer Switch,
3	Mikrotik Router	Dual-Concurrent 2.4/5GHz AP Wireless 2.4 GHz standards 802.11b/g/n Wireless 5Ghz standards 802.11a/n/ac Five Ethernet Ports PoE-out on port 5 USB for 3G/4G support CPU core count 1 Size of RAM 64MB Storage siaze 16MB Operating System Router OS Support advanced features like VPN,firewall with NAT, advanced routing, bandwith shaping,VLAN, QoS, and Network monitoring tools through Router OS. Support RADIUS Bridge for a variety of serives including PPP, Hostpot, Wireless amd more.



3. Information Technology Equipment

SR. NO.	Description	Specification
4	8 ports Unmanaged Switch	<p>Network Interface: 8 Gigabit Ethernet (10/100/1000) Ports</p> <p>Switching Capacity: Minimum 16 Gbps</p> <p>Forwarding Rate: Minimum 11.9 Mpps for 64-byte packets</p> <p>Packet Buffer Memory: Minimum 128 KB</p> <p>MAC Address Table: Minimum 4K entries</p> <p>IEEE Standards: 802.3 (Ethernet), 802.3u (Fast Ethernet), 802.3ab (Gigabit Ethernet), 802.3x (Flow Control)</p> <p>Auto MDI/MDIX: Automatic detection of straight-through or crossover cables</p>
5	24 ports Unmanaged Switch	<p>Network Interface: 24 x 10/100/1000 Mbps Ethernet Ports: Auto-negotiation, auto MDI/MDIX</p> <p>Switching Capacity: Minimum 48 Gbps</p> <p>Forwarding Rate: Minimum 35.7 Mpps for 64-byte packets</p> <p>Packet Buffer Memory: Minimum 512 KB</p> <p>MAC Address Table: Minimum 8K entries</p> <p>Standards and Protocols:</p> <p>IEEE Standards: 802.3 (Ethernet), 802.3u (Fast Ethernet), 802.3ab (Gigabit Ethernet), 802.3x (Flow Control)</p> <p>Auto MDI/MDIX: Automatic detection of straight-through or crossover cables</p> <p>Non-blocking Switching Architecture: Ensures maximum throughput at wire speed</p> <p>Store-and-Forward: Switching method to eliminate bad packets</p>
6	Customer Premises Equipment (CPE)	<p>Built-in Antenna: 13dBi 2x2 dual-polarized directional MIMO</p> <p>Transmission Power: Adjustable from 0 to 26dBm/200m</p> <p>Wireless Standards: IEEE 802.11a/n, IEEE 802.11b/g/n</p> <p>Operating Modes: AP, Client, AP Router, AP Client Router (WISP)</p> <p>Wireless Security: WPA-PSK/WPA2-PSK, 64/128/152-bit WEP, WPA/WPA2</p> <p>QoS: Quality of Service</p> <p>Power Supply: Passive PoE (Power over Ethernet) with include Passive PoE Adapter</p>



3. Information Technology Equipment

SR. NO.	Description	Specification
7	Access Point	1.3 GHz dual-core processor Four-stream high-efficiency Wi-Fi 6 technology 5 GHz band 4x4 MU-MIMO and OFDMA with radio rate of 2.4 Gbps 2.4 GHz band 4x4 MIMO with radio rate of 600 Mbps Powered with 802.3at PoE with include Passive PoE Adapter
8	Wireless Router	Dual-Band Wi-Fi: Supports both 2.4 GHz and 5GHz bands Wi-Fi Standards: IEEE 802.11a/b/g/n/ac Interface: WAN Port: 1 x 10/100/1000 Mbps Ethernet port LAN Ports: Minimum 4x10/100/1000 Mbps Ethernet ports USB Ports: Minimum 1xUSB 3.0 port with include Adapter
9	LAN Trainer	PC to PC communication with IEEE 802.3 Peer to Peer network Client - Server network Design of Star topology using 100Base-Tx Design of Bus topology using 10Base-2 Design of Ring topology using DB9 Simulation of Distance Vectors and Link State Algorithms Socket Programming exercise for LINUX Encryption/Decryption Technique User can send any file over LAN. Detailed introduction to TCP/IP Model (4 Layer Model) Video Tutorials for software operation Creation of cables for network connections Network design using RJ45 & DB9 connectors Socket programming and processing Wireless LAN with 803.11b/g Network monitoring Various LAN Protocols Data rate up to 100Mbps Variable packet size



3. Information Technology Equipment

SR. NO.	Description	Specification
9		Variable packet delay Error generation (Manual and Auto) Color coded real time graphical representation of entire transmission & reception Graphical Analysis of LAN performance with various parameters and protocols Save / Print option for graphs User friendly software Switch faults in both hardware & software Exhaustive course material & references On Board Touch Switch
10	Fiber Optice Splicer	<ul style="list-style-type: none"> - Battery pack - AC adapter - AC power cord - USB cable - Fusion splicer strap - Electrodes(spare) - Fiber holder set plate - Carrying case, Work tray, Tripod screw, Carrying case strap - Alcohol dispenser - Stripper.
11	Media Converter	Fiber Media Converter – 100Base-FX, SC Single mode,20km, 1310/1550nm
12	Digital Multimeter	DCV-60m/600m/9.999/99.99/999.9V, ACV-60m/600m/9.999/99.99/999.9V DCA-600μ/6000μ/60m/600m/6/10A ACA-600μ/6000μ/60m/600m/6/10A Resistance-600/6k/60k/600k/6M/60MΩ Capacitance-60n/600n/6μ/60μ/600μ/6m/25mF Frequency-15Hz~50kHz Buzzer sounds at between 20Ω and 300Ω



3. Information Technology Equipment

SR NO.	Description	Specification
13	Router (Cisco)	<p>Processor: Multi-core CPU</p> <p>Memory: Minimum 512 MB DDR2 DRAM, expandable to 2 GB</p> <p>Flash Memory: Minimum 256 MB, expandable to 8 GB</p> <p>Ethernet Ports: 3 x 10/100/1000 Gigabit Ethernet ports</p> <p>Enhanced High-Speed WAN Interface Card (EHWIC)</p> <p>Slots: 4</p> <p>Service Module Slots: 1</p> <p>Internal Services Module (ISM) Slot: 1</p> <p>USB Ports: 2 USB 2.0 ports</p> <p>Routing Protocols: Support for RIP, EIGRP, OSPF, BGP, IPv4, IPv6</p> <p>Static Routing: Supported</p> <p>Default Routing: Supported</p> <p>Dynamic Routing: Supported</p> <p>Network Address Translation (NAT): Supported</p> <p>DHCP Server: Supported</p> <p>VPN: Support for IPsec, SSL VPNs</p> <p>Firewall: Stateful inspection firewall</p> <p>QoS: Traffic prioritization and band width management</p> <p>Management Interface: Console port, auxiliary port, USB port</p> <p>Web-based GUI: Cisco Configuration Professional (CCP)</p> <p>CLI: Command-Line Interface via console or SSH</p> <p>SNMP: Supported for remote management</p> <p>Syslog: Supported</p>
14	Network Switch	<p>Ports Quantity 16</p> <p>Data Transfer Rate 1000 Mbps</p> <p>Data Link Protocol Giga-bit Ethernet, Fast Ethernet (1000/100-Mbit/s)</p> <p>Compatibility PC</p> <p>Power Source AC 100-240 V (50/60 Hz)</p>



3. Information Technology Equipment

SR NO.	Description	Specification
15	Fiber Optic Cable Ethernet Converter	<p>Complies with IEEE802.3 (10BASE-T) and IEEE802.3u (100BASE-TX/FX) standards</p> <p>Distances up to: 2 km Multimode, 25-120 km Single Mode ST, SC, FC LC, SFP Slots optical connectors</p> <p>AC/DC powered</p> <p>Status LED's for TX,FX LINK/ACT, POWER,100M to easily monitor network status</p>
16	Desktop Computer	<p>Processor: -14th Generation Intel® Core™ i7-14700</p> <p>Processor (E-cores up to 4.20 GHz P-cores up to 5.30GHz)</p> <p>Memory: 8 GB DDR5-5600MT/s (UDIMM)</p> <p>Storage: 512 GB SSD M.2 2280 PCIe Gen4 QLC</p> <p>OS : Windows 11 Pro License</p> <p>Office 2019 Professional Plus License</p> <p>Graphic: Intel® Arc™ A310 4GB GDDR6 At Least:</p> <p>1 x HDMIOutput and 1 x DisplayPort Output</p> <p>Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1</p> <p>Front Ports 1x USB-C (USB 5Gbps / USB 3.2 Gen 1), with 15Wcharging 4xUSB-A(USB 5Gbps/USB 3.2Gen1), 1x headphone / microphone combo jack (3.5mm) 1x microphone (3.5mm)</p> <p>Rear ports 4x USB-A (Hi-Speed USB/USB 2.0)1xHDMI 2.1 TMDS 1x VGA1xEthernet(RJ-45),1xline-out(3.5mm)</p> <p>1x DisplayPort 1.4 a(HBR2) 1x parallel* 2x PS/2* 2x serial*</p> <p>USB Keyboard & Mouse</p>
17	Function Generator	<ul style="list-style-type: none"> - Bandwidth : 100MHz 2CH Function Generator - sampling rate of 500MSa/s. - Function Generation - Arbitrary Waveform Generation - Pulse Generation - Analogue / Digital Modulation - Supported modulation... AM, FM, PM, ASK, FSK, PSK,BPSK, QPSK, 3FSK, 4FSK, OSK & PWM - Power cord - USB cable - BNC cable with crocodil clips



3. Information Technology Equipment

SR NO.	Description	Specification
18	Oscilloscope	<ul style="list-style-type: none"> - 2 Channel - Bandwidth 200 MHz - Sample rate: 1Gs/s - Rise time : ≤1.7ns - Vertical sensitivity 1mV/div~10V/div - Time-Based Range - 10ns/div~50s/div - Trigger Modes - Edge, Pulse, Video, Alternate,Slope - Interface - USB OTG, Pass/Fail
19	Netwrok Printer	<p>Supercharged performance for home office</p> <p>Fast color print, copy, scan, fax, 2-sided prints, mobile/wireless/ethernet</p> <p>Print up to 20 pages per minute</p> <p>HP's most reliable wi-fi and HP Wolf Essential Security</p> <p>Dynamic security enabled printer</p>
20	Interactive Touch Screen System	<p>Display; size 75 inch</p> <p>Glass: 4mm Antil Glared glass "4mm Anti-Glare Glass"</p> <p>Touch type Infrared ,Respond time 8 ms</p> <p>Touch Points 20 points " ≤ 20 Points (Android)</p> <p>Resolution 3840x2160 (4K)</p> <p>Ratio 5000:01, Frame rate 60HZ</p> <p>Viewing Angle 178",</p> <p>Operation System Android 11</p> <p>RAM 4 GB, Storage: 32 GB</p> <p>Input Method Finger or Touch Pen Finger or Touch Pen, Power AC 100_240V 60</p> <p>Operation Power 238W</p> <p>Standby power 5W , Speaker 10W*2pcs 16W*2pcs</p> <p>Slot in PC (OPS) CPU : Intel Core i5 CPU Memory: 8 GB</p> <p>Memory : 128 GB SSD</p> <p>Windows: 10 Pro, Touch Pen : 2 pcs</p> <p>TV Stand Cart Trolley,Voltage regulator</p> <p>Wireless mini KB+</p> <p>(3 years parts and service warranty)</p>



3. Information Technology Equipment

SR. NO.	Description	Specification
21	Desktop Computer	Processor: -14th Generation Intel® Core™ i7-14700 Processor (E-cores up to 4.20 GHz P-cores up to 5.30 GHz) Memory: 8 GB DDR5-5600MT/s (UDIMM) Storage: 512 GB SSD M.2 2280 PCIe Gen4 QLC OS : Windows 11 Pro License Office 2019 Professional Plus License Graphic: Intel® Arc™ A310 4GB GDDR6 At Least: 1 x HDMIOutput and 1 x DisplayPort Output Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1 Front Ports 1x USB-C (USB 5Gbps / USB 3.2 Gen 1), with 15Wcharging 4x USB-A(USB 5Gbps/USB 3.2 Gen 1), 1x headphone / microphone combo jack (3.5mm) 1x microphone (3.5mm) Rear ports 4x USB-A (Hi-Speed USB / USB 2.0)1x HDMI 2.1 TMDS 1x VGA 1x Ethernet (RJ-45), 1x line-out (3.5mm) 1x DisplayPort 1.4 a (HBR2) 1x parallel* 2x PS/2* 2x serial* USB Keyboard & Mouse
22	Handheld 2-in-1 Oscilloscope and Function Generator	Oscilloscope: Bandwith: 40 MHz Sample Rate: 250 Msa/s 2 Analog Channels Function Generator: Frequency Range: up to 25 MHz Waveforms: Sine, Square, Triangle, Arbitrary Waveforms
23	Handheld 2-in-1 Oscilloscope and Function Generator	Oscilloscope: Bandwith: 40 MHz Sample Rate: 250 Msa/s 2 Analog Channels Function Generator: Frequency Range: up to 25 MHz Waveforms: Sine, Square, Triangle, Arbitrary Waveforms



3. Information Technology Equipment

SR. NO.	Description	Specification
24	Network Printer	Supercharged performance for home office Fast color print, copy, scan, fax, 2-sided prints, mobile/wireless/ethernet Print up to 20 pages per minute HP's most reliable wi-fi and HP Wolf Essential Security Dynamic security enabled printer



4. Mechanical Engineering Test Equipment

SR NO.	Description	Specification
1	Universal educational testing	30 kN (160 bar) manometer 50 mm travel analog dial gauge 250 bar pressure transducer 50 mm travel digital transducer 50 mm travel ram 8-channel digital indicator 20 kN, Power supply: 230V 1ph 50-60Hz 70W Dimensions: 600x600x850 mm Weight: 60 kg approx. Accessories: Complete Accessories Devices for Tensile, Compression, Shear, Bending, Hardness Tests -Tensile heads for round samples and Tensile heads for flat samples. -Upper and lower shear heads and connecting rods. -Two compression platens and one distance piece. support beam,two lower rollers and one upper roller. -upper hardness head (with a 10 mm sphere) and a lower compression platen. Required Specimens for Tests: Flat bar test specimens, different materials (14 pcs) Round bar test specimens Ø6 mm, aluminum made (14 pcs) Round bar test specimensØ6mm,copper made(14pcs) Round bar test specimensØ6mm,bronze made(14 cs) Round bar test specimensØ6mm,brass made(14pcs) Round bar test specimensØ6mm,stainless steel made (14pcs)
2	Rockwell Hardness Tester	Hardness Capabilities: Regular and twin Preliminary Load: 10kg [98.07N] Test Load: 60, 100, 150 kg [588.4, 980.7, 1471 N] Specimen Illumination: Adjustable LED Maximum Specimen Weight: 220 lbs [100kg] Applications:steels,Coppers,Cast Irons,Thin Materials, Shallow and Deep CaseHardened Materials



4. Mechanical Engineering Test Equipment

SR NO.	Description	Specification
3	Brinell Hardness Tester	Loading Force: 62.5Kgf-3000Kgf (612.9N~29400N) Output Data: RS 232/Printer Brinell Range: (8-650) HBW Hardness Display: LCD Display Magnification of Microscope: 20x Digital Microscope Auto Hardness Conversion: HR, HV, HK, etc Vertical Space: 225mm Horizontal Space: 135 mm Dimension: 893 x720 x747mm Gross/Net Weight: 160Kg/130Kg Power Supply: AC220V/50Hz;110V/60Hz
4	Balance of Reciprocating masses	Forces in reciprocating engines Engine <ul style="list-style-type: none"> • number of cylinders: 4 • piston mass: 40g • additional mass: 41g Crank drive <ul style="list-style-type: none"> • mass of connecting rod: 18g • centre distance of cylinders: 35mm • crank radius: 15mm • length of connecting rod: 70mm Measuring ranges <ul style="list-style-type: none"> • speed: 100...3000min⁻¹ • force: 0...500N 230V, 50Hz, 1 phase 230V, 60Hz, 1 phase; 120V, 60Hz, 1 phase LxWxH: 420x370x350mm Weight: approx. 40kg LxWxH: 230x230x80mm (display and control unit) Weight: approx. 1kg
5	Gyroscope	Gyro <ul style="list-style-type: none"> - drive motor power: 3,6W - moment of inertia of the gyroscope: 375gcm² - speed of the rotation axis: 1000...6000min⁻¹ - gyroscopic moment: 0...61Nmm



4. Mechanical Engineering Test Equipment

SR NO.	Description	Specification
5		Precession - drive motor power: 19W - speed of precession axis: 5...63min ⁻¹ 230V, 50Hz, 1 phase 230V, 60Hz, 1 phase; 120V, 60Hz, 1 phase UL/CSA optional LxWxH: 420x400x310mm Weight: approx. 22kg
6	Fluid Properties	three hydrometers of resolution 0.002°SG two hydrometer jars of 450x50mm Aneroid barometer, range: 973 – 1047 mbar. Thermometer with a range between -10 and 50 °C. Pycnometer of 50ml Digital Chronometer Capillary tubes unit with tubes of different size:5 mm, 4 mm, 3 mm, 2.2 mm, 1.7 mm and 1.2 mm. Two falling sphere viscometer tubes of 300 x 40 mm, with marks at 0, 25, 175, 200 and 220. Set of stainless steel balls of different sizes:3.175mm, 2.381 mm and 1.588 mm. Dimension: 850 x 500 x 800 mm approx, Weight 20Kg
7	Fluid statics and manometry	“U” shape vertical tube. Two parallel vertical tubes. Vertical tube with variable section. Vertical tube with a pivot that allows it to incline from 0 to 90°. Dimensions: 700x350x800mm approx.(27.55x13.77x 31.49 inches approx.) Weight:15 kg approx
8	Ignition system training equipment	1) Carburetor and Point ignition circuit system 2) Suction type MPI, Kalman swirl system 3) Suction system MPI AFS 4) Suction system map sensor suction motor, Diagnosis jack, Control relay, Key box Size: Approx. 1800 X 600 X 1800mm Weight: Approx. 200kg



4. Mechanical Engineering Test Equipment

SR. NO.	Description	Specification
9	Diesel fuel system training equipment	1) Single Phase ½HP moto 2) Timer 3) Inline Pump, 4) 4 Fuel Pressure Gauge, 5) Inverter for Speed Control Etc. Size: Approx. 600 X 400 X 1,200 mm Weight: Approx. 100 kg
10	Turbocharger structure training equipment	Turbocharger Size: Approx. 300 X 200 X 300 mm Weight: Approx. 15 kg
11	Fuel Injection control board system	1) Injection System Module with Auto Fault - Installment of 2 kinds of injection system (fuel return system, fuel return less system) - Control of fuel pressure regulator and injecting place pressure changes - Injection duration display of each injector - Hypothetic cooling water temperature display (for checking change of injection amount depending on cooling water temperature changes) - injection number display during injection amount measurement (for calculating quantity of single injection) 2) Drawer type storage space 3ea Size: Approx. 2,400 X 600 X 2,100 mm Weight: Approx. 350 kg
12	Electronic control chassis simulator trainer unit	- Vehicular underbody frame, control frame - Avante HD actual automobile 1/2 - Control box (material : steel) - Motor three phases 380V 2.2Kw 6p 1200 RPM - Inverter three phases 380V 3HP
13	Electric Car Steering System Trainer New Energy Automotive Training Didactic Equipment Driving School Simulator	Size: 1300mm×1000mm×1750mm Power supply: single-phase, AC220V/50Hz; Working temperature: -40°C~+50°C. Weight: about 200kg



4. Mechanical Engineering Test Equipment

SR. NO.	Description	Specification
14	Alarm Circuit Training Panel Fire Alarm Trainer Educational Equipment Teaching Equipment	Power Supply: 220V/50Hz aluminum alloy structure: dimensions 1565 x 400 x 1070mm (LxWxH) Weight: 200kg
15	Scan Tool	OE level Diagnostic Tool For Passenger, Commercial Vehicles & Electric Vehicles CPU : 2.0GHz OCTA-CoreLCD : 13.3" TFT Touch ScreenROM/RAM : 256/8GUpdate: 2 YearOperating System : Android 9.0Include EV software:support EV battery test & EV system test Include:Thinkeasy Battery Test Clip (Standard)Thinktool Video Scope (Standard) Thinkcar T-Wand 200 (Standard)Thinktool Scope Box (Standard)
16	Hydraulic Training board and accessories	Pressure Relief Valve 2 Way Flow Control Valve One Way Flow Valve Non Return Valve 4/2 Way Hand lever Valve, 4/3 Way Lever Valve , Hydraulic motor,Pressure Gauge,4 way Distributor,... Aluminium Profile Plate 700 mmx 1100mm
17	Pneumatic Training board and accessories	2x3/2 way valve (closed/open) 1x5/2 way valve Pneumatic timer, Pneumatic sequence valve, Shuttle Valve, Manifold, Pressure Gauge, Plastic tubing.... Pneumatic Compressor, Quick Coupling set for Compressor, Aluminium Profile 700mmx1100mm
18	MIG Welders	USA-Lotos (Complete Accessories)
19	Argon Gas Cylinder	50 L (cylinder, Ar, Accessories)



4. Mechanical Engineering Test Equipment

SR NO.	Description	Specification
20	Rolling Forming Bending Equipment Multi-Function Pipe Bending Machine(With Stand)	Mild Steel and Electric 3 Roller Type Round Ring Pipe Bending Machine Bending Wall Thickness 0.5--3mm Bending Radius 20mm Spindle Speed 15 R/mm Secondary Shaft Speed 20r/mm Motor 2.2kw above (Forward,Reverse) Body Size 710x540x960mm Transport Package Wooden Case Specification 230kg Single Phase
21	Machine vice for Drilling Machine	Jaw Size- 5"
22	Energy losses in pipe fittings apparatus	<ul style="list-style-type: none"> - Manometer - Bourdon type: 0 - 4 bars - Differential manometer: 0 -520mm - PVC Rigid pipes - Interior diameter: 28.2mm - Exterior diameter: 33.2mm - Flexible pipe - Pressure taking- differential Manometer. External diameter: 10 mm -To pressurize the equipment.External diameter:6mm - Widening - Diameter: 28.2/33.2mm - Narrowing - Diameter: 33.2/28.2mm - Valves - Membrane Valves diameter: 28.2mm - Air return: 6mm
23	Hydraulic bench(Digital)	<ul style="list-style-type: none"> - Mobile Hydraulic Bench, - Sump tank capacity, 215 litres - Centrifugal pump 0.55kW, 20-120 Litres/min - Runner made in stainless steel, - Quick and easy change of the different accessories, - Mobile, floor standing service unit for fluid mechanics apparatus Single Phase



4. Mechanical Engineering Test Equipment

SR NO.	Description	Specification
24	Automotive Electrical System Training panel board	Electrical System Training Panel Board -EFI System -Lighting System -Combination Meter -Engine speed can be varied by crankshaft speed input -starter motor -Charging System -12 VDC battery -test points terminals -wiper System -power windows System -Single Phase
25	Four post lift	3D Alignment Compatible Capacity: 4000kg Width: 3286mm Length: 4515mm Lifting Height: 1700mm Platform height: 205mm Platform length: 4300mm Platform width: 480mm Single Phase
26	Compressor	1hp, semehermatic type
27	Bench Drilling machine with Vise(5")	Bench Drill 12 inch Bench Drilling Machine Variable Speed Drilling Chuck 3-16mm For DIY Woodworking Tools with laser / digital
28	14" Cutting Machine	Voltage(V) 220-240 Blade Dia(mm) 355 Blade Bore(mm) 25.4 No-load speed (RPM) 4100 Input power(W) 2100 Rated Frequency (HZ) 50/60 MOQ(Pcs) 200 Cutting Capacity (solid steel pipe) 58mm Cutting Capacity (hollow steel pipe) 110mm G.W(KGS) 12.0 N.(KGS) 11.0 Package 1PCS/CTN Size(mm)54*30*40



4. Mechanical Engineering Test Equipment

SR NO.	Description	Specification
29	Surface Grinding machine	CylindricalGrinder Type Universal Cylindrical Grinder Table Size500*250 T -Slot Number*Width1*14Spindle Motor1.5kW. Weight 650kg 500X250mm table size
30	Twist and Bend Testing Machine	Max distance between supports: 600 mm Accuracy of bending: 0.01 mm Accuracy of twisting: 0.01 mm (degrees) Dimension: 790x225x345 mm Weight: 13 kg Two loading devices (0.25 Kg) - Two 1 kg weights - Four 0.5 kg weights - One dial gauge - Seven steel test pieces of rectangular cross-section - One wood test piece of rectangular cross-section - Three test pieces, diameter 8 mm, of resp. steel, aluminum, and brass - Two end fixtures - Laboratory manual
31	Single Cylinder Petrol Engine	Type - 4-stroke, OHV, single cylinder, inclined by 25°C Displacement - 196 cm ³ (12.0 cu.in) Max. horsepower - 5.5 HP (4.1 kW) at 3600 rpm Max. torque (crank PTO) - 12.4 Nm (1.26 kg. m, 9.1 ft.lb) at 2500rpm Carburetor - Horizontal type, butterfly valve Cooling system - Forced-air Ignition system - Transistorized magneto ignition Lubricating system - Forced splash Starting system - Recoil starter Stopping system - Ignition primary circuit ground Fuel used - Unleaded gasoline (octane number 86 or higher) Fuel consumption - 3.1 liters (0.82 US gal, 0.68 Imp gal)/h PTO shaft rotation - Counterclockwise(from PTOshaft side)



4. Mechanical Engineering Test Equipment

SR. NO.	Description	Specification
32	Arc Welding M/C and Accessories	Phase: Three Phase Output Current:300–400 A Technology: Inverter Based, IGBT Based Frequency: 50 Hz Voltage 415 V +/- 15% Rated Power: 13 KVA Power Factor: 0.93 Open Circuit Voltage: 63 V Rated Duty Cycle: 60 % Net Weight:12.5 Kg Efficiency:0.85 Machine Dimensions: 500X200X370 mm Maximum Electrode Diameter: 4 mm IGBT Discrete Inverter MMA Welders Technology TGAN40N120FDR (4 Pcs) Configuration: 2 Pcs 35–50 Quick Plug
33	Advanced Torsion Testing Machine	Dimensions- 1100x400x300mm Net Weight-33kg Packed Volume and Weight-0.3m ³ ,60kg (approx.) Nominal Capacity-30Nm Maximum Specimen Length-750mm Gearbox Ratio-60:1
34	Single Cylinder Diesel Engine	4 Stroke; Direct Injection; 996 cm ³ ; 13.25 kW (18 HP) at 2200 rpm; Water-cooling
35	Airconditioner	(1.5Hp) (Split Type) R32 (Inverter Type)
36	4 cylinder Petrol Engine Running with stand	4 Cylinder Gasoline Engine -1.3 L or 1.5L displacement -Toyota Multi port Injection EFI System -starter motor included -Engine stand with gear BOX
37	Wheel balancer machine	Power supply 220V Motor power : 0.2kw Max wheel weight : 65kg Max wheel diameter : 1000mm Rim diameter10"-24" Wheel width : 1.5"-17" - Automatic brake - Automatic distance, rim diameter and rim width measuring -Single Phase



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
1	Slump Test of Concrete	<p>The slump cone, complete set, is ideal for laboratories and includes: Accessories</p> <ol style="list-style-type: none"> 1.Slump Cone, stainless steel made 2.Tamping rod, galvanized steel, dia. 16x600 mm 3.Slump Cone funnel, galvanized steel 4.Graduated slump scale engraved in 0.5 cm increments with sliding measuring rod 5.Base, galvanized steel, complete 6.Aluminium scoop, 500 cc capacity 7.Fine wire brush
2	Rock Study Kit	<p>Rock Study Kit set (15 specimen)</p> <p>Igneous Rocks: obsidian, granite, basalt, pumice, rhyolite,</p> <p>Sedimentary Rocks: shale, tufa, sandstone, limestone, conglomerate(quartz, feldspar, and other rocks),</p> <p>Metamorphic Rocks: slate, marble, quartzite, gneiss and schist</p> <ul style="list-style-type: none"> - A rock identification key - A magnifier - A 5 x 7" display box
3	Mineral Study Kit	<p>Mineral Study Kit Set (15 specimen)</p> <p>(fluorite, feldspar, hematite, pyrite, quartz, calcite, muscovite, magnetite, gypsum, talc, halite, biotite, graphite, satin spar and gypsum selenite)</p> <ul style="list-style-type: none"> - A rock identification key - A magnifier - A 5 x 7" display box - A streak plate
4	Hardness Pick Set & Mineral ID Kit	<p>Included Items:</p> <p>Four double-ended picks, color-coded, with eight points comprising 2,3,4,5,6,7,8, and 9 on Mohs' hardness scale.</p> <p>A Glass Hardness Plate (hardness of about 5.5) which, when scratched, quickly distinguishes hard from soft minerals.</p>



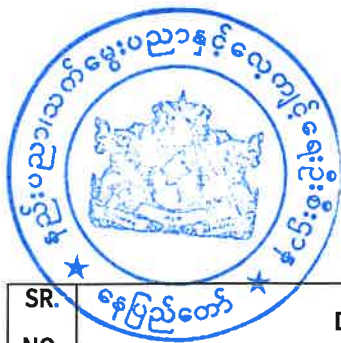
5. Civil Engineering Test Equipment

SR NO.	Description	Specification
4		<p>Two additional Hardness Plates with a hardness value of 2.5 and 3.5, respectively.</p> <p>A 100 grit Grinding Stone to keep the points sharp.</p> <p>Streak Plate for testing a mineral's streak color.</p> <p>Magnet to test magnetic rocks such as Magnetite, Pyrrhotite, and Nickel-Iron Meteorite.</p> <p>compact Wooden Case.</p> <p>Hardness Table for 300 Minerals.</p> <p>Complete Instructions.</p> <p>Hardness points can be easily and inexpensively replaced.</p> <p>All points are stamped with the indicated hardness value, and each double-ended pick body is color coded.</p>
5	Auto Level	<p>Telescope Length 215 mm, Stadia 0-100,</p> <p>Magnification 32X</p> <p>Objective Aperture-42mm</p> <p>Resolving Power 3",</p> <p>Field of View 1°20'</p> <p>Including Tripod, Leveling Staff, Ranging Rod</p> <p>Survey Hammer, 100ft Measuring Tape, Plumb Bob.</p>
6	Rebound Hammer	<p>Able to test of concrete items 4" (100mm) or more in thickness, or concrete with a maximum particle size less than or equal to 1.25" (32mm).</p> <p>A compressive strength range of 1,450 to 10,152 psi (10 to 70 N/mm²)</p> <p>Impact energy of the test is 1.6 ft-lbs (2.207 Nm)</p> <p>Dimensions: 33 X 10 X 10 mm</p> <p>Accessories consists of: Grinding Stone</p> <p>Carrying case</p>
7	CBR Test Equipment with complete accessories	<p>CBR machine, 50 kN, analogue measurement</p> <p>CBR loading machine motorized, 50 kN</p> <p>Load is applied through a screw jack driven by an electric motor at a constant penetration rate of 1.27 mm/min achieved by a built-in gearbox and assured</p>



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
7		<p>also under load. The upper beam can be adjusted in height. Foreseen of fast approach device of the base plate.</p> <p>The KIT CBR machine comprises:</p> <ul style="list-style-type: none"> CBR motorized frame CBR penetration piston Load ring 50 kN capacity Dial gauge 10x0.01 mm Dial gauge holder CBR Mould and Accessories(ASTM)
8	pH Meter with accessories	<p>pH/ORP/Temperature (°C/°F)</p> <p>pH Range -2.00 to 16.00 pH</p> <p>Resolution 0.01 pH, Accuracy ± 0.01 pH</p> <p>Calibration Points Up to 5 (USA & NIST)/Up to 6(DIN),</p> <p>Data Memory 5000 data points</p> <p>Buffer Options USA, NIST, DIN</p> <p>ORP Range ± 2000 mV</p> <p>Resolution 0.1 mV (< ±1000 mV), 1 mV (≥ ±1000 mV)</p> <p>Accuracy ±0.3 mV (< ±1000 mV), 0.3% of reading (≥ ±1000 mV)</p> <p>Intellical PHC201 Laboratory General Purposes Gel Filled pH Electrode, 1 m Cable</p> <ul style="list-style-type: none"> - 2 set of Buffer Solution Kit, Colour-coded, pH 4.01, pH 7.00 and pH 10.01, 1000 mL - Standard field case for probes
9	Turbidity Meter with Accessories	<p>Stabilisation time</p> <p>Ratio on: 30 minutes after start-up</p> <p>Ratio off: 60 minutes after start-up</p> <p>Reading modes</p> <p>Single, continuous, Rapidly Settling Turbidity, signal averaging on or off, ratio on or off</p> <p>Communication USB</p> <p>Interface 2 USB-A ports for USB flash drive, external printer, keyboard and barcode scanner</p> <p>Data logging 2000 total logs, includes reading log,</p>



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
9		verification log and calibration log - silicone oil(30ml), oiling cloth, USEPA filter D1252 assembly, 1-inch sample cells (30 mL) with caps (12x), Gelex secondary turbidity standardization kit, Stabcal calibration kit, power supply, power cord, dust cover
10	Direct Shear Testing Machine	Direct Shear Testing Machine with complete accessories Max. Shear Capacity 5000 N Resolution 1 N Adjustable Shear Speed 0.00001 to 9.99999 mm/min Max. Shear Travel 45 mm V.Load Beam Ratio 11:1,10:1,9:1 Approx. Dimension(LWH) 1300mmx400mmx1250mm Power Supply 240 V, 1 pH, 50/60 Hz, 0.5 Hp Approx. Weight 165 kg
11	Triaxial Testing Machine with complete accessories	Capacity 50 kN Testing Speed 0.00001 - 9.99999 mm/min Max. Vertical Clearance 700 mm Horizontal Clearance 315 mm Platen Diameter 185 mm Consists of: Advance Pressure Volume Control Triaxial Cell and Load Cell and Displace Gauge Max. Sample Size Ø 150 mm 220V ~ 240V, 1Ph, 50/60 Hz
12	Hydrology Apparatus(Complete Set)	Experiment tank - area: 2mx1m, depth: 0,2m - max. sand filling: 0,3m ³ - inclination adjustment: -2,5...5% Precipitation device - 8 nozzles, switchable in 2 groups of 4 nozzles - flow rate per nozzle: 1...4,7L/min, square spray pattern Pump - power consumption: 0,55kW



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
12		- max. flow rate: 2000L/h Storage tank, stainless steel: content 180L Measuring ranges - pressure: 19x 0...300mmWC - flow rate: - 1x 150...1700L/h (water supply) - 1x 0...1700L/h (water drain)
13	Flow Probe(Velocity Meter)	Scale - 0...260mm, graduation: 1mm Measuring ranges - flow velocity: 0,04...5m/s determination of discharge velocity 1 velocity meter 1 set of accessories 1 manual
14	Hydrometer Set and Test	Hydrometer jar, 1000 ml capacity (6 pieces provided with the kit) Soil hydrometer,151H,range 0.995 to 1.038 g/ml with div. 0.001 Glass tank, dimensions: 600x300x380 mm Heater, professional type, complete with thermostat, cooling coil,water circulating unit.230V 1ph 50-60Hz 1000W Thermometer, range 0 - 50 °C, subdiv. 0.5 °C. Beaker, pyrex, 250 ml capacity Sodium Hexametaphosphate, 1000 g High speed stirrer,10.000 rpm, complete with cup, paddle,anti-splash baffle, for dispersing soil particles in water. 230V 1ph 50-60Hz
15	Liquid and Plastic Limit Test Equipment	Recommended for performing liquid limit test in accordance with ASTM specifications.ASTM liquid limit machine, mixing dish, spatula, graduated cylinder and a sample cans pack.
16	Microwave Oven	Specifications Nominal capacity 780 liters Max. temperature 200°C Air convection Forced Power 4200 W Internal dimensions mm (approx.)(lxdxh) 815x814x1201



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
16		External dimensions mm (approx.) (lxdxh) 1213x1214x1461 Number of grid shelves 3 Weight approx.: 200 kg
17	Electro Hydraulic Rebar Cutter	Motor Single-Phase, 110-115V/220-230V, 50/60Hz, 1430W, Double Insulation Weight 22.0 kg / 48.5 lbs Dimensions 480 (L) x 138 (W) x 268 (H) mm 18.9 × 5.43 × 10.55 in Max. Cutting Capacity Max.D25 / #8 (620N/mm ² (63kgf/mm ²))* = grade60 *Please use SP blade for longer cutting life. Cutting Speed approx. 3.5 seconds Standard Accessories Wooden box, Hydraulic oil, Hex wrenches (4 · 5 · 6 · 8 mm), Spanner (14 ×17 mm & 24 mm)
18	Aluminum Formwork Set	High-strength aluminum alloy (typically 6061-T6). Lightweight but durable Panels can withstand up to 60-80 kN/m ² of concrete pressure. Aluminum formwork systems weigh ~20-25 kg/m ² . Usable up to 150-200 cycles with proper maintenance.
19	Plastic Formwork Set	Standard sizes: 600mm x 1200mm, 300mm x 1200mm, or customized. Typically 3-5 mm (varies by manufacturer). Panels can handle concrete pressures of 40-60 kN/m ² . Extremely lightweight, ~10-15 kg/m ² . Reusability: Usable up to 50-100 cycles with proper handling. Surface Finish: Smooth finish, eliminating the need for plastering.
20	Handheld Rebar Locator	(Rebar Detector, Rebar locator, Concrete cover) Technology: Eddy-current Connection: Wireless Cover Measuring Depth: Up to 185 mm / 7.3 in Cover Measuring Accuracy: +/-1 mm / 0.04 in to 4 mm



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
20		<p>/0.16 in depending on depth</p> <p>Rebar Diameter Measuring Depth: up to 63 mm / 2.5 in</p> <p>Rebar Diameter Measuring Accuracy: +/- rebar size</p> <p>Encoder Accuracy: +/- 0.5mm / 0.02 in + 0.5% of measured length</p> <p>Max Scanning Speed: 0.5m/s - 1.7 ft / s</p> <p>Max Line Scan Distance: 1km / 0.6 miles</p> <p>Max Area Scan: 10'000m² / 107'000 ft²</p> <p>Display: High-contrast OLED screen</p> <p>Dimensions: 250 x 130 x 45 mm / 9.8 x 5.1 x 1.8 in (with cart) 190 x 75 x 45 mm / 7.5 x 3.0 x 1.8 in (without cart) Weight 690 g / 1.5 lb (with cart) 300 g / 0.7 lb (without cart)</p> <p>Battery: 2 x AA(NiMH) rechargeable or non rechargeable,</p> <p>Removable, Flight-safe, 8 hours autonomy,</p> <p>USB-C power bank (not included)</p>
21	Los Angles abrasion Testing Machine with complete Accessories	<p>Drum Speed 31 – 33 RPM:</p> <p>The rotating drum operates at a specified speed range to ensure consistent and accurate testing conditions. Set of 12 ABRASIVE CHARGES, conforming to ASTM / AASHTO / CNR / UNI / UNE / NLT Standards.</p> <p>Security cabinet, manufactured from sheet steel</p> <p>Device for fast and easy clamping of the table to the Los Angeles drum.</p>
22	Consonlidation Test Apparatus	<p>The consolidation apparatus is rigidly constructed to ensure minimum frame distortion. The frame is designed to load the specimen through a lever arm one of three alternative beam ratios as 9:1, 10:1 and 11:1. The Front-Loading Oedometer (consolidation) set comes complete with, cast aluminium frame, the lever arm incorporates 9:1, 10:1 and 11:1 beam ratios. Consolidation cell, dial gauge or displacement transducer and data logger, bench, weights, apparatuses for prepare</p>



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
22		consolidation samples and calibration disc. Set of Weights for consolidation, 6 pcs. 10 kg, 3 pcs. 5 kg, 3 pcs. 2 kg, 3 pcs. 1 kg, 3 pcs. 0.5 kg, 3 pcs. 0.25 kg. Dial gauge Digital Dial gauge Displacement transducer Data logger 4 Channel type. Data logger 8 Channel type. 50kg, 64kg, 80kg Loading
23	Permeability Test Apparatus	Constant Head Permeability Set, consists of a 80 mm dia. constant head permeability cell, wooden stand with 3 pcs. manometer tubes, constant level tank, and 3m connection hoses. Wooden Stand with 3 Manometer Tubes: 220x70x1700 mm 5.6 kg Constant Level Water Tank: 300x200x250 mm 3 kg Tamping Rod: Ø 8x300 mm 0.5 kg Connection Hoses 3m Falling Head Permeability Set consists of stand with 4 pcs. manometer tubes with connection valves, a Ø100mm permeability cell, soaking reservoir tank and connection hoses. Falling Head Permeability Cell 100 mm dia. 150x150x260 mm 3 kg Wooden Stand with 4 Manometer Tubes 230x100x1700 mm 6.6 kg Soaking Reservoir Tank 320x320x250 mm 3.6 kg Connection Hoses De-Airing Tank
24	Vicac apparatus with complete accessories	The instrument consists of a metallic frame, graduated scale with index, sliding probe of 300 g, consistency plunger Ø10mm, glass base plate x 2 Nos Consists of: 1. Initial Needles x 2 sets (ASTM , EN) 2. Final Needles x 2 sets (ASTM , EN)



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
24		3.Cornical Needles 8mm 4.Vicat Mould x 2 nos (ASTM , EN) 5. Stop watch 6. Beaker 7. Graduated cylinder 8.Standard Spatula 9.Thermometer 10+50°C
25	Digital Balance with complete set of weights Maximum Capacity 15 kg	Readability 0.1g Settling Time 1.5 s Display: LCD Display Unit: g, ct, oz, lb, *, pcs Platform Size: 255×190mm Power: AC 220V, Rechargeable Battery Adabter Included Load Cells: Including Type Precision Balance Calibration: External Connection Type RS232
26	Sieve Shaker with sieves	It accepts sieves having diameter 200 - 250 - 300 mm, and 8" ...12". This simple and low cost Sieve Shaker is activated by an electric motor and can hold up to 8 Sieves plus Ø 200 mm pan and lid. Provided of timer 0 - 60 minutes. Power supply: 230V 1ph 50Hz 110W Dimensions: 350x400x950 mm Opening Seives 20 Nos(200mm) with Pan Cover Opening 37.5mm, 25.0mm, 19.0mm, 12.5mm, 9.500 mm, 6.30mm, 4.750mm, 3.350mm, 2.360mm, 2.00mm, 1.180mm, 0.850mm, 0.60mm, 0.425mm, 0.300mm, 0.25mm, 0.150mm, 0.106mm, 0.075mm
27	Digital Theodolite With Tripod(Complete Set)	Specification Telescope Length :152 Objective Lens :45mm Magnification: :30x Power Field Of View :1°30°



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
27		Water Proof :IP 66 Angle Measuring Accuracy : 5" Angle Display-1"/5" Compensation Range : ±3' Optical Plummet Telescope Magnification :3x Display Unit-2 Side Including Tripod, Leveling Staff, Ranging Rod Survey Hammer, 100ft Measuring Tape, Plumb Bob.
28	Portable Drilling,	Mortise machine 550W Motor power Rating- 750W Output-550W,Voltage 220V Motor speed 2840 rpm Open the knives(3 Nos) 3/8",1/2 "and 5/8" Workbench size 220*160MM Maximum opening depth 128MM Drill chuck Φ1-Φ16 Bench Mortiser, Mortise Drill Chuck(up to 16mm) Tenon Cutter,Chisel Holder, four hex wrenches and a wrenches and L Key(1 Set) Mortrise Chisel Drill Bits (6mm,8mm,10mm,12mm,16mm)
29	Jig Saw	Cutting Capacity- Soft Wood 5-7/8" Cutting Capacity-Aluminum 0.875 Cutting Capacity-Mild Steel 0.375 Dust Blower, Dust Collection Height in 8.43",Hertz 60 Jig Saw Blade Type- Jig Saw T-Shank Length-14.0" Max. Bevel Capacity (°) 45.0 Max. Bevel Cut 45° No Load SPM-500-3,100 Stroke Length (in)-1.0,Tool Level- 2-Corded - variable speed intermediate Jig Saw blade(3),Splinter guard and Screwdriver



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
30	Compound Miter Saw with Complete Accessories	Max. Bevel Angles (L/R)-45° - 0° Max. Cross Cut- 60 x 310 mm Max. Mitre Angles (L/R) -45° - 0° - 45° Mitre Saw Bevel Slide -Sliding Mitre Stop Angles -0, 15, 30, 45 ° No Load Speed 5000 rpm Power Output (Watts/Kw)- 1500 W Power Supply -Electric Guide fence,Saw Blade and Tools for assembly Hex key,Material clamp and Insert plates
31	Portable Electric Hand Drill	Portable Electric Drills 110V - 60Hz . Impa : 59 10 01 - 59 10 17 . Max. Drilling Diameter : 16mm . Size : 6.5-16.0mm . No-Load Speed : 330-2700RPM . Rated Voltage :110V/220V Special : Available : 110V-60Hz), Frequency : 50 / 60Hz Rated Input Power : 305-1600W Drill bits(5 Sets) and tools for assembly
32	Portable Planner	Amperage -6.5 Height in 6.5", Length in 11.4" No Load RPM - 16,500 Planing Depth- 0" - .0625" Planing Width - 0" - 3.25" Rabbet Depth - 5/16", Rabbet Width-3-1/4" Planer Attachments and Planer Blade Dual-mount(Parallel)guide fence,Carton box,Hex key Sharpening device for HSS blade, Setting gauge for HSS blade
33	Portable Electric Grinder	Input power-800 Watt Output Power-380 Watt No Load Speed -11,000 RPM/Min Disc Diameter -4 inch Voltage -230 V Wheel Diameter -100 mm



5. Civil Engineering Test Equipment

SR NO.	Description	Specification
34	Wood Working Vise	5" Cast iron Vise clamp with workbench attached
35	Rebound Hammer	Able to test of concrete items 4" (100mm) or more in thickness, or concrete with a maximum particle size less than or equal to 1.25" (32mm). A compressive strength range of 1,450 to 10,152 psi (10 to 70 N/mm ²) Impact energy of the test is 1.6 ft-lbs (2.207 Nm) Dimensions: 33 X 10 X 10 mm Accessories consists of: Grinding Stone Carrying case
36	Wheel Barrow	Capacity-150KG Material-Metal and Portable, Compact Wheel- 12" Tyre 60D x 90W x 30H Centimeters
37	Mixing Tray	MS Sheet(1070mmx1070mm)with taper depth 70mm Total Size:1150mmx1150mmX70mm Thickness 1.5 mm
38	Tension Testing Machine for Cement Motor	TECHNICAL SPECIFICATIONS Maximum compression capacity: 50kN Maximum tensile capacity: 25kN Adjustable testing speed from 0.01 to 51 mm/minute Adjustable pace rate from 1 to 15000N/sec. Max. ram travel: 100 mm Daylight between columns: 380 mm Included Accessories LOAD CELL 10 KN CAPACITY DISPLACEMENT TRANSDUCER CALIBRATION LOAD PISTON, MARSHALL FLEXURE DEVICE 40,1X40X160MM, EN, NF, DIN TENSILE JAWS FOR MORTAR BRIQUETTE BRIQUETTE MOULD, THREE GANG SW FOR MORTAR BRIQUETTE TEST SW MORTAR FLEXURE, TOUCH SCREEN



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
39	Universal tensile testing machine (Complete Set)	Technical Parameters Max Load (kN) : 600 Max Tension Test Space (mm) : 800 Max Compression Test Space (mm) : 750 Column Effective Spacing (mm) : 400 Clamping Method : Hydraulic Automatic Clamp Flat Specimen Clamping Width (mm) : 100x100 Compression Plate Size : Ø 165 mm Grips for round specimens Ø6-13 mm and Ø13-26 mm Grips for round specimens Ø 13-26 mm Consists of accessories: 1.Electronic extensometer 2.Compression platen for Concrete Specimen 3.Tension fixer for Rebar and 4.Tension fixer for Flat Specimen 5.Bend-rebend accessories 6.Bending fixer with accessories(Span between the support roller 30:500mm) 7.Double Shear Accessories 8.Cube Mold(100mmx100mm) 6 Gaung 9.Cylinder Mold(100mmx200mm) 3 Gaung 10.Computer and Printer
40	Total Station(Complete Set)	Specification Telescope Length-171mm (6.7in) Magnification-30X/2,5" Minimum Focus 1.3m (4.3ft) Distance Measurement Laser Output Measuring Range Reflectorless 0.3 to 500m (1640ft) Reflective Sheet (1.3 to 500m) , (1.3 to 300m) , (1.3 to 100m) Mini prisms 1.3 to 500m (4.3 to 1640ft) Single Prism 1.3 to 4,000m (4.3 to 13,320ft) Accuracy - 2" Accuracy Reflectorless (2+2ppmxD) mm Reflective Sheet (2+2ppmxD) mm Prism (1.5+2ppmxD) mm Including Tripod(3nos), Prism Pole(2nos) Target Prism(2nos), Mini Prism(1set), prism sheet(1doz)



5. Civil Engineering Test Equipment

SR NO.	Description	Specification
41	Steel Straightening Machine	<p>Diameter range: 4mm to 16mm (may vary by model).</p> <p>Motor capacity ranges from 3HP to 10HP, depending on the machine's size and capability.</p> <p>Typical speed: 20m/min to 50m/min, based on material size and machine design.</p> <p>Standard input: 220V/380V, 50Hz.</p>
42	Steel Bending Machine (Seoul Bar Bender)	<p>Diameter: 6 mm to 25 mm (or up to 32 mm for larger models)</p> <p>Material: Steel, deformed bars, or rebar</p> <p>Range: 0° to 180°</p> <p>Range: 1.5 kW to 3.0 kW (single-phase or three-phase options)</p> <p>220 V / 380 V (depends on the model and regional standards)</p> <p>Typically 100 kg to 200 kg (varies with capacity)</p> <p>Around 5-10 seconds per bend</p> <p>Compact design: 500 mm × 500 mm × 600 mm (varies)</p>
43	Stirrup Bending Machine	<p>Minimum Diameter: 4 mm</p> <p>Maximum Diameter: 16 mm (some models support up to 20 mm)</p> <p>Bar Type: Plain or deformed steel bars</p> <p>0° to 180° or more (depending on the model)</p> <p>800 to 1,200 stirrups/hour (depends on the machine's efficiency)</p> <p>Voltage: 220V/380V/415V (single-phase or three-phase)</p> <p>Motor Power: 3 kW to 7 kW (depends on capacity)</p> <p>Length: ~1000 mm</p> <p>Width: ~800 mm</p> <p>Height: ~1200 mm (approximate values for portable models)</p> <p>Typically 300 kg to 500 kg (varies by model)</p>



5. Civil Engineering Test Equipment

SR. NO.	Description	Specification
44	Portable Electric Circular Saw	Rated input power 1250 W Saw blade diameter 184 mm No-load speed 5,500 rpm Saw blade bore diameter 20 mm Max. cutting capacity in wood (90°) 67 mm Max. cutting capacity in wood (45°) 49 mm Guide fence, Circular Saw Blade and Tools for assembly Hex key, Carton box and Wrench



6. Building Technology

SR NO.	Description	Specification
1	Electric Hand Grinder(Ø 4")	Voltage: 110V-240V, 230V-50Hz Motor power: 750W No-load speed: 2950/min Wheel size: (175X25X32)mm"
2	Electric Drill with vibration (Complete Accessories)	220-240 Volt Hammer Drill Power Input 800W Drilling diameter In Concrete 4-26mm In Steel up to 13mm In Wood up to 30mm No-load Speed 0-900rpm
3	Electric Drill (AC) (Complete Accessories)	Variable speed 0-1200 rpm
4	Electric Drill (DC) (Complete Accessories)	12 V Cordless Drill/Driver
5	Mixing Tray	MS Sheet(3'-6"x3'-6")with taper depth 3" Thickness 1.5 mm
6	Portable Sander	Rating Output- 250W Sanding pad diameter- 125mm Oscillating circuit diameter-2.5mm No-load speed 7,500 - 12,000 rpm Orbital stroke rate 15,000 - 24,000 opm Eccentricity 1.25 mm Sanding sheet / disc attachment hook and loop fastening
7	Portable Router	Motor speed: 30000rpm Motor power: 800W and Voltage:220V Milling cutter shank:1/4 inch or 6.35mm Trimming diameter:1/4 inch or 6.35mm Motor material: resistant copper wire motor Shell material: aluminum case Wrench ,Tools for Assembly, Compactable Collet 6mm Router Bit Set 15 pcs, Mixed 6 mm shank



6. Building Technology

SR. NO.	Description	Specification
8	Portable Drilling,	Mortise machine 550W Motor power Rating- 750W Output-550W,Voltage 220V Motor speed 2840 rpm Open the knives(3 Nos) 3/8",1/2 "and 5/8" Workbench size 220*160MM Maximum opening depth 128MM Drill chuck $\Phi 1-\Phi 16$ Bench Mortiser, Mortise Drill Chuck(up to 16mm) Tenon Cutter,Chisel Holder, four hex wrenches and a wrenches and L Key(1 Set) Mortrise Chisel Drill Bits(6mm,8mm,10mm,12mm,16mm)
9	Compound Mitre saw	Max. Bevel Angles (L/R)-45° - 0° Max. Cross Cut- 60 x 310 mm Max. Mitre Angles (L/R) -45° - 0° - 45° Mitre Saw Bevel Slide -Sliding Mitre Stop Angles -0, 15, 30, 45 ° No Load Speed 5000 rpm Power Output (Watts/Kw)- 1500 W Power Supply -Electric Guide fence,Saw Blade and Tools for assembly Hex key,Material clamp and Insert plates
10	Jig saw	Cutting Capacity- Soft Wood 5-7/8" Cutting Capacity-Aluminum 0.875 Cutting Capacity-Mild Steel 0.375 Dust Blower, Dust Collection Height in 8.43",Hertz 60 Jig Saw Blade Type- Jig Saw T-Shank Length-14.0" Max. Bevel Capacity (°) 45.0 Max. Bevel Cut 45° No Load SPM-500-3,100 Stroke Length (in)-1.0,Tool Level- 2-Corded - variable speed intermediate Jig Saw blade(3),Splinter guard and Screwdriver



6. Building Technology

SR. NO.	Description	Specification
11	Portable Electric Hand Drill	Portable Electric Drills 110V – 60Hz . Impa : 59 10 01 – 59 10 17 . Max. Drilling Diameter : 16mm . Size : 6.5-16.0mm . No-Load Speed : 330-2700RPM . Rated Voltage :110V/220V Special : Available : 110V-60Hz), Frequency : 50 / 60Hz Rated Input Power : 305-1600W Drill bits(5 Sets) and tools for assembly
12	Auto Level With Tripod(Complete Set)	Telescope Length : 215mm Stadia Ratio : 0-100 Magnification : 32X Objective Aperature : 42mm Resolving Power :3" Field of view : 1. 20' Accuracy 1km Double run level : 0.7mm Setting accuracy : 0.3" Compensation Range : 15' Minimum divison : 1.(1g) Minimum focus :0.5m/1.6ft Accessories for Surveying Instruments Aluminium Tripod (1) Aluminium Staff (1) Survey Hammer (1) 100gt Measuring Tape (1) Plumb Bob (1)
13	Welding machine(A.C Arc Welder Inverter.195 Amp)	Arc Welder Inverter Rated Input Voltage:220V Rated Duty Cycle @40°C: 60 Max. Load Power Capacity:7.1 KVA Rated Output Voltage: 32V Rated Output Current: 195 A Welding Current/Voltage Range: 0-100A Pulse Frequency: 50/60HZ"



6. Building Technology

SR. NO.	Description	Specification
14	Airconditioner	(1.5Hp) Split Type , Non-Inverter/R410a
15	Airconditioner (1Hp)	Split Type, Inverter/ R410a
16	Airconditioner 2Hp	Floor Stand Type, Non-Inverter/ R410a
17	Cutting Machine Cutter Grinder(Ø14")	Cut-Off Machine: 14 in Blade Dia., 3,800 RPM Max. Blade Speed, 220V AC, 15 A Current
18	Portable Planer machine	Amperage -6.5 Height in 6.5", Length in 11.4" No Load RPM - 16,500 Planing Depth- 0" - .0625" Planing Width - 0" - 3.25" Rabbet Depth - 5/16", Rabbet Width-3-1/4" Planer Attachments and Planer Blade Dual-mount (Parallel)guide fence, Carton box, Hex key Sharpening device for HSS blade, Setting gauge for HSS blade
19	Digital Theodolite With Tripod(Complete Set)	Telescope Length :149, Objective Lens :45mm Magnification: :30x Power, Field Of View :1°30° Water Proof :IP 66, Angle Measuring Accuracy : 9" Angle Display" 10"/20" , Compensation Range : ±3' Optical Plummet Telescope Magnification :3x , Temperature Operating Temperature :-20 to 50°C (-4 to 122°F) Dust And Water Protection : IP66 Sensitivity Of Levels Plate Level :40"/2mm, Circular Level :10'/2mm Power Supply Battery :4AA batteries, Battery life :250 hrs Weight :4kg Accessories for Surveying Instruments Aluminium Tripod (1), Aluminium Staff (1) Survey Hammer (1), Measuring Tape (1) Plumb Bob (1)



7. Electronics Technology

SR NO.	Description	Specification
1	Analog Multi-meter	<ul style="list-style-type: none"> - AC Voltage : 10V /50V/250V/1000V - DC Voltage : 2.5V to 1000V - DC Current: 50uA to 10A - Resistance :1/10/100/1k/10k - Power: 1.5V AA × 2, 9V 6F22 * 1(NOT INCLUDED)
2	Variable DC Power Supply	<ul style="list-style-type: none"> - Output Power: 300W - Output Current: 0-10A - Output Voltage: 0-30V - Dual Channel - Include Short Circuit Protection
3	Charger/Inverter with Battery	<ul style="list-style-type: none"> - Power: 3000W - Inverter: Output 220Vac, 50Hz, Input 12Vdc - Charger: Input 220Vac, Output 12V DC - Battery type: Lead Acid Battery - Low battery alarm: 10.5Vdc - Modify sine wave output - Accessories: Battery cables, AC power cord
4	Battery 120 Ah	<ul style="list-style-type: none"> - Norminal Voltage: 12V - Norminal Capacity: 120Ah - Lead Acid Battery - Conventional Type
5	Variable Transformer (Variac)	<ul style="list-style-type: none"> - Single Phase 0-250V, 3KVA
6	Hot Air Soldering Rework Station	<ul style="list-style-type: none"> • Power: 700W • AC 220V • Temperature: 100-500°C • Air flow rate: 100L/min (max) • Temperature Stability: ±5°C • Accessories: Vacuum Pen Holder, 3 nozzles, AC cable
7	8 Ports Unmanaged Switch	<ul style="list-style-type: none"> - 8 x Gbit Ethernet ports, 1 x 10G SFP+ Fiber port
8	Solar Set	<ul style="list-style-type: none"> - Solar Panel Rated Maximum Power (Pm): 150W Voltage at Pmax (Vmp): 18.28V Current at Pmax (Imp) : 8.207A - Solar Charge Controller Battery System Voltage : 12V only Maximum System Current : 10A



7. Electronics Technology

SR. NO.	Description	Specification
9	Small Conveyor	Mini Conveyor (10cm*50cm) 12Vdc Motor with Speed Control
10	Arduino Strater kits	Microcontroller: Arduino Uno ESP 32 Breadboard Sensors: Temperature (digital and analog), Gas, Flame, Hall effect, Soil Moisture, Proximity (Inductive and Capacitance), Flex, Ultrasonic, Light, PIR, Humidity, Photoresistor , Potentiometers Jumper wires (male to male, male to female, female to female) LEDs (Light Emitting Diode), Relay Modules, Resistors (220 ohm, 330Ohm, 1Kohm and 10Kohm), Key Pad, LCD 16, Push buttons, bluetooth module, LED (red yellow green), Buzzer Switch,
11	CCTV Camera	Vandal proof IR Done Camera IR Distance 30M 2.8–12mm manual zoom lens 2M pixels
12	CCTV Monitor	Type : LED Screen Size : 32 inches Color : Colar HDMI Format : 4K Feature : with Remote Control Interface Type : HDMI
13	CCTV Video Recorder and Storage Device	- CCTV Video Recorder Switch type : Gigabit Switch VLAN Transmission Rate : 10/100/ 1000 Mbps Communication Mode : Full Duplex Power Input : 100–240 VAC, 50–60HZ PoE Port : 8 poe port Gigabit Power Module : Built-in Power Module - Data Storage Device (Hard Disc) Series - C800A Series Storage Type : SSD Capacity : 120 GB



7. Electronics Technology

SR. NO.	Description	Specification
14	LOGO!8 PLC and LOGO Power Supply with Desktop Computer	<ul style="list-style-type: none">• LOGO!8 DC/DC/RLY, 24Vdc, 8 inputs/4 outputs• Including Logo! Power supply, 24V, 4A Desktop Computer: <ul style="list-style-type: none">• Intel Core i7 (11th Gen), 8GB RAM, 1 TB Hard Drive, 18.5" LED Display, Keyboard , Mouse, USB, 650W SMPS,



8.Machining Technology

SR. NO.	Description	Specification
1	Oxy Acetylene Gas Welding Set (Gas Cylinder Sets Acetylene Cylinder with Regulator)	Material Steel, HP295 Water, Volume 40L -Oxygen Cylinder with Regulator Material Steel, Weight: 48KG Oxygen Cylinder Volume: 40L
2	Argon Cylinder with Regulator	Material ;Steel, Weight: 48KG Argon Cylinder Volume: 40L
3	CO2 Cylinder with Regulator	Material Steel, Weight: 48KG CO2 Cylinder Volume: 40L
4	UNIVERSAL MILLING MACHINE(Combined Attachments & Accessories)	(i)Universal Indexing Head & Tail Stock (ii) Drill chuck, draw bar, Allen Wrenches, (iii) Wedge, tool box & tools, Machine stand HSS End Mill (4 flute) 6mm,8mm,10mm,12mm,14mm 16mm (1 set) HSS End Mill (2Flute) 6mm, 8mm, 10mm, 12mm, 14mm 16mm (1 set) HSS Drill 4mm to 12mm increment0.5mm(1Set) Carbide End Mill 6mm,8mm,12mm (2set) (iv) Workpiece; Aluminum(L4"xW4"xH1") 10Nos Workpiece; Engineering Plastic(L4"xW4"xH1") 10Nos Workpiece; Mild Steel (L5"xW5"xH1") 20Nos (v) Machine Vise 1 No (vi) Collet chuck 1 set Table travel (x, y, z) 680 x 300 x 380 mm Voltage- 1 Phase (220 v- 250 v) Machining capacity- Heavy Duty Spindle taper - ISO40 Range of spindle speed (r.p.m) -40 - 1300 r.p.m Weight (kg)- 1500 Max. table load (kg)-350 kg Dimension(l*w*h)- 1500*1650*2200 Main motor- 2.2kw(V); 2.2kw(H) CE ISO9001 Weight- 1450/1500 kgs Power- 2.2KW (V); 2.2KW (H) Usage- Universal Turret Milling



8.Machining Technology

SR. NO.	Description	Specification
5	Spot Welding Machine	Max. Welding Thickness (mm): 2+2 Input Voltage: 230 V Rated Power: 2.3 kW Max. Absorbed Power: 13 kW Dimensions: 440x110x185 mm
6	TIG Welding Machine	TIG welding with complete set and accessories Input Voltage 380/400V AC; 208V AC; 220/230/240V Maximum Amperage (Stick)300/500 A Maximum Amperage (TIG)315 A Maximum Input Current20.5 A @ 230V; 26.5 A @ 115V Minimum Amperage (Stick)10 A Minimum Amperage (TIG)10 A Open Circuit Voltage80V DC
7	Lathe Machine	Max. Length of Work (mm): 1000mm, Spindle Speed(r.p.m): 70–2000 rpm Spindle Bore(mm): 38mm, Width of bed (mm): 186, Max. Turned Length (mm): 1000mm, Spindle Motor Power(kW): 1.5,Max. Swing Diameter: 330mm, Voltage: 220v~240v
8	MIG Welding Machine	MIG Welding Machine (Complete Set) A.C 220–240 Max. Wire Dia. 0.035in/0.8 to2mm (Solid) 0.045 in/1.2/1.5mm (Flux–Cored) Maximum Amperage (MIG)500 A Minimum Amperage (MIG)30 A Minimum Wire Diameter0.025 in (MIG–Steel); 0.030 in/2mm/2.5mm (Flux–Cored)



8.Machining Technology

SR NO.	Description	Specification
9	Plasma Cutting Machine	Max; Cutting Thickness: 15mm Air Pressure(KG): 4.0-4.5 Input Power Volt: AC 220 50/60 Hz+_10% Rated Input Capacity: 7.8 KVA Rated Output Voltage: 100 Output Amp; Range: 10-50 No-load Voltage: 260 Rated Duty Cycle %: 60%



9. Electrical Technology

SR. NO.	Description	Specification
1	LOGO Expansion Module	4 Input 2 Output OBA2 INPUT 4 × DC OUTPUT 4 × Relays/ 5A
2	Single Phase Capacitor Start, Capacitor Run Induction Motor	220V ,2HP ,1800 RPM ,2HP
3	Automatic Winding Machine	(Digital Display) (AC/DC)
4	LOGO!8 (230 RCE) With Desktop Computer	-230RCE, TDE, HMI Aviable, Ethernet Cable, -(LOGO soft V 8.2& V8.3) ,(LWE soft), 8/4- I/O -(Relay type) Capacitive Sensor (PNP), Inductive Sensor(PNP), Photo Electric Sensor -Computer Specification ; Core I7,11Gen, -SSD 500,Ram 8 GB,LED 19"



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

NO.	Description	Specification
1	<p>1.Electronics Engineering Test Equipment</p> <p>Analog Multimeter</p>	<ul style="list-style-type: none"> • AC Voltage : 10V /50V/250V/1000V • DC Voltage : 2.5V/10V/50V/250V/1000V • DC Current: 100uA/2.5 mA/25mA/250mA/2.5A • Resistance :1/10/100/1k/10k
2	Digital Multimeter	DC Voltage: 60mV~600V, AC Voltage: 60mV~600V, DC Current: 600uA~10A, AC Current: 600uA~10A, W: 600W~6MW
3	Variable DC Power Supply	<ul style="list-style-type: none"> - Product Type : APS DC power supply - Product Weight : 3.9KG - Product size : 150 × 160 × 260 (L × W × H) mm <p>Specifications</p> <p>Rated output value</p> <ul style="list-style-type: none"> - Voltage : 0 ~ 30V - Current : 0 ~ 5A <p>Voltage Regulation</p> <ul style="list-style-type: none"> - Line regulation : ≤ 0.05% +3 mV - Load regulation : ≤ 0.1% +3 mV (rated current ≤ 3A)≤0.1% +5 mV (rated current > 3A) - Ripple noise : ≤ 3mVrms (5Hz ~ 1MHz) <p>Current regulation</p> <ul style="list-style-type: none"> - Line regulation : ≤ 0.2% +3 mA - Load regulation : ≤ 0.2% +6 mA
4	Regulator(AC)	<ul style="list-style-type: none"> • Input Voltage: 220 V AC (single-phase) • Output Voltage: 0 – 250 V AC (adjustable) • Frequency: 50/60 Hz • Output Current: Usually depends on the model (commonly 2A, 5A, 10A, etc.) • Display: Digital voltmeter (shows output voltage) • Control: Rotary dial for voltage adjustment • Protection: On/off switch with fuse protection • Socket: Single AC output socket • Cooling: Ventilation slots on the casing (natural air cooling)



10. Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
5	Oscilloscope	<ul style="list-style-type: none"> - 2 Channel Bandwidth 25 MHz - Sample rate: 250Ms/s - Rise time £ 14 ns - Vertical sensitivity 1mV/div~20V/div -Time-Based Range - 10ns/div~50s/div - Trigger Modes - Edge, Pulse, Video, Alternate - Interface - USB OTG, Pass/Fail Bandwidth 100MHz Real-time Sampling Rate 1 GS/s Screen Resolution 800 x 480 Rise Time Less than 3.5nS Horizontal Resolution 2ns/div ~ 1,000s/div Vertical Resolution 5mV/div ~ 5V/div Signal Resolution 8 Bit Maximum Input Voltage 400V (PK - PK)(DC+AC, PK-PK) DC Gain Accuracy ±5% Trigger Accuracy ±0.3 div
6	Function Generator	<ul style="list-style-type: none"> Complete dual channels function/arbitrary waveform generator -Channel independence, coupling, track working mode -200 MSa/s sampling rate and 14-bit vertical resolution per channel -Output of 6 standard waveforms, built-in 50 kinds of arbitrary waveform -Multi modulation function: AM, DSSC - AM, FM, PM,PWM, FSK, ASK -BPSK and logarithm/linear sweep Power Supply DC5V±0.5V Puls Width Adjustment 25nS~4000S Suqare Wave Rise Time ≤10ns Frequency Accuracy ±20ppm Wave Form Vertical Resolution 14 bits Square wave and pulse wave Size 194mmx178mmx69mm



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR NO.	Description	Specification
7	Digital Lab Unit	High level , high quality digital-analog trainer with removable breadboard, DC power supply, function generator two pulse switches, 2 1/4 inch 8 ohm 0.25W speaker and etc., Clock pulse Output :1,5,10,100, 1K Hz 7 Segment: 2
8	Analog Lab Unit	-Fixed DC: +5V, +12V, -12V -Maximum Current Output: 0.3A -Dual DC Power Supply: 0 ~ +25V and 0 ~ -25V -adjustable AC Power Supply -Voltage Range: 2V-0V-2V, 12V-0V-12V, 15V-0V-15V -Maximum Current Output: 500mA -Function Generator: -Output Waveform: Sine, Square, Triangle and TTL -Output Frequency: up to 100KHz in five steps
9	NI Elvis II Board	NI ELVIS II Board + Labview Multisim + ultiboard (CircuitDesign Suite) + Analog Device Part Kits + Laptop Computers with Preinstalled Software,
10	Digital Logic trainer	Power Supply: Supplies - +5V/1A, ± 12V/1A Ripple - Less than 1mV Regulation - Less than 0.1% Special Features: Protection - Protection against load & short circuit Display - 2 Digit BCD to Decimal Display TTL Clocks - 1Hz to 1MHz Indication of Outputs - Single/ Dual Color High Intensity LED Monopulse - High & Low Physical Parameters: IC Sockets - 4 Nos. 16 pin ZIF sockets 680 pin bread board Logic I/P and O/P - 12 Nos. Dimension of Terminals - 2mm Sockets Dimension of the Unit: 320mmX320mmX110mm Weight: 5 Kgs. Accessories: Fuse 1A



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR NO.	Description	Specification
10		Patch Chords 24 Nos. Manual 1 No. Digital IC (NOT, AND, OR, NAND,NOR,XOR, SRflip flop, jk flip flop, XNOR, MULTIXER AND DEMULTIXER, COUNTER, SHIFREGISTER
11	AC to DC converter	Dimension: 14.8cm x 6cm x 3.5cm 3V~36V 4A 144W Universal Power Supply 3V 5V 6V 9V 12V 15V 18V 20V 24V 30V 36V Adjustable Variable Switching AC/DC Adapter, 100V-240V AC to DC Converter with 14 Tips & Polarity Converter & Test Lead
12	Digital circuit Fundamental Trainer	<ul style="list-style-type: none"> - Clock - Pulse Generator - Counter - Multiplexer/Demultiplexer - BCD Decimal Decoder/BCD Priority Encoder - ADC/DAC - 7-Segment Driver/Display - Parity Generator/ Checker - Input Signals - 4-bit Shift Register - Asynchronous Ripple Counter - 4-bit Adder - Synchronous Counter - 4-bit Comparator - +5 V regulated supply, Built-in - clock circuit pulse generator circuit counter circuitry - regulated supply, Manual input signal control,
13	Manual Base Unit With Built In Power Supply	LabVolt Series 91000-3X(FESTO) Power Requirements Service Installation- Standard single-phase ac outlet Voltage - 100-250 V ac Current - 0.4-0.65 A Frequency - 50/60 Hz Physical Characteristics Intended Location- On a table able to support the



10. Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
13		weight of the equipment Dimensions (H x W x D)- 152 x 305 x 356 mm (6 x 12 x 14 in) Net Weight- 3.1 kg (6.9 lb)
14	Digital Clamp Meter(UT203)	DC Voltage: 400mV / 4V / 40V / 400V / 600V - best accuracy: +/- (0.8%+1) AC Voltage: 4V / 40V / 400V / 600V - best accuracy: +/- (1%+5) DC Current: 40A / 400A - best accuracy: +/- (2%+3) AC Current: 40A / 400A - best accuracy: +/- (2.5%+5) Resistance: 400 Ohm / 4 kOhm /40 kOhm /400 kOhm / 4 MOhm / 40 MOhm -best accuracy: +/- (1%+2) Frequency: 10Hz - 1MHz - best accuracy: +/- (0.1%+3)
15	Digital Bench Type Multimeter	DC Voltage (V) - 200mV/2V/20V/200V/ 1000V - AC Voltage (V)- 2V/20V/200V/1000V - DC Current (A) - 200μA/ 2mA/ 20mA/ 200mA/ 10A - AC Current (A) - 2mA/20mA/200mA/10A - Resistance(Ω)- 200Ω/ 2kΩ/ 20kΩ/ 200kΩ/ 2MΩ/ 20MΩ - 200Ω/ 2kΩ/ 20kΩ/ 200kΩ/ 2MΩ/ 200MΩ - Capacitance (F) - 20nF/2μF/200μF - Frequency (Hz) - 2kHz/ 200kHz -Temperature(°C) - 40 °C ~ 1000 °C
16	Solar Crimping Tool Kit	Solsop Solar Crimping Tool Kit for Solar Panel Cable -14-10 AWG with Wire Stripper, -10 Pairs Connectors, -2 Pair Solar Connector Spanner Wrench - Handle Material with High Carbon Steel -Crimping Range- 2.5/4/6 mm2 -Length-21.5cm/8.77 inch -Weight-448.6g



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR NO.	Description	Specification
17	Micrometer	Range: 0-25mm Resolution: 0.001mm Accuracy: ± 0.002mm Parallelism: (2+L/100) μm, L = max. range (mm) Measuring Force: 5-10N Measuring face: Carbide-tipped, micro-lap finish Measuring Spindle:With spindle lock,6.35mm diameter Spindle pitch: 0.5mm Scale: Thimble and sleeve satin chrome finish, ø18mm Ratchet stop Analogue Metric
18	Battery 12V, 8AH	Solar Battery -12V - 8AH
19	Pulse Width Modulation Charge Controller	IC charger PWM N1210 Battery Voltage-12V 24V Auto Charging Current -10A Discharging Current -10A Max Solar input-50V(for 24V battery) 25V(for 12V battery) Equalization-14.4V(Sealed) 14.2V(Gel) 14.6V(Flood)Float charge-13.7V(default,adjustable) Discharge stop- 10.7V(default,adjustable) Discharge reconnect- 12.6V(default,adjustable) USB output-5V/3A Self- consume-<10mA Operating temperature--35°C~+60°C
20	Maximum Power Point Tracking Charge Controller	EASUN MPPT Controller 50Ah -12/24V Auto -Dual USB 5V/2A - Maximum Voltage -50VDC -Max PV Input Power; 12V- 1,200W 24V- 2,400W
21	Inverter	(300W)
22	Solar Module	(12V/40W)
23	Solar Module	(24V/100W)



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
24	Pyranometer Solar	Solar radiation sensor -LPPYRAS -Typical Sensitivity-6 to 11 $\mu\text{V}/(\text{W}/\text{m}^2)$ -Impedance- 5 Ω +50 Ω -Measuring range- 0÷2000/4000W/m ² Viewing Field- 2 π sr Spectral range (50%)- 283nm ÷ 2800nm Operating and storage temperature range- -40°C÷80°C Weight-0.90kg
<u>2.Electrical Power Engineering Test Equipment</u>		
25	Electric Hand Drill	AC 220V, 650W, with drill bit set
26	DC Cordless Drill	DC 12 V, 3Ah, with extra battery and screw bit set
27	AC Single Phase Motor	2HP,220V , 3000 RPM (Induction Motor)
28	AC Three Phase Motor (Induction Motor)	2HP,220-440 V (Star-Delta) , 3000 RPM
<u>3.Information Technology Equipment</u>		
29	Variable DC Power Supply	(DC 0 to 30V variable dc) Input voltage: 220 VAC/ 50Hz Adjustable Output Voltage: 0 ~ 30V Current: 0 ~ 5 A 4-Digits LED Display, 5V/2A USB Interface Load Regulation: <0.01% + 3mV Line Regulation: <0.01% + 3mV Ripple & Noise: <1mVrms
30	Function Generator	-Bandwidth : 100MHz 2CH Function Generator -sampling rate of 500MSa/s. -Function Generation -Arbitrary Waveform Generation -Pulse Generation -Analogue / Digital Modulation -Supported modulation... AM, FM, PM, ASK, FSK, PSK, BPSK, QPSK, 3FSK, 4FSK, OSK & PWM -Power cord -USB cable -BNC cable with crocodil clips



10. Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
31	Oscilloscope	<ul style="list-style-type: none"> - 2 Channel - Bandwidth 200 MHz - Sample rate: 1Gs/s - Rise time : $\leq 1.7\text{ns}$ - Vertical sensitivity 1mV/div~10V/div - Time-Based Range - 10ns/div~50s/div - Trigger Modes - Edge, Pulse, Video, Alternate, Slope - Interface - USB OTG, Pass/Fail
32	Mikrotik Router	<ul style="list-style-type: none"> Dual-Concurrent 2.4/5GHz AP Wireless 2.4 GHz standards 802.11b/g/n Wireless 5Ghz standards 802.11a/n/ac Five Ethernet Ports PoE-out on port 5 USB for 3G/4G support CPU core count 1 Size of RAM 64MB Storage size 16MB Operating System Router OS Support advanced features like VPN, firewall with NAT, advanced routing, bandwidth shaping, VLAN, QoS, and Network monitoring tools through Router OS. Support RADIUS Bridge for a variety of services including PPP, Hostpot, Wireless and more.
33	LAN Trainer	<ul style="list-style-type: none"> PC to PC communication with IEEE 802.3 Peer to Peer network Client - Server network Design of Star topology using 100Base-Tx Design of Bus topology using 10Base-2 Design of Ring topology using DB9 Simulation of Distance Vectors and Link State Algorithms Socket Programming exercise for LINUX Encryption/Decryption Technique User can send any file over LAN. Detailed introduction to TCP/IP Model (4 Layer Model) Video Tutorials for software operation Creation of cables for network connections



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
33		<p>Network design using RJ45 & DB9 connectors</p> <p>Socket programming and processing</p> <p>Wireless LAN with 803.11b/g</p> <p>Network monitoring</p> <p>Various LAN Protocols</p> <p>Data rate up to 100Mbps</p> <p>Variable packet size</p> <p>Variable packet delay</p> <p>Error generation (Manual and Auto)</p> <p>Color coded real time graphical representation of entire transmission & reception</p> <p>Graphical Analysis of LAN performance with various parameters and protocols</p> <p>Save / Print option for graphs</p> <p>User friendly software</p> <p>Switch faults in both hardware & software</p> <p>Exhaustive course material & references</p> <p>On Board Touch Switch</p>
34	Netwrok Printer	<p>Supercharged performance for home office</p> <p>Fast color print, copy, scan, fax, 2-sided prints, mobile/wireless/ethernet</p> <p>Print up to 20 pages per minute</p> <p>HP's most reliable wi-fi and HP Wolf Essential Security</p> <p>Dynamic security enabled printer</p>
35	Media Converter	<p>Fiber Media Converter – 100Base-FX, SC Single mode,20km, 1310/1550nm</p>
36	Cisco Router	<p>Processor: Multi-core CPU</p> <p>Memory: Minimum 512 MB DDR2 DRAM, expandable to 2 GB</p> <p>Flash Memory: Minimum 256 MB, expandable to 8 GB</p> <p>Ethernet Ports: 3 x 10/100/1000 Gigabit Ethernet ports</p> <p>Enhanced High-Speed WAN Interface Card (EHWIC) Slots: 4</p> <p>Service Module Slots: 1</p> <p>Internal Services Module (ISM) Slot: 1</p> <p>USB Ports: 2 USB 2.0 ports</p> <p>Routing Protocols: Support for RIP, EIGRP, OSPF, BGP,</p>



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
36		IPv4, IPv6 Static Routing: Supported Default Routing: Supported Dynamic Routing: Supported Network Address Translation (NAT): Supported DHCP Server: Supported VPN: Support for IPsec, SSL VPNs Firewall: Stateful inspection firewall QoS:Traffic prioritization and bandwidth management Management Interface: Console port , auxiliary port, USB port including console cable Web-based GUI:Cisco Configuration Professional(CCP) CLI: Command-Line Interface via console or SSH SNMP: Supported for remote management Syslog: Supported
37	Cisco Switch	Port Count :24 x 10/100/1000 Mbps Ethernet ports Uplink Ports: 2 or 4 x 1G/10G SFP/SFP+ (Fiber or Copper) PoE Support: PoE+ (IEEE 802.3at) – For IP Phones, Wireless APs, CCTV Switching Capacity: ≥ 56 Gbps Forwarding Rate:≥ 41.67 Mpps (for 24 ports) Layer Support:Layer 2 with Basic Layer 3 (Static Routing) VLAN Support:802.1Q VLANs (≥ 64 VLANs) QoS:802.1p, DSCP-based, bandwidth control Security Features:802.1X, DHCP Snooping, DAI, Port Security, ACLs Redundancy:STP,RSTP,MSTP,LACP(Link Aggregation) Management: CLI (via SSH/Telnet), SNMP v1/v2c/v3 Logging & Alerts Syslog, SNMP Trap, Email Alert Power Supply:Internal or Redundant Power Supply (RPS) optional NOISE LEVEL: 1 address (for quiet office) or LOW-NOISE MODELS Mounting:Rack-mountable or Desktop depending on size



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
38	Desktop Computer	Processor: -14th Generation Intel® Core™ i7-14700 Processor(E-cores up to 4.20 GHz P-cores up to 5.30 GHz) Memory: 8 GB DDR5-5600MT/s (UDIMM) Storage: 512 GB SSD M.2 2280 PCIe Gen4 QLC OS : Windows 11 Pro License Office 2019 Professional Plus License Graphic: Intel® Arc™ A310 4GB GDDR6 At Least: 1 x HDMIOutput and 1 x DisplayPort Output Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1 Front Ports 1x USB-C (USB 5Gbps / USB 3.2 Gen 1), with 15Wcharging 4x USB-A (USB 5Gbps / USB 3.2 Gen 1), 1x headphone / microphone combo jack (3.5mm) 1x microphone (3.5mm) Rear ports 4x USB-A (Hi-Speed USB / USB 2.0) 1xHDMI 2.1 TMDS 1x VGA 1x Ethernet (RJ-45), 1x line-out (3.5mm) 1x DisplayPort 1.4 a (HBR2) 1x parallel* 2x PS/2* 2x serial* USB Keyboard & Mouse
39	4.Mechanical Engineering Test Equipment Gas Tungsten Arc Welding Machine(GTAW) with accessories (with Argon gas cylinder)	Material / Metal Processed; Carbon Steel, Stainless Steel, alloy steel Rated Input Voltage; 220 V Max. Load Capacity; 7.5 kVA Output Polarity; DC TIG, Rated Duty Cycle @40°C (TIG); 60% Rated Output Current (TIG); 170 A Rated Output Voltage (TIG); 60 V Arc Current; 10~170A Pilot Arc Current; 10~170A
40	Gas Metal Arc Welding Machine (GMAW) with accessories (CO2 Gas Cylinder)	Material / Metal Processed; Carbon Steel Input Voltage(V); 1PH AC 220V ± 15% 50/60Hz Input Curret(A); 32.7 Input Power Capacity (KVA); 7.2



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
40		Out Current Range(A); MIG:50–200, MMA:20–160 No-load Voltage(V); 65 ± 5 Rated Duty Cycle (%) @40°C ; 35 Efficiency; 85 Power Factor (Cos Ø); 0.73 Electrode(mm); 1.6–4.0 Wire(mm) ; 0.6/0.8/1.0 Wire feeding Speed(M/Min); 0.5–13 Optional Accessories –CO2 Regulator with Heater –Coil- (0.8mm, 1 mm) –1 nos (15 Kg)
41	Universal Material Testing Machine	–Flat Jaw Dia (0–12) mm –Round Jaw Dia (5–10) mm, (10–20) mm – Desktop Computer Core i7 8G 512 SSD –Colour Printer –Software –Standard Specimens (Round bar, Flat bar) –Plate (Standard size) –L Key (1)Set –Tool Box (1)Set –Technical Manual Book –Operation Manual Book –Circuit Diagram/Wiring Diagram
42	Conventional lathe machine	Max.swing over bed: 500mm Max.swing over cross, slide:325 mm Valid length of gap:260mm–Spindle Nose:ISO–C6 or ISO D6 Max.length of workpiece 1000mm Spindle speeds (Number): 22–1800 rpm (15 steps) Cross-section size of toolshank:25*20mm Travel of tailstock sleeve: 120mm–Main drive motor:5.5Kw –Turning, Parting, Boring, Threading 5 set –Ball Center 1 no –1" Polish shaft 2' –Drill Chuck and Drill Sleeve (MT1, MT2) –L–Key one set



10. Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR NO.	Description	Specification
42		-Drill set 1 Box -Coolant Oil 5 gallons -Hydraulic Oil -Authorization Letters -Technical Manual Book -Operation Manual Book -Circuit Diagram/Wiring Diagram
43	Vertical Drilling Machine with Drilling Machine Vice	max drilling capacity 40mm max tapping capacity M27mm max distance from spindle to column 360 mm effective area of table 550x470mm main motor power 2.2 kw above Machine Vice(Rotary)-6" (or) 8" Single Phase
44	Air conditioner(1.5 hp) Inverter type	1.5 hp, split type, inverter -R32 gas
45	Rolling Forming Bending Equipment Multi-Function Pipe Bending Machine(With Stand)	Mild Steel and Electric 3 Roller Type Round Ring Pipe Bending Machine Bending Wall Thickness 0.5--3mm Bending Radius 20mm Spindle Speed15 R/mm Secondary Shaft Speed20r/mm Motor2.2kw above (Forward,Reverse) Body Size710x540x960mm Transport Package Wooden Case Specification 230kg Single Phase
46	Indexing head and Gear Cutter	DP system 8 pcs (inches scale) module system 8 pcs Bt 40, Arbor Shaft 25.4, 28, 32 bore, Tailstock, Gear trail (gaer 8 nos) , HSS, Plate 3nos
47	Hexagonal Work Bench with 4"Vice(Set)(Heavy Duty)	(3ftx2.5inchesx3ft) Worktop (W x D): 3ft x 3ft Worktop thickness: 2.5 inch



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
48	<p>5.Industrial Engineering Test Equipment</p> <p>Analog Trainer</p>	<p>Bread Board with $\pm 5V$ to $\pm 12V$ DC Supply</p> <ul style="list-style-type: none"> - Output Indicators (16 Nos) - Potentiometer, Input Switches - Function Generator (1- 100kHz) - Output Speaker - Connection Wire (Jumper Wire) - Digital Gate ICs with Base
49	<p>6.Civil Engineering Test Equipment</p> <p>Total Station(Complete Set)</p>	<p>Specification</p> <p>Telescope Length-171mm (6.7in)</p> <p>Magnification-30X/2,5"</p> <p>Minimum Focus 1.3m (4.3ft)</p> <p>Distance Measurement Laser Output</p> <p>Measuring Range</p> <p>Reflectorless 0.3 to 500m (1640ft)</p> <p>Reflective Sheet(1.3 to 500m),(1.3 to 300m), (1.3 to 100m) Mini prisms 1.3 to 500m (4.3 to 1640ft)</p> <p>Single Prism 1.3 to 4,000m (4.3 to 13,320ft)</p> <p>Accuracy - 2"</p> <p>Accuracy Reflectorless (2+2ppmxD) mm</p> <p>Reflective Sheet (2+2ppmxD) mm</p> <p>Prism (1.5+2ppmxD) mm</p> <p>Including Tripod(3nos), Prism Pole(2nos)</p> <p>Target Prism(2nos), Mini Prism(1set), prism sheet(1doz)</p>
50	<p>Vicat apparatus with complete accessories</p>	<p>The instrument consists of a metallic frame, graduated scale with index, sliding probe of 300 g, consistency plunger $\varnothing 10\text{mm}$, glass base plate x 2 Nos</p> <p>Consists of:</p> <ol style="list-style-type: none"> 1.Initial Needles x 2 sets (ASTM , EN) 2.Final Needles x 2 sets (ASTM , EN) 3.Cornical Needles 8mm 4.Vicat Mould x 2 nos (ASTM , EN) 5. Stop watch



10. Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR NO.	Description	Specification
50		6. Beaker 7. Graduated cylinder 8. Standard Spatula 9. Thermometer 10+50°C
51	Slump Test of Concrete	The slump cone, complete set, is ideal for laboratories and includes: Accessories 1. Slump Cone, stainless steel made 2. Tamping rod, galvanized steel, dia. 16x600 mm 3. Slump Cone funnel, galvanized steel 4. Graduated slump scale engraved in 0.5 cm increments with sliding measuring rod 5. Base, galvanized steel, complete 6. Aluminium scoop, 500 cc capacity 7. Fine wire brush
52	Sieve Shaker with Sieve	It accepts sieves having diameter 200 – 250 – 300 mm, and 8”...12”. This simple and low cost Sieve Shaker is activated by an electric motor and can hold up to 8 Sieves plus Ø 200 mm pan and lid. Provided of timer 0 – 60 minutes. Power supply: 230V 1ph 50Hz 110W Dimensions: 350x400x950 mm Opening Sieves 20 Nos(200mm) with Pan Cover Opening 37.5mm, 25.0mm, 19.0mm, 12.5mm, 9.500 mm, 6.30mm, 4.750mm, 3.350mm, 2.360mm, 2.00mm, 1.180mm, 0.850mm, 0.60mm, 0.425mm, 0.300mm, 0.25mm, 0.150mm, 0.106mm, 0.075mm
53	Horizontal Mortiser	<ul style="list-style-type: none"> - Drilling width : 300 mm, Max. drilling : 140 mm - Depth at 90°, Work table : 150 mm - Height, adjustment Work table : 500 mm - Length, Work table width : 207 mm - Tool clamping : 0 – 16 mm diameter - Spindle speed (s) : 2850 min-1 - Dimensions and Weights - Length approx. : 905 mm - Width/depth approx. : 710 mm - Height approx. : 1230 mm



10. Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
53		<ul style="list-style-type: none"> - Weight approx. : 108 kg - Electrical Data - Drive motor output : 1,5 kW Mains Frequency : 50 Hz
54	Surface Planer	Dimensions and weights Length approx. : 1300 mm, Width/depth approx. : 720 mm, Height approx. : 1010 mm, Weight approx. : 210 kg Electrical Data Drive motor output : 2,2 kW, Absorbed power drive motor : 2.84 kW, Supply voltage : 230 V, Mains frequency : 50 Hz Extraction port diameter thickness : 100 mm Extraction port diameter joints : 100 mm Speed : 7 m/min Max. cutting depth : 3 mm, Planing stop pivoting range : 90 – 45 ° Planing knife shaft, Type Strip planer blade shaft Number of planing blades : 3 St, Speed : 5200 min ⁻¹ , Max. planing width : 308 mm Thickness Working height min. : 5 mm Working height max. : 225 mm Max. cutting depth : 3 mm
55	Wood Thicknesser	Jointing Infeed table length-1295 mm, Infeed table width-325 mm, Working height-850 mm, Max. cutting depth-3 mm Planing knife shaft Type-Strip planer knife, Diameter-70 mm, Number of planing blades-3 St, Speed-5200 min ⁻¹ , Max. planing width-308 mm Thickness Thicknessing table length-545 mm, Thicknessing table width-308 mm, Working height-min.5 mm, Working height max.-225 mm, Max. cutting depth-3 mm Dimensions and weights Length-1300 mm,



10. Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
55		Width/depth-720 mm, Height-1010 mm, Weight approx.-210 kg Drive output Absorbed power drive motor-2.77 kW, Main motor-2.2 kW Dust extraction port Extraction port diameter thickness-100 mm Extraction port diameter joints-100 mm Electric Data Supply voltage-400 V
56	Dust Extractor	Extraction duct inlet outside nominal width : 150 mm Extraction duct outlet outside nominal width:3 x 100mm Length approx. : 1450 mm Width/depth approx. : 800 mm Height approx. : 2000 mm Weight approx. : 48 kg Electrical Data Motor input : 2,2 kW Supply voltage : 230 V Mains frequency : 50 Hz Rated volume flow : 3910 m ³ /h Max. negative pressure : 1950 Pa
57	Universal tensile testing machine (Complete Set)	Technical Parameters Max Load (kN) : 600 Max Tension Test Space (mm) : 800 Max Compression Test Space (mm) : 750 Column Effective Spacing (mm) : 400 Clamping Method : Hydraulic Automatic Clamp Flat Specimen Clamping Width (mm) : 100x100 Compression Plate Size : Ø 165 mm Grips for round specimens Ø6-13 mm and Ø13-26 mm Grips for round specimens Ø 13-26 mm Consists of accessories: 1. Electronic extensometer 2. Compression platen for Concrete Specimen 3. Tension fixer for Rebar and 4. Tension fixer for Flat Specimen



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
57		5.Bend-rebend accessories 6.Bending fixer with accessories(Span between the support roller 30:500mm) 7.Double Shear Accessories 8.Cube Mold(100mmx100mm) 6 Gaung 9.Cylinder Mold(100mmx200mm) 3 Gaung 10.Computer and Printer
58	7.Farm Machinery Bottom plows	<ul style="list-style-type: none"> - Twin Bottom Plow - Moldboard blades: 14 in. - Steel bar frame: 1 in. x 4 in. - Tractor HP compatibility: 18 - 50 HP - 3 point category hitch 1 with lift pins - Paint finish: Powder coated - Weight: 258 lbs
59	Chisel plows	Power Source: Tractor Operation: Soil Preparation Machinery, Continuous Running Operation Traction Type: Hanging Drive Type: Tractor Driven Subsoiler Certification: CE, Color: Red Specification: 7 legs chisel plow
60	Rotary cultivators	Farming Policy: Dry Cultivating Machinery Power Source: Tractor Operation: Arable Machinery Traction Type: Hanging, Drive Type: Gear Drive Arbor Configuration: Vertical Shaft, Color: Red Transport Package: Steel Frame, Specification: 2m
61	Sprayers	Specifications: Engine Type: Four-Stroke Petrol Engine Tank Capacity: 15 Liters Pressure: High Pressure Weight :15000 g, HSN Code: 84248200



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
62	Mould board plow	Frame: 100mmx25mm flat Drawbar Tube: 40mmx80mm Tyne: 25mm, Length: 6ft 1", Height: 3ft 5" Blade: 10mm, Mould Board: 8mm Bar Point: 40mmx25mm bar(Forged) 3 Point Linkage Connecting Flat: 12mm (MS Flat) Width of Cut: 25", Depth of Cut: 7"-10" Tractor Power: 35-40HP
63	Harrows and Leveler	weight: 1250, use: disc harrow dimension(l x w x h): 1730mmx1350mmx800mm Working Width: 2.2m, Working depth: 180-200mm Quantity of disc: 20pcs, Disc diameter: 660mm Matched power: 70-100HP, Linkage: Trailed Power source: tractor drive
64	Centrifugal pump (3" dia)	Max Flow Rate: Customized Power Source: Electric Head: Head range Up to 88 meter Type of end use: Agricultural
65	Vertical turbine pump	Head: Up to 240 meters, Frequency: 50Hz / 60Hz availability Product Type: Vertical Turbine Pump Dimension A: 1100 mm, Dimension B: 1100 mm Dimension D: 1526 mm, Dimension N: 720 mm Dimension L : 2200 mm, Weight: 4800 Kg Delivery Size: Up to 2200 mm, Capacity: Up to 55000 m3 /hr
66	Submersible pump	Power: 5 HP, Head: 50 Meter Max Flow Rate: 250m3/hr, Voltage: 230 V Frequency: 50 Hz, Horse Power: 1 HP Phase: Three Phase
67	Propeller pump	Pump Head: up to 9 meter Max Flow Rate: Up to 20,000 m3/hr Material: Cast Iron, Austenitic Stainless Steels, Duplex Alloys, Nickels, Nickel Chrome Alloy other alloy Size: 6 - 40" inch



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
68	Jet Pump	Power: 1 HP, Pump Type: Jet Pump Material: Mild Steel Discharge Pressure: 2500 LPM, Color: Green Phase: Single Phase Pressure: 10 Bar, Motor Phase: Single Frequency: 50 Hz, Motor Speed: 2900 RPM Voltage: 240 V
69	Reciprocation pumps	Type: Reciprocating Pump Piston Pump
70	Tractor Rear Axle	Complete Axle for John Deere Utility Tractors
71	Tractor brake system Training panel	Power requirements : 110V @ 20 amps or 220V @ 10 amps (specify when ordering). Sturdy powder coated metal stand with two locking swivel and two fixed casters. Dimensions : Height: 51 Width: 24 Depth: 50 (127.5 x 60 x 125 cm). Weight : 325 lb (147.7 kg).
72	Tractor Front Axle	Max; Engine Power: 70HP Flange to flange distance: 1450mm Steering sensor: Optional Differential: Open/Limited slip/Hydraulic lock Peak torque at wheels: 14kNm Dynamic load capacity: 28kN Static load capacity: 70kN
73	Training panel for Steering system of tractor	Component List: -Meritor axle
74	Training panel for Hydraulic system of tractor	The Hydraulic Systems Principles Trainer Voltage availability 220-240V Additional specifications Hydraulic power pack, Hydraulic cylinder 4/2 way DCV, Hand lever valve, Pressure relief valve Pressure gauge, Hydraulic hose (2-3 feet) T - Junction enough, Base mounting enough 5/3 way manual directional valve



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
75	Tractor Electrical/ Electronic system Training Panel	Technical specifications Power supply~220 50Hz (single-phase 220V 50Hz) Power consumption, kW, max: 2 Stand overall dimensions, max: Width, mm:1000, Height, mm:1470 Length, mm:2000, Weight, kg, max: 180
76	<u>8.Food Technology</u> Hygrometer	Temperature Humidity Meter (-10°C-100°C)(0%RH-100%RH)
77	Perforated Trays	Stainless steel, large size, shape- square, Outer dimension~Approx. 365 x 155 x 140 mm (Bottom Approx. 302 x 151) mm Inner dimension~300x150x100 mm Hole distance~10mm
78	Kitchen Weighing Scale	MAX:3000g d=0.1g
79	Cooking pot	Capacity: 7 litres minimum total inner volume Material: stainless steel (or aluminium where specified in contract) Diameter: min 250mm, max 280mm internal diameter Thickness: min 0.8mm in the center of the bottom and minimum 0.6mm at 20mm from the top of the wall (aluminium min1.75mm) Handles: 2 stainless steel handles, attached with leakage-proof rivets, or welded, bent upward
80	Blanching basket	Size: 8" / 20cm
81	Large bowl(ice bath)	minimum depth of 10-12 inches (25-30 cm) Capacity- 10-15 liters
82	Mixing Vessels	10L Lab Vacuum Emulsion Mixing Tank for Dressing Jam and Sauce
83	Hot water bath ice cream making machine	cooling capacity 22-28L/H Refrigerant R22/R404a Power-1800W, Loading Capacity-27pcs/54pcs
84	Electric Mixer	5L 300W Electric Mixer Machine Kitchen Equipment Cake Bread Cream Food Mixer Dough Mixing Machine



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
85	Incubation Jar	Hermetic Jar, 1 stack of 12 Petri dishes, Colored stainless steel clamp, 90 to 100 mm(petridish diameter), 245 × 215 × 395 mm (packaging dimension)
86	Wine Fermentor	1.0 Liters to 15.0 Liters / 250ml to 10.0 Liters, Whole Glass/ double jacketed vessel Table Top, Autoclavable type with SS316L Flange, 230V+ 10%, AC,50 Hz
87	Fermentation lock Bubbler airlock	
88	Siphoning Unit	food-grade plastic
89	Manual Sausage Filler	7L, food-grade stainless steel, Vertical, number of filling tubes -4
90	Deep Fryers	Temperature control 190 ° C/ stainless steel/ 230V/50Hz/1Phase or 400V/50Hz/3Phase
91	Blender	1.2 liter glass container,22000rpm,glass container with handle
92	Can Seamer	can sizes, such as 45-110mm diameter and 39-200mm height stainless steel Motor power 370W (0.37kW) and 550W (0.55kW)
93	Stereo microscope	Magnification- 7x-45x, Binocular
94	Milk analyzer	Sample Volume: 25 ml Processing Rate: 60 to 90 Seconds/per test Fat Content: 0.01 to 25 % ± 0.10 % Solids-Non-Fat (SNF) Content: 3 to 15 % ± 0.15 %
95	Density meter	Portable density meter Builts in measurement scale-acids, base and chemical tables, alcohol tables, brix/sugar tables, density/specific gravity User programmable tables/functions
96	Probe Thermometer	Stainless steel probe 116 mm Illuminated display, rotatable by 180°, easy to read for left- and right-handed users Test temperatures: (0°C/100°C/150°C)
97	Micrometer	Measurement range- 0.025 to 25 millimeters (0.001 to 1 inch)



10.Naypyitaw Polytechnic Institute အတွက်သင်ထောက်ကူပစ္စည်းများ

SR. NO.	Description	Specification
98	Sieve (1 mm hole diameter)	Aperture Size: 1 mm (round hole) Frame Diameter: Common sizes include 15 cm, 20 cm, or 25 cm. stainless steel
99	Cone type tumbling mixer	Dual-cone, Stainless Steel 304
100	Nephelometer 0-1000 NTU	
101	Waterbath	Power-500W, Temperature range- RT+5~100°C, chamber volume-5L,netweight -5kg
102	Refrigerator	temperature range- 2~8°C, capacity- 100L - 1500L
9.Plastic & Rubber Technology		
103	Rubber Masticator	2 roll mill (steam or heat) 3 phase motor Nip change unit - A 5 x 7" display box - A streak plate
104	Plastic Recycling Crusher	Plastic recycling crusher, Fix bladeRotary(pcs)-46 Power(kw)-7.5, 380V plastic type-PVC, PET, PE Screen mesh(mm)-6-18 Capacity(kg)-150-300kg WH (mm)-11428531581 Inlet size(mm) 320*400
105	Rubber compound molding machine	Verticalize compression force Mold heat plate with thermosetting 2 ft 1.5 ft thermo plate 2 sets
106	Injection molding machine	Must have a Mohs hardness of around 7 2"x2" in Size and about 3/16" thick
107	Vacuum Forming Machine	Forming area 482 x 432 mm Depth of draw 185 mm Sheet size 508 x 457 mm
108	Cone type tumbling mixer (Plastic Resin Mixer)	3 phase motor 4 ft diameter cone cylinder tube 5 ft ² frame body



11. Office Equipment

SR NO.	Description	Specification
1	Projector (4200 Lumens)	XGA 1024 x 768 4,200 ANSI Lumen 5,000 Hour Normal Lamp Life 20,000 Hour Eco Lamp Life 25,000:1 Contrast
2	Motorize Projector Screen	Motorized Screen 96" x 96"
3	Projector (4500 Lumens)	XGA 1024 x 768 4,500 ANSI Lumen 5,000 Hour Normal Lamp Life 7,000 Hour Eco Lamp Life 20,000:1 Contrast
4	Projector Tripod Screen	Tripod Screen 84" x 84"
5	Water Dispenser	(Hot & Cold Water) Hot/ Cold Capacity-1 Liter/3 Liter Heating/Cooling Power-420 W Voltage-220-240 V
6	1000L/Hr Purified drinking water treatment with RO System	<ul style="list-style-type: none"> · Stainless Steel Feed Pump (Pressure Pump) 1.1 Kw, 220V · 4 m3/hr, 5 Bar, F18" x H 65" Manganese Sand Filter, Activated Carbon Filter and Water Softener Filter with complete Accessories · Filter Housing F7" x H 20" with 1 Micron Filter 5 cartridges · RO Drinking Water Treatment System with 8040 R.O Membrane, High Pressure Pump 2.1KW(220V) and complete Accessories · Ultra Violet Sterilization System with Stainless Steel Housing with Philip UV Lamp, 55 Watt (2Sets) · REGENERATION SYSTEM with Ejector and Regeneration tank · Stainless Steel Raw Water Storage Tank 2000L (minimum 1mm thickness) with Water Level Auto Switch



11. Office Equipment

SR. NO.	Description	Specification
6		<ul style="list-style-type: none"> ·Stainless Steel Purified Drinking Water Storage Tank 1000L (minimum 1mmthickness) with Water Level Auto Switch and Steel Water Tap ·RO Membrane Dosing System with Dosing Pump and 100L Chemical Dosing Tank ·Control functions, Pressure Regulators, Flow Meters, Pressure Gauges, TDS Meter with Complete Accessories ·Additional for 20” Rough Filter (1 Micron) (30 Nos) and Salt Bag (30 Vises) 5Bags ·Electrical, Piping and Fitting Installation and Supervision)
7	Inverter (1800W)	<p>Capacity : 2200 VA/ 1800 W Nominal DC Voltage : 2200 VA 24 VDC Input Voltage : 220 240 VAC Output Voltage : 230 VAC Transfer Time : 10 20 ms / 40 ms (Max) Max Charge : 10 A or 20 A (Selectable) Dimension (mm) : 309.5 x 244 x 96 DxWxH Frequency Range : 50 60 Hz (Auto Sensing) Output efficiency : AC mode : > 95 % /Battery mode:80 LCD Display : Input Voltage, Output Voltage, load level, battery level, overload and fault alarm Off Mode Charging : Green Flashing Battery Mode : Yellow Lighting Fault : Red Lighting / Overload : Red Flashing With 12 V 100 Ah Battery (2) Nos</p>
8	1" Jet Pump (750W)	<p>1hp Water Pump (1hp, 1" Inlet, 1" outlet)</p>
9	2 HP Jet Pump	<p>2 Hp Water Pump (2 hp, 2" Inlet, 2" Outlet)</p>



11. Office Equipment

SR. NO.	Description	Specification
10	Digital Camera	Power Shot G7X MK III One Shot AF, Servo AF, Manual Focus Processor Type DIGIC 8 Shutter Speed Range (Sec.)-30 - 1/25,600, Bulb AF System Points-31 Digital Zoom-4x Built-in Flash-YES Effective Pixels(Megapixels)-20.1 Lash Modes Auto, On, Slow Synchro,Off Local Length (35mm Equivalent)-24 - 100mm (4.2x) LCD Monitor (Size)(Inch)-3.0 LCD Monitor Resolution(dots)-1,040,000 Manual Focus - YES Memory Card Type-SD / SDHC* / SDXC* memory cards
11	Digital Camera	Processor Type - DIGIC X Sensor Size-Full-Frame CMOS AF Modes- One-Shot AF, AI Focus AF(stills), Servo AF/ Movie Servo AF AF System Points-Max.1053 AF frame zones(Stills/Movies) Digital Zoom-Digital Tele-converter x2.0 & 4.0 Effective Pixels(Megapixels)-24.2 Focal Length (35mm Equivalent)-4-50mm LCD Monitor (Size)(Inch)-3.0 CD Monitor Resolution (dots)-1.62 million Manual Focus - YES Memory Card Type-Single Card Slots (SD, SDHC*, SDXC*) Movie Digital IS-Yes Optical Image Stabilizer-Yes Optical Zoom-2.0x
12	ရေမြုပ်ပန် (Submersible Pump)(3HP)	
13	Generator (25 KVA)	
14	မြက်ရိတ်စက်(ဘေးလွယ်)	4 Stroke , 2Hp



11. Office Equipment

SR. NO.	Description	Specification
15	Wireless Video and Audio Conference System	<p>(a) Video Conference HD Camera (1)No</p> <ul style="list-style-type: none"> - 20x optical zoom, - USB3.0, HDMI, 3G-SDI, LAN, - To achieve software video conference <p>(b) Full Digital Networked DSP Conference Processor (1)No</p> <ul style="list-style-type: none"> - All microphone units ID independent output. - Hand-in-Hand-Loop-Network"connection makes the system 8 segment equalizer EQ adjusted independently. - 16 segment equalized EQ to achieve sound field adjustment; - Sound output by separated zones function - Echo cancellation, remote two-way real-time call with another conference controller - USB recording, controller monitor, advanced noise cancellation - Can drive 2x120W POE speaker, support up to 16 POE speakers. - Both wired/wireless discussion units - Up to 8 wireless microphones to be turned on at the same time - compliance with IEEE 802.11n standard Wi-Fi both for 5GHz. - Maximum 8-channel audio output - TCP/IP connection between controller and PC - RS232 central control, realize microphone switch, priority, volume and other controls. - RS232 or RS485 to send the PELCO/VISCA protocol to realize camera auto-tracking function. - plug-and-play, and auto-recovery function. - Without using PC software <p>(c) Chairman Unit (1) No</p> <p>(d) Delegate Unit (19)Nos</p> <p>(e) Pluggable Gooseneck Microphone 485mm (20)Nos</p> <p>(f) Professional Conference Access Point (1) No</p> <ul style="list-style-type: none"> - 5G wifi access point



11. Office Equipment

SR. NO.	Description	Specification
15		- stable performance for all the discussion units (g) Digital Conference Splitter Box (1) No (h) Conference management, main unit configuration (1) No (i) Charger Box For Battery Pack (3) Nos (j) Rechargeable battery Pack for Wireless unit (24) Nos - Long life and lasting stability of charging performance - Four hours needed to fully charge And can use 24 hours. (k) Power Relay box, POE, Provide extra power to microphone (1) No (l) 10 inch PoE active speaker, Audiolink compatible (2) Nos (m) Wall mount bracket (2) Nos (n) TV 75" With Stand (1) No (Include System Configuration , Installation, Training
16	Laser Printer (A4)	Printing Type : Black and White - Printing Technology : Laser - Print Resolution : 600 x 600 dpi - Print Speed Black : 18 PPM - Paper Size: A4 - Network : USB 2.0
17	Color Printer (Color Printer (Inkjet) (A3)	Color Printer Model PGI-750 (PGBK) CLI-751 (Black/Cyan/Magenta/Yellow) (A3, A4 Size, 14.5 iPM (Mono, A4), 10.4 iPM (Color, A4), USB Interface, 5 Color Individual Ink Cartridge System, Wireless LAN
18	Document Scanner(A4)	35 ppmc 70 ipm Single Pass Duplex ADF Scanning 600 dpi Scan Resolution 1200 ppi Output Resolution 40 to 210 gsm 50 Sheets Input Tray 216 x 3100 mm ADF Scan Size(8.5 x 122 inch)
19	Binding Machine	Binding Style: Click Bind Document Size : A4 Punch Capacity : 6 Sheet



11. Office Equipment

SR. NO.	Description	Specification
20	Paper Cutter Machine	Cutting Capacity -250-300 Sheets (70 GSM) Cutting Size A3 & A4 Paper Clamp Manual Cutting Width 458 mm Dimension 76 x 55 x 30 cm Weight 30 KG Body Material Metallic Capable to Cut Heavy-duty Paper cutter for commercial and professional with Hardened steel cutting die and punch Thick/Strong Paper, Card, etc
21	Lamination Machine Inspire plus A3	Laminates from ID size to A3 Pouch capability: 75 / 100 Micron (1 Preset setting) 2 roller technology Release lever for any misfeeds Max. Document Size: A3 (Max. 330mm) Pouch Capacity (mic): 75 / 100 Warm-up Time (min): 4-6 Speed (mm/min): 230 No. of Rollers: 2
22	Digital Multifunction Copier with Feeder	c/w One Tube of Toner 7-inch TFT LCD WVGA Color Touch Panel Standard Duplexing 2 x 550 Sheets Univalsal Cassette, 1 x 100 sheets Stack Bypass STD: 2 GB Memory (30GB EMMC) 600 x 600 dpi Copy/Scan Resolution 1200 x 1200 dpi Printing Resolution Network print controller (UFR II LT) Supports PCL Printer driver Up to Window 11 - Up to Mac OS 15.6 Sequoia Copier, Printer, Scanner, Ethernet Network Remote UI, Scan to E mail, Wireless, Mobile Print (25 PPM, 25-400% Zoom, Up to A3 Size)-9999 copies



11. Office Equipment

SR. NO.	Description	Specification
23	Digital Duplicator (B4)	B4 Digital Duplicator Thermal Digital Master Making 19 Seconds Master Making Speed 300 x 400 DPI Resolution Upto 120 ppm Print Speed Upto 11.6" x 16.5" (297mm x 420mm) Document Size Upto 9.9" x 14" (252mm x 358mm) Printing Image Area 40-128 gsm Paper Weight 950 Sheets Feeding Capacity, 1200 Sheets Receiving Capacity 5 Step Speed Control Flatbed Scanning Method Big LCD Panel USB 2.0 Interface
24	Paper Shredder	Cutting Style: Cross Cut Shred Capacity: 13 sheets Bin Capacity: 23 Litres Dimension: (375x255x370)mm Security Level: S3/P3 (5x42mm) Shred Paper, Staple, Paper Clips Working Cycle: 6min On / 60min Off



12.Furniture

SR. NO.	Description	Specification
1	Table & Chair	Table topboard 1 inch: Finger Joint With Polish Coating, Desk Size-3 'x 2 'x 2'6" Chair Size-18 "x 18 "x 36" ကျောင်းသားဆောင်များတွင် စာကြည့်သုံးစားပွဲအဖြစ်အသုံးပြုရန်
2	Computer Table & Chair	Table Size:W1000x D500xH750 mm Chair Size : W17"x D18"x H33" Keyboard Drawer, Material high quality Block Board 17mm with 1.2mm metal frame, Table Legs. 1.2mm high quality square tubes, black color power coated finished. Plywood painted varnish Steel pipe 1.2 mm thickness
3	Stool	Size(L 16" x W 1' x H 2') 16mm Topboard, Teak Finger joint ခြေချုပ်(၄)ချောင်းပါ
4	Whiteboard (16'x4')	Material : MDF, Metal, Aluminium Frame
5	Whiteboard with stand (8'x4')	Material : MDF, Metal, Aluminium Frame Surface: Magnetic White Board
6	Flipchart Board with frame	Flipchart board (4' x 3')
7	Locker (12 Holes)	Size (W 914x D 470 X H 1817)mm
8	မှန်ပီရို	Size (W 914x D 470 X H 1817)mm
9	ရုံးသုံးပီရို	Size (W 914x D 470 X H 1817)mm
10	Cabinet (4 Drawer)	(W463 x D620 x H1324) mm Locker Storage Cabinet with 4 Lock Drawers
11	ဖိုင်တင်စင်	Size: (W 914x D 316 xH1870)mm Thickness: 0.8 mm Boxes : 40 boxes file
12	Officer Table	(5'X3'X2'6")
13	Table	(4'x2'6"x2'6")
14	Armless Chair	Size(17"x18"x33")



12.Furniture

SR. NO.	Description	Specification
15	Arm Chair	Size(20"x 20"x 40")
16	Meeting Table with Chair (U Shape for 20 Persons)	Table (5'x2.6'x2.6') (10 Nos) Connect Table (4'x2.6'x2.6') (1 No) Connect Table (3'x2.6'x2.6') (2 Nos) Chair (20 Nos)(20"x20"x40")
17	ဘွဲ့နှင်းသဘင်သုံးဆက်တီထိုင်ခုံ	(Teak and Sofa) (1 set) ၁ ယောက်ထိုင် - ၁၀ လုံး၊ သဘာပတီထိုင် - ၁ လုံး ဆိုဖာထိ အမြင့် (၁၈) လက်မ၊ လက်တင်ထိအမြင့် (၂၄)လက်မ၊ ကျောမှီအမြင့် (လက်တင်မှ (၂၀) လက်မ)၊ စုစုပေါင်းအမြင့် (၄၄)လက်မ၊
18	Chair (Hall ခန်းသုံးရန်)	
19	Waiting Chair (3 seaters)	Size - 68" x 16" x 19"
20	Stage ခုံ (8'x4'x1')	(2" Hollow Frame, 12mm Plywood)
21	Working bench	2.5x2.5" 11-Gauge Steel frame Finish: Enamel Top Material: Wood Table Top Thickness: 1.5" Load Capacity: 1000 kg Length 72" , Width 36", Height 35" Wood Top Included: Yes Adjustable feet for stability Finish Options: Satin Clear Frame Specs: 60" x 28" x 33.25"
22	စာသင်ခုံ (ထိုင်ခုံပါ)	1.Desk Size : 1' 11.5" x 1' 3.5" x 2' 6" 2.Chair Size: 1' 4" x 1' 2.5" x 1' 5.5"
23	Workshop Storage Shelf	Size(L8'x W 1.5'x H 6')
24	File Shelf (Iron)	Size(3'x1.5'x6')
25	File Shelf (Wood)	Size(3'x1.5'x6')



12.Furniture

SR. NO.	Description	Specification
26	Table	(W1500xD900xH750 mm)
27	Chair	Size(20" x 20" x 40")
28	တစ်ယောက်အိပ်ကုတင်	Size(6'x3'x1'6")
29	Dinning Table & Chair(4 Nos)	Table (4' x4' x2'5")&Chair (1' 6" x1' 6" x 3") Wood Finger - Joint
30	Partation Table (For 4 Persons)	
31	Chair	Size(19"x22.5"x38.25")
32	စာကြည့်တိုက်သုံးစာဖတ်စားပွဲ (4 Persons)	Size(4'6"x2'6"x2')
33	Settee	Center Table(1No) Double Chair (1 No) Single Chair(4 Nos) Side Table (1 No) All Teak