



## MILLENNIUM CHALLENGE ACCOUNT NEPAL (MCA-NEPAL)

Supply and Delivery of IT Equipment and Accessories  
Ref No: (MCA-N/PM/SH/078)

### ADDENDUM #1

Issued on: 07 August 2024

This Addendum No. #1 modifies respective portions of the Request for Offers (RFO) Document issued on 26 July 2024. **The changes, as indicated below with blue shaded text,** are effective on the date of issue of this Addendum #1.

Except as expressly amended by this Addendum, all other terms and conditions of the Request for Offers (RFO) Document issued on 26 July 2024 remain unchanged and shall remain in full force and effect in accordance with their terms.

SN	Pages/Paragraph	Addendum
1.	Request for Offer, Pages 1, Clause #2	Suppliers are also required to submit with their Offers the copies of the following documents: a. Firm/Company Registration Certificate / Letter of incorporation b. PAN/ VAT Registration Certificate (applicable to Nepalese Firms/Companies only). c. Tax Clearance Certificate of the last Fiscal Year 2079/80 (applicable to Nepalese Firms/Companies only). d. <b>Manufacturer's Authorization letter</b>

# Attachment #1

## TECHNICAL SPECIFICATIONS

Technical Specifications of IT Equipment and Accessories

### Lot #1 : Laptop Computer

#### 1. Laptop Computer (Type A) with Docking and Monitor – 40 sets

Type	<ul style="list-style-type: none"><li>▪ Business Enterprise Grade Laptop</li></ul>
Operating System	<ul style="list-style-type: none"><li>▪ Windows 11 Professional x64 bit English</li><li>▪ Recovery Image</li></ul>
Processor Technology	<ul style="list-style-type: none"><li>▪ Intel® Core™ Ultra 7 with vPro™ Technology</li></ul>
Processor	<ul style="list-style-type: none"><li>▪ Intel® Core™ Ultra 7 165H vPro or equivalent</li></ul>
Graphics	<ul style="list-style-type: none"><li>▪ Integrated Intel® Arc Graphics</li></ul>
Chipset/Security	<ul style="list-style-type: none"><li>▪ TPM 2.0 Security Complied</li></ul>
Display	<ul style="list-style-type: none"><li>▪ Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent</li><li>▪ Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li></ul>
Memory	<ul style="list-style-type: none"><li>▪ 1 x 32 GB DDR5 SODIMM, Expandable up to 64 GB</li></ul>
Internal Storage	<ul style="list-style-type: none"><li>▪ 512 GB PCIe® 4x4 NVMe™ TLC SSD</li></ul>
Sound/Audio	<ul style="list-style-type: none"><li>▪ Dual stereo speakers, integrated multi array microphone</li><li>▪ 1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li></ul>
LAN/Wireless technology	<ul style="list-style-type: none"><li>▪ Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li></ul>
External I/O Ports	<ul style="list-style-type: none"><li>▪ 2 x USB 3.1 Gen 1 Type-A ports</li><li>▪ 2 x Thunderbolt™ 4 with USB™ Type-C ports</li><li>▪ 1 x HDMI 2.0 port</li><li>▪ 1 x Headphone/microphone universal Combo Jack</li><li>▪ 1 x Nano-SIM slot (optional)</li><li>▪ <b>Standard security lock with peripheral trap (slim)</b></li></ul>
Keyboard/Touchpad	<ul style="list-style-type: none"><li>▪ <b>Backlit, spill-resistant premium keyboard</b></li><li>▪ Pointing Device: Touchpad with multi-touch gesture support</li></ul>
Power Supply/ Battery	<ul style="list-style-type: none"><li>▪ ~ 65W USB Slim Power Adapter (AC)</li><li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery.</li></ul>
Carrying bag	<ul style="list-style-type: none"><li>▪ Good quality branded laptop carrying bag (back-pack)</li></ul>
Warranty	<ul style="list-style-type: none"><li>▪ Three-years warranty</li></ul>

Docking Station	<ul style="list-style-type: none"> <li>▪ Type – Universal Thunderbolt 4</li> <li>▪ Ports – at least 3 x USB-A, 1 x USB-C</li> <li>▪ Ethernet – 1 xRJ45 Gigabit or higher speed</li> <li>▪ 2 x DisplayPort, HDMI 2.0</li> <li>▪ 4 x Simultaneously display support.</li> <li>▪ Connectivity – Integrated / detachable cable</li> <li>▪ Audio port – 1 x 3.5mm audio combo jack (optional)</li> <li>▪ Power on indicator – LED</li> <li>▪ Windows 10/11, macOS support</li> <li>▪ Power supply – standard 220v, 50Hz</li> </ul>
Desktop Monitor	<ul style="list-style-type: none"> <li>▪ Size/type – 23 ~24 inches IPS</li> <li>▪ Display resolution – WUXGA (1920 x 1200)</li> <li>▪ Aspect Ration – 16:10</li> <li>▪ Connectivity - at least 1xHDMI, 1xDP or equivalent</li> <li>▪ USB Ports – 2 x USB 3.0</li> <li>▪ Stand – adjustable height and angle (VESA)</li> <li>▪ Power Supply – Standard 220V, 50Hz</li> </ul>
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>▪ Business enterprise grade premium multi-device wireless keyboard and mouse combo (USB/Bluetooth)</li> </ul>

**2. Laptop Computer (Type B) - without Docking and Monitor – 25 sets.**

Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise Grade Laptop</li> </ul>
Operating System	<ul style="list-style-type: none"> <li>▪ Windows 11 Professional x64 bit English</li> <li>▪ Recovery Image</li> </ul>
Processor Technology	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 with vPro™ Technology</li> </ul>
Processor	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 165H vPro or equivalent</li> </ul>
Chipset/Security	<ul style="list-style-type: none"> <li>▪ TPM 2.0 Security Complied</li> </ul>
Memory	<ul style="list-style-type: none"> <li>▪ 2 x 32 GB DDR5 SODIMM</li> </ul>
Internal Storage	<ul style="list-style-type: none"> <li>▪ 1 TB PCIe® NVMe™ TLC SSD</li> </ul>
Graphics Card	<ul style="list-style-type: none"> <li>▪ Integrated Intel® Arc Graphics</li> </ul>
Display	<ul style="list-style-type: none"> <li>▪ Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent higher</li> <li>▪ Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li> </ul>
Sound/Audio	<ul style="list-style-type: none"> <li>▪ Dual stereo speakers, integrated multi array microphone</li> <li>▪ 1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li> </ul>
LAN/Wireless technology	<ul style="list-style-type: none"> <li>▪ Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li> </ul>
External I/O Ports	<ul style="list-style-type: none"> <li>▪ 2 x USB 3.1 Gen 1 Type-A ports</li> </ul>

	<ul style="list-style-type: none"> <li>▪ 2 x Thunderbolt™ 4 with USB™ Type-C ports</li> <li>▪ 1 x HDMI 2.0 port</li> <li>▪ 1 x Headphone/microphone universal Combo Jack</li> <li>▪ 1 x Nano-SIM slot (optional)</li> <li>▪ 1 x Standard Z with Peripheral Trap – Slim</li> <li>▪ USB 3.0 to Gigabit RJ45 Adapter (laptops without an Ethernet port)</li> </ul>
Keyboard/Touchpad	<ul style="list-style-type: none"> <li>▪ Dual Point Backlit spill-resistant Collaboration Premium Keyboard with ambient light sensor</li> <li>▪ Pointing Device: Touchpad with multi-touch gesture support</li> </ul>
Power Supply/ Battery	<ul style="list-style-type: none"> <li>▪ ~ 65W Slim Power Adapter (AC)</li> <li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery</li> </ul>
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>▪ Business enterprise class premier multi-device wireless keyboard and mouse (Bluetooth)</li> </ul>
Carrying bag	<ul style="list-style-type: none"> <li>▪ Good quality branded laptop carrying bag (back-pack)</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>▪ Three-years warranty</li> </ul>

## Lot #2 – Multifunctional Printer

### 3. Multifunctional Printer (MFP) – 1 set

Machine Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise Grade Multifunctional Machine</li> <li>▪ (All-In-One)</li> </ul>
Printing Output	<ul style="list-style-type: none"> <li>▪ Monochrome (Standard - A4, A3, Letter)</li> </ul>
Standard Functions	<ul style="list-style-type: none"> <li>▪ Print, Copy, Scan, Email</li> </ul>
Printing Speed	<ul style="list-style-type: none"> <li>▪ Up to 70 ppm (Standard Letter, A4) or equivalent higher speed</li> <li>▪ Monthly duty cycle – up to 300,000 pages or equivalent higher volume printing capacity</li> <li>▪ First copy out =&lt;5 second or faster</li> </ul>
Copy and Print Resolution	<ul style="list-style-type: none"> <li>▪ Standard automatic Duplex Printing</li> <li>▪ Manual One-sided printing</li> <li>▪ Copy resolution up to 600 x 600 dpi,</li> <li>▪ Print resolution up to 1200 x 1200 dpi enhanced.</li> <li>▪ Copying reduce/enlarge: 25% ~ 400%.</li> <li>▪ Economic /Grayscale Printing (default)</li> </ul>
Printer Processor	<ul style="list-style-type: none"> <li>▪ Intel ATOM Quad Core/Dual-Core/ARM or any Dual Custom Processor or equivalent higher</li> </ul>
Printer Memory	<ul style="list-style-type: none"> <li>▪ 4GB total or equivalent or higher</li> </ul>
Internal Storage (HDD/SSD)	<ul style="list-style-type: none"> <li>▪ 128 GB SSD or higher (512 GB Preferred) or equivalent higher advanced technology storage.</li> </ul>
Control Panel	<ul style="list-style-type: none"> <li>▪ 10.1” TFT/LCD/LED Color Display Touch Screen</li> </ul>

Connectivity and other printing options	<ul style="list-style-type: none"> <li>▪ Standard RJ-45 Ethernet (10/100/1000 Base-T)</li> <li>▪ High speed USB 2.0/3.0 direct printer connection</li> <li>▪ Additional latest wireless feature such as WiFi (IEEE 802.11 b/g/n) or WiFi Direct or AirPrint and Bluetooth and cloud printing preferred.</li> <li>▪ Print from USB disk (USB 2.0 or higher) feature.</li> <li>▪ Print from Cloud repositories preferred (Dropbox, OneDrive, and Google Drive) or equivalent.</li> </ul>
Scanning Options / File Format Support	<ul style="list-style-type: none"> <li>▪ Scan to USB directly connected to Printer.</li> <li>▪ Scan to Email via SMTP support.</li> <li>▪ Scan to Network/FTP/SFTP/SMB features.</li> <li>▪ Scan to Cloud (desirable)</li> <li>▪ Standard format - PDF, PDF/A, JPEG, TIFF and wider range of file format support and OCR.</li> <li>▪ Other security features</li> </ul>
OS Support	<ul style="list-style-type: none"> <li>▪ Windows® Server2012/Server2012 R2/ Server2016/Server2019/Server 2022, Windows 10/11 and Mac OS X (10.11) or higher versions</li> <li>▪ Both PCL and advanced PostScript (PS). PDF and XPS printing support</li> </ul>
Paper Handling (ADF, Trays and Paper Output Options)	<ul style="list-style-type: none"> <li>▪ Robust feeder design (multiple size support – ~A4)</li> <li>▪ DADF/DADF with standard Single-Pass Duplex Automatic Document Feeder for scan and copy.</li> <li>▪ Paper Tray/Cassette/Drawer - Total FOUR Trays (Letter, A4 ~ A3) including - bypass and high capacity Tandem/Deck or equivalent options enough for high volume printing.</li> <li>▪ Paper/Size/Thickness: Standard Letter, A4, A3 - up to 200/300 GSM/140LB or equivalent paper weight support</li> <li>▪ Paper output Accessories - Office Finisher Unit (OFU) with up to 50 Sheets (20 lb/80 gsm) single-position stapling or equivalent feature.</li> </ul>
Power Supply	<ul style="list-style-type: none"> <li>▪ Standard 220 v, 50 Hz Nepal</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>▪ Power Cables, USB Cables and ADF, Cover etc.</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>▪ 3 Years</li> </ul>

### Lot #3 – Video Conferencing System

#### 4. Video Teleconferencing (VTC) System for mobile Use -1 set

<b>Auto Tracking Conference Camera</b>	
Type	<ul style="list-style-type: none"> <li>▪ Professional Auto Tracking PTZ Camera</li> </ul>
Picture Elements	<ul style="list-style-type: none"> <li>▪ Single/Double Lens with 1/25” ~1.0” Image Sensor</li> </ul>
Output Resolution	<ul style="list-style-type: none"> <li>▪ 4K Ultra HD</li> </ul>
Zoom	<ul style="list-style-type: none"> <li>▪ 15~30 Advance Zoom or Equivalent</li> </ul>

FOV/PTZ	<ul style="list-style-type: none"> <li>▪ 60~120-degree horizontal coverage or equivalent</li> </ul>
Connectivity	<ul style="list-style-type: none"> <li>▪ 3G-SDI/ HDMI / IP / USB/ RS-232/ RS-422 etc. Audio IN/OUT options</li> </ul>
Video Formats	<ul style="list-style-type: none"> <li>▪ MPEG/AVI/MOV/WMV compatible with Windows</li> </ul>
Auto Tracking /AI Functions	<ul style="list-style-type: none"> <li>▪ Human Detection/Motion Tracking Feature</li> </ul>
OS Support	<ul style="list-style-type: none"> <li>▪ Plug and Play – Windows/Mac OS</li> </ul>
Power Supply	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable, remote control, Extension cable/wire up to 20M, mounting kit etc. to make the system functional.</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>
<b>Audio Speakerphone</b>	
Type	<ul style="list-style-type: none"> <li>▪ Full duplex microphone array speakerphone</li> </ul>
Audio acoustic features	<ul style="list-style-type: none"> <li>▪ Advanced echo cancellation / noise suppression features for powerful wideband voice processing</li> </ul>
Voice/Audio Control	<ul style="list-style-type: none"> <li>▪ Speaker volume adjustable via Remote control/Touch Control/button control for volume up/down, mute, call and hang-up functions</li> </ul>
Connectivity	<ul style="list-style-type: none"> <li>▪ Bluetooth/LAN/audio IN/OUT, USB 3.0/USB-C/HDMI/ RS-232/ RS-422 with options for MIC POD expansion and external audio system</li> </ul>
Power Supply	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable/HuB, remote control and extension cable up to 20M to make the system functional.</li> <li>▪ Mounting Kits (if applicable)</li> </ul>
OS Support	<ul style="list-style-type: none"> <li>▪ Plug and Play with Standard Windows and Mac OS</li> </ul>
Expected Apps to be Compatible With	<ul style="list-style-type: none"> <li>▪ Skype/Skype for Business</li> <li>▪ Microsoft Teams</li> <li>▪ Zoom</li> <li>▪ Cisco WebEx, Jabber,</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE Year</li> </ul>
Carrying Bag	<ul style="list-style-type: none"> <li>▪ Appropriate carrying bag to accommodate Conference Camera, Speakerphone and Accessories</li> </ul>

## Lot #4 – Uninterruptable Power Supply System (UPS)

### 5. 3 kVA Smart UPS - 1 Sets

Type/Capacity	<ul style="list-style-type: none"> <li>▪ 3000 VA Smart UPS System</li> <li>▪ Tower Casing</li> </ul>
Power Input Voltage/Current	<ul style="list-style-type: none"> <li>▪ 220 V, 50/60 Hz +/-3 Hz Auto Sensing</li> <li>▪ IEC320- C19 Input Connection</li> <li>▪ Input Voltage range – 160 ~ 285 V adjustable.</li> <li>▪ At least 95.0 % efficiency at full load</li> </ul>
Power Output Voltage/Current	<ul style="list-style-type: none"> <li>▪ 3.0 kVA, 2.7kWatts</li> <li>▪ Nominal Output voltage – 220 ~230 configurable</li> <li>▪ At least 95% Efficiency at full load</li> <li>▪ (1) IEC C19 outlet connection</li> <li>▪ (4+) IEC C13 outlet connections</li> </ul>
Batteries	<ul style="list-style-type: none"> <li>▪ 2x2 Maintenance-free sealed Lead-Acid battery (Leak-proof)</li> <li>▪ Expected re-charge time 3 Hrs.</li> <li>▪ Expected Battery Life (years): 3- 5 years.</li> </ul>
Backup/runtime	<ul style="list-style-type: none"> <li>▪ At least 8 ~ 12 minutes of runtime at half load</li> </ul>
Output Frequency	<ul style="list-style-type: none"> <li>▪ Sinewave, 50 Hz (47 - 53 Hz), +/-5% distortion</li> </ul>
Communication	<ul style="list-style-type: none"> <li>▪ Smart-Connect, USB &amp; Serial support.</li> <li>▪ LED/LCD/Light status display for On-Line, On-Battery, Battery Replace and Overload Indicator</li> </ul>
Audible Alarm	<ul style="list-style-type: none"> <li>▪ Alarm when UPS is on battery, distinctive low battery and configurable delays or defects.</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>▪ Power Cables, C13, C19 type,</li> <li>▪ Serial/USB cable, Serial-RJ-45 etc.</li> <li>▪ User manual</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>

### 6. 20 kVA UPS for Data Center (Redundant) -1 set

<b>External Features</b>	
Chassis Type	<ul style="list-style-type: none"> <li>▪ Tower with trolley wheelbase</li> </ul>
UPS Type/Capacity	<ul style="list-style-type: none"> <li>▪ 20 kVA Smart, Double Conversion Online</li> </ul>
Architecture	<ul style="list-style-type: none"> <li>▪ Modular design for quick service and less maintenance via self-diagnosis and replaceable spare parts.</li> </ul>
User Interface	<ul style="list-style-type: none"> <li>▪ Control Panel/LCD display - Alpha-numeric displays for system parameters and alarms.</li> </ul>

Signal and Alert	<ul style="list-style-type: none"> <li>Audible alarms notify changes in utility and UPS power conditions, programmable with auto reset and various frequencies.</li> </ul>
Installation	<ul style="list-style-type: none"> <li>Easy installation, customizable to connect with external battery bank, with adequate option for charging system and scalability.</li> </ul>
Diagnostics	<ul style="list-style-type: none"> <li>Self-test features to ensures early detection of electricity fault or battery issue.</li> </ul>
<b>Input Power Ratings (Municipal Feed)</b>	
Input Frequency	<ul style="list-style-type: none"> <li>45 ~ 65 Hz (auto sensing)</li> </ul>
3- Phase Input Voltage range	<ul style="list-style-type: none"> <li>304 ~ 477V, Others 380V ~ 415V</li> </ul>
Input Power Factor at Full Load	<ul style="list-style-type: none"> <li>0.99</li> </ul>
Input Connections	<ul style="list-style-type: none"> <li>Hard Wire 5-wire (3PH + N + G)</li> </ul>
<b>Output Power ratings (Pure Sine Wave)</b>	
Max Configurable Power	<ul style="list-style-type: none"> <li>20.0 kW / 20.0kVA</li> </ul>
Nominal Output Voltage	<ul style="list-style-type: none"> <li>220 V Single Phase/3 Phase (Configurable for 380: 400 or 415 V 3-Phase nominal output voltage)</li> </ul>
Output Voltage Distortion	<ul style="list-style-type: none"> <li>Less than 3% at full load</li> </ul>
Efficiency at Full Load	<ul style="list-style-type: none"> <li>95.0 % or higher</li> </ul>
Output Frequency (sync to mains)	<ul style="list-style-type: none"> <li>50 Hz Sync to mains, 60 Hz Sync to mains</li> </ul>
Output connection	<ul style="list-style-type: none"> <li>Customizable for 3Phase to 3Phase or 3Phase to Single phase, Hard Wire 5-wire (3PH + N + G), IEC 320 standard installations.</li> </ul>
Bypass	<ul style="list-style-type: none"> <li>Built-in maintenance bypass</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>3 Years</li> </ul>
<b>Installation/Operation</b>	
Installation	<ul style="list-style-type: none"> <li>This UPS will serve as a redundant use for the existing 20 kVA APC Smart-UPS - SUVT 20KHS model. Vendor must conduct a test installation, synchronizing the offered UPS to the existing wiring infrastructure that connects with 32 x 150 Ah, 12V battery bank setup.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>Pre-Installed Network Management, Interface Ports(s), RJ-45 10/100 Base-T Smart slot with audible and visible alarm. EMP/Temperature Sensor, Web/SNMP Management Card for remote access/management.</li> </ul>
Documentation / Manual	<ul style="list-style-type: none"> <li>CD with software/firmware, User Manual for graceful power programming.</li> </ul>



### Attachment -3

#### Submission Form of Supplier’s Proposed Technical Specifications

Supply and Delivery of IT Equipment and Accessories, MCA-N/PM/SH/078

(Supplier shall propose better or equivalent Technical Specifications than described in Attachment 1 and 3)

MCA-Nepal's Required Specification		SUPPLIERS SPECIFICATION
<b>Lot #1: Laptop Computer</b>		
<b>1. Laptop Computer (Type A) with Docking and Monitor – 40 sets</b>		
<b>BRAND/MODEL NAME</b>		
Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise Grade Laptop</li> </ul>	
Operating System	<ul style="list-style-type: none"> <li>▪ Windows 11 Professional x64 bit English</li> <li>▪ Recovery Image</li> </ul>	
Processor Technology	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 with vPro™ Technology</li> </ul>	
Processor	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 165H vPro or equivalent</li> </ul>	
Graphics	<ul style="list-style-type: none"> <li>▪ Integrated Intel® Arc Graphics</li> </ul>	
Chipset/Security	<ul style="list-style-type: none"> <li>▪ TPM 2.0 Security Complied</li> </ul>	
Display	<ul style="list-style-type: none"> <li>▪ Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent</li> <li>▪ Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li> </ul>	
Memory	<ul style="list-style-type: none"> <li>▪ 1 x 32 GB DDR5 SODIMM, Expandable up to 64 GB</li> </ul>	

Internal Storage	<ul style="list-style-type: none"> <li>▪ 512 GB PCIe® 4x4 NVMe™ TLC SSD</li> </ul>	
Sound/Audio	<ul style="list-style-type: none"> <li>▪ Dual stereo speakers, integrated multi array microphone</li> <li>▪ 1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li> </ul>	
LAN/Wireless technology	<ul style="list-style-type: none"> <li>▪ Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li> </ul>	
External I/O Ports	<ul style="list-style-type: none"> <li>▪ 2 x USB 3.1 Gen 1 Type-A ports</li> <li>▪ 2 x Thunderbolt™ 4 with USB™ Type-C ports</li> <li>▪ 1 x HDMI 2.0 port</li> <li>▪ 1 x Headphone/microphone universal Combo Jack</li> <li>▪ 1 x Nano-SIM slot (optional)</li> <li>▪ Standard security lock with peripheral trap (slim)</li> </ul>	
Keyboard/Touchpad	<ul style="list-style-type: none"> <li>▪ Backlit, spill-resistant premium keyboard</li> <li>▪ Pointing Device: Touchpad with multi-touch gesture support</li> </ul>	
Power Supply/Battery0	<ul style="list-style-type: none"> <li>▪ ~ 65W USB Slim Power Adapter (AC)</li> <li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery.</li> </ul>	
Carrying bag	<ul style="list-style-type: none"> <li>▪ Good quality branded laptop carrying bag (back-pack)</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ Three-years warranty</li> </ul>	
Docking Station	<ul style="list-style-type: none"> <li>▪ Type – Universal Thunderbolt 4</li> <li>▪ Ports – at least 3 x USB-A, 1 x USB-C</li> <li>▪ Ethernet – 1 xRJ45 Gigabit or higher speed</li> <li>▪ 2 x DisplayPort, HDMI 2.0</li> <li>▪ 4 x Simultaneously display support.</li> <li>▪ Connectivity – Integrated / detachable cable</li> <li>▪ Audio port – 1 x 3.5mm audio combo jack (optional)</li> <li>▪ Power on indicator – LED</li> <li>▪ Windows 10/11, macOS support</li> <li>▪ Power supply – standard 220v, 50Hz</li> </ul>	
Desktop Monitor	<ul style="list-style-type: none"> <li>▪ Size/type – 23 ~24 inches IPS</li> <li>▪ Display resolution – WUXGA (1920 x 1200)</li> <li>▪ Aspect Ration – 16:10</li> <li>▪ Connectivity – at least 1xHDMI, 1xDP or equivalent</li> </ul>	

	<ul style="list-style-type: none"> <li>▪ USB Ports – 2 x USB 3.0</li> <li>▪ Stand – adjustable height and angle (VESA)</li> <li>▪ Power Supply – Standard 220V, 50Hz</li> </ul>	
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>▪ Business enterprise grade premium multi-device wireless keyboard and mouse combo (USB/Bluetooth)</li> </ul>	

<b>2. Laptop Computer (Type B) - without Docking and Monitor – 25 sets.</b>		
<b>BRAND/MODEL NAME</b>		
Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise Grade Laptop</li> </ul>	
Operating System	<ul style="list-style-type: none"> <li>▪ Windows 11 Professional x64 bit English</li> <li>▪ Recovery Image</li> </ul>	
Processor Technology	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 with vPro™ Technology</li> </ul>	
Processor	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 165H vPro or equivalent</li> </ul>	
Chipset/Security	<ul style="list-style-type: none"> <li>▪ TPM 2.0 Security Complied</li> </ul>	
Memory	<ul style="list-style-type: none"> <li>▪ 2 x 32 GB DDR5 SODIMM</li> </ul>	
Internal Storage	<ul style="list-style-type: none"> <li>▪ 1 TB PCIe® NVMe™ TLC SSD</li> </ul>	
Graphics Card	<ul style="list-style-type: none"> <li>▪ Integrated Intel® Arc Graphics</li> </ul>	
Display	<ul style="list-style-type: none"> <li>▪ Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent higher</li> <li>▪ Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li> </ul>	
Sound/Audio	<ul style="list-style-type: none"> <li>▪ Dual stereo speakers, integrated multi array microphone</li> <li>▪ 1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li> </ul>	
LAN/Wireless technology	<ul style="list-style-type: none"> <li>▪ Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li> </ul>	

External I/O Ports	<ul style="list-style-type: none"> <li>▪ 2 x USB 3.1 Gen 1 Type-A ports</li> <li>▪ 2 x Thunderbolt™ 4 with USB™ Type-C ports</li> <li>▪ 1 x HDMI 2.0 port</li> <li>▪ 1 x Headphone/microphone universal Combo Jack</li> <li>▪ 1 x Nano-SIM slot (optional)</li> <li>▪ 1 x Noble/Wedge Lock Slot (Z) with <b>Peripheral Trap – Slim</b></li> <li>▪ <b>USB 3.0 to Gigabit RJ45 Adapter (laptops without an Ethernet port)</b></li> </ul>	
Keyboard/Touchpad	<ul style="list-style-type: none"> <li>▪ Dual Point Backlit spill-resistant Collaboration Premium Keyboard with ambient light sensor</li> <li>▪ Pointing Device: Touchpad with multi-touch gesture support</li> </ul>	
Power Supply/ Batter	<ul style="list-style-type: none"> <li>▪ ~ 65W Slim Power Adapter (AC)</li> <li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery</li> </ul>	
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>▪ Business enterprise class premier multi-device wireless keyboard and mouse (Bluetooth)</li> </ul>	
Carrying bag	<ul style="list-style-type: none"> <li>▪ Good quality branded laptop carrying bag (back-pack)</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ Three-years warranty</li> </ul>	

## Lot #2: Multifunctional Printer

<b>3. Multifunctional Printer (MFP) – 1 set</b>		
	<b>BRAND/MODEL NAME</b>	
Machine Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise Grade Multifunctional Machine</li> <li>▪ (All-In-One)</li> </ul>	
Printing Output	<ul style="list-style-type: none"> <li>▪ Monochrome (Standard - A4, A3, Letter)</li> </ul>	
Standard Functions	<ul style="list-style-type: none"> <li>▪ Print, Copy, Scan, Email</li> </ul>	

Printing Speed	<ul style="list-style-type: none"> <li>▪ Up to 70 ppm (Standard Letter, A4) or equivalent higher speed printing</li> <li>▪ Monthly duty cycle – up to 300,000 pages or equivalent higher volume printing capacity</li> <li>▪ First copy out =&lt;5 second or faster</li> </ul>	
Copy and Print Resolution	<ul style="list-style-type: none"> <li>▪ Standard automatic Duplex Printing</li> <li>▪ Manual One-sided printing</li> <li>▪ Copy resolution up to 600 x 600 dpi,</li> <li>▪ Print resolution up to 1200 x 1200 dpi enhanced.</li> <li>▪ Copying reduce/enlarge: 25% ~ 400%.</li> <li>▪ Economic /Grayscale Printing (default)</li> </ul>	
Printer Processor	<ul style="list-style-type: none"> <li>▪ Intel ATOM Quad Core/Dual-Core/ARM or any Dual Custom Processor or equivalent higher</li> </ul>	
Printer Memory	<ul style="list-style-type: none"> <li>▪ 4GB total or equivalent or higher</li> </ul>	
Internal Storage (HDD/SSD)	<ul style="list-style-type: none"> <li>▪ 128 GB SSD or higher (512 GB Preferred) or equivalent higher advanced technology storage.</li> </ul>	
Control Panel	<ul style="list-style-type: none"> <li>▪ 10.1” TFT/LCD/LED Color Display Touch Screen</li> </ul>	
Connectivity and other printing options	<ul style="list-style-type: none"> <li>▪ Standard RJ-45 Ethernet (10/100/1000 Base-T)</li> <li>▪ High speed USB 2.0/3.0 direct printer connection</li> <li>▪ Additional latest wireless feature such as WiFi (IEEE 802.11 b/g/n) or WiFi Direct or AirPrint and Bluetooth and cloud printing preferred.</li> <li>▪ Print from USB disk (USB 2.0 or higher) feature.</li> <li>▪ Print from Cloud repositories preferred (Dropbox, OneDrive, and Google Drive) or equivalent.</li> </ul>	
Scanning Options / File Format Support	<ul style="list-style-type: none"> <li>▪ Scan to USB directly connected to Printer.</li> <li>▪ Scan to Email via SMTP support.</li> <li>▪ Scan to Network/FTP/SFTP/SMB features.</li> <li>▪ Scan to Cloud (desirable)</li> <li>▪ Standard format - PDF, PDF/A, JPEG, TIFF and wider range of file format support and OCR.</li> <li>▪ Other security features</li> </ul>	

OS Support	<ul style="list-style-type: none"> <li>▪ Windows® Server2012/Server2012 R2/ Server2016/Server2019/Server 2022, Windows 10/11 and Mac OS X (10.11) or higher versions</li> <li>▪ Both PCL and advanced PostScript (PS). PDF and XPS printing support</li> </ul>	
Paper Handling (ADF, Trays and Paper Output Options)	<ul style="list-style-type: none"> <li>▪ Robust feeder design (multiple size support – ~A4</li> <li>▪ DADF/DSDF with standard Single-Pass Duplex Automatic Document Feeder for scan and copy.</li> <li>▪ Paper Tray/Cassette/Drawer - Total FOUR Trays (Letter, A4 ~ A3) including - bypass and high capacity Tandem/Deck or equivalent options enough for high volume printing.</li> <li>▪ Paper/Size/Thickness: Standard Letter, A4, A3 - up to 200/300 GSM/140LB or equivalent paper weight support</li> <li>▪ Paper output Accessories - Office Finisher Unit (OFU) with up to 50 Sheets (20 lb/80 gsm) single-position stapling or equivalent feature.</li> </ul>	
Power Supply	<ul style="list-style-type: none"> <li>▪ Standard 220 v, 50 Hz Nepal</li> </ul>	
Accessories	<ul style="list-style-type: none"> <li>▪ Power Cables, USB Cables and ADF, Cover etc.</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ 3 Years, Spares and Onsite Support</li> </ul>	

**Lot #3 : Video Conferencing System**

<b>4. Video Teleconferencing (VTC) System for mobile Use -1 set</b>		
<b>BRAND/MODEL NAME</b>		
Type	<ul style="list-style-type: none"> <li>▪ Professional Auto Tracking PTZ Camera</li> </ul>	
Picture Elements	<ul style="list-style-type: none"> <li>▪ Single/Double Lens with 1/25” ~1.0” Image Sensor</li> </ul>	
Output Resolution	<ul style="list-style-type: none"> <li>▪ 4K Ultra HD</li> </ul>	
Zoom	<ul style="list-style-type: none"> <li>▪ 15~30 Advance Zoom or Equivalent</li> </ul>	

FOV/PTZ	<ul style="list-style-type: none"> <li>▪ 60~120-degree horizontal coverage or equivalent</li> </ul>	
Connectivity	<ul style="list-style-type: none"> <li>▪ 3G-SDI/ HDMI / IP / USB/ RS-232/ RS-422 etc. Audio IN/OUT options</li> </ul>	
Video Formats	<ul style="list-style-type: none"> <li>▪ MPEG/AVI/MOV/WMV compatible with Windows</li> </ul>	
Auto Tracking /AI Functions	<ul style="list-style-type: none"> <li>▪ Human Detection/Motion Tracking Feature</li> </ul>	
OS Support	<ul style="list-style-type: none"> <li>▪ Plug and Play – Windows/Mac OS</li> </ul>	
Power Supply	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>	
Accessories	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable, remote control, Extension cable/wire up to 20M, mounting kit etc. to make the system functional.</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>	
<b>Audio Speakerphone</b>		
Type	<ul style="list-style-type: none"> <li>▪ Full duplex microphone array speakerphone</li> </ul>	
Audio acoustic features	<ul style="list-style-type: none"> <li>▪ Advanced echo cancellation / noise suppression features for powerful wideband voice processing</li> </ul>	
<b>Voice/Audio Control</b>	<ul style="list-style-type: none"> <li>▪ Speaker volume adjustable via Remote control/Touch Control/button control for volume up/down, mute, call and hang-up functions</li> </ul>	
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>▪ Bluetooth/LAN/audio IN/OUT, USB 3.0/USB-C/HDMI/ RS-232/ RS-422 with options for MIC POD expansion and external audio system</li> </ul>	
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>	
<b>Accessories</b>	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable/HuB, remote control and extension cable up to 20M to make the system functional.</li> <li>▪ Mounting Kits (if applicable)</li> </ul>	
<b>OS Support</b>	<ul style="list-style-type: none"> <li>▪ Plug and Play with Standard Windows and Mac OS</li> </ul>	
<b>Expected Apps to be Compatible With</b>	<ul style="list-style-type: none"> <li>▪ Skype/Skype for Business</li> <li>▪ Microsoft Teams</li> </ul>	

	<ul style="list-style-type: none"> <li>▪ Zoom</li> <li>▪ Cisco WebEx, Jabber,</li> </ul>	
<b>Warranty</b>	<ul style="list-style-type: none"> <li>▪ At least ONE Year</li> </ul>	
<b>Carrying Bag</b>	<ul style="list-style-type: none"> <li>▪ Appropriate carrying bag to accommodate Conference Camera, Speakerphone and Accessories</li> </ul>	

#### Lot #4: Uninterruptable Power Supply System

<b>5. 3 kVA Smart UPS -1 set</b>		
	<b>BRAND/MODEL NAME</b>	
Type/Capacity	<ul style="list-style-type: none"> <li>▪ 3000 VA Smart UPS System</li> <li>▪ Tower Casing</li> </ul>	
Power Input Voltage/Current	<ul style="list-style-type: none"> <li>▪ 220 V, 50/60 Hz +/-3 Hz Auto Sensing</li> <li>▪ IEC320- C19 Input Connection</li> <li>▪ Input Voltage range – 160 ~ 285 V adjustable.</li> <li>▪ At least 95.0 % efficiency at full load</li> </ul>	
Power Output Voltage/Current	<ul style="list-style-type: none"> <li>▪ 3.0 kVA, 2.7kWatts</li> <li>▪ Nominal Output voltage – 220 ~230 configurable</li> <li>▪ At least 95% Efficiency at full load</li> <li>▪ (1) IEC C19 outlet connection</li> <li>▪ (4+) IEC C13 outlet connections</li> </ul>	
Batteries	<ul style="list-style-type: none"> <li>▪ 2x Maintenance-free sealed Lead-Acid battery (Leak-proof)</li> <li>▪ Expected re-charge time 3 Hrs.</li> <li>▪ Expected Battery Life (years): 3- 5 years.</li> </ul>	
Backup/runtime	<ul style="list-style-type: none"> <li>▪ At least 8 ~ 12 minutes of runtime at half load</li> </ul>	
Output Frequency	<ul style="list-style-type: none"> <li>▪ Sinewave, 50 Hz (47 - 53 Hz), +/-5% distortion</li> </ul>	
Communication	<ul style="list-style-type: none"> <li>▪ Smart-Connect, USB &amp; Serial support.</li> <li>▪ LED/LCD/Light status display for On-Line, On-Battery, Battery Replace and Overload Indicator</li> </ul>	



Audible Alarm	<ul style="list-style-type: none"> <li>▪ Alarm when UPS is on battery, distinctive low battery and configurable delays or defects.</li> </ul>	
Accessories	<ul style="list-style-type: none"> <li>▪ Power Cables, C13, C19 type,</li> <li>▪ Serial/USB cable, Serial-RJ-45 etc.</li> <li>▪ User manual</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>	

**6. 20 kVA UPS for Data Center (Backup) -1 set**

<b>BRAND/MODEL NAME</b>		
<b>External Features:</b>		
Chassis Type	<ul style="list-style-type: none"> <li>▪ Tower with trolley wheelbase</li> </ul>	
UPS Type/Capacity	<ul style="list-style-type: none"> <li>▪ 20 kVA Smart, Double Conversion Online</li> </ul>	
Architecture	<ul style="list-style-type: none"> <li>▪ Modular design for quick service and less maintenance via self-diagnosis and replaceable spare parts.</li> </ul>	
User Interface	<ul style="list-style-type: none"> <li>▪ Control Panel/LCD display - Alpha-numeric displays for system parameters and alarms.</li> </ul>	
Signal and Alert	<ul style="list-style-type: none"> <li>▪ Audible alarms notify changes in utility and UPS power conditions, programmable with auto reset and various frequencies.</li> </ul>	
Installation	<ul style="list-style-type: none"> <li>▪ Easy installation, customizable to connect with external battery bank, with adequate option for charging system and scalability.</li> </ul>	
Diagnostics	<ul style="list-style-type: none"> <li>▪ Self-test features to ensures early detection of electricity fault or battery issue.</li> </ul>	
<b>Input Power Ratings (Municipal Feed)</b>		
Input Frequency	<ul style="list-style-type: none"> <li>▪ 45 ~ 65 Hz (auto sensing)</li> </ul>	
3- Phase Input Voltage range	<ul style="list-style-type: none"> <li>▪ 304 ~ 477V, Others 380V ~ 415V</li> </ul>	

Input Power Factor at Full Load	<ul style="list-style-type: none"> <li>▪ 0.99</li> </ul>	
Input Connections	<ul style="list-style-type: none"> <li>▪ Hard Wire 5-wire (3PH + N + G)</li> </ul>	
<b>Output Power ratings (Pure Sine Wave)</b>		
Max Configurable Power	<ul style="list-style-type: none"> <li>▪ 20.0 kW / 20.0kVA</li> </ul>	
Nominal Output Voltage	<ul style="list-style-type: none"> <li>▪ 220 V Single Phase/3 Phase (Configurable for 380: 400 or 415 V 3-Phase nominal output voltage)</li> </ul>	
Output Voltage Distortion	<ul style="list-style-type: none"> <li>▪ Less than 3% at full load</li> </ul>	
Efficiency at Full Load	<ul style="list-style-type: none"> <li>▪ 95.0 % or higher</li> </ul>	
Output Frequency (sync to mains)	<ul style="list-style-type: none"> <li>▪ 50 Hz Sync to mains, 60 Hz Sync to mains</li> </ul>	
Output connection	<ul style="list-style-type: none"> <li>▪ Customizable for 3Phase to 3Phase or 3Phase to Single phase, Hard Wire 5-wire (3PH + N + G), IEC 320 standard installations.</li> </ul>	
Bypass	<ul style="list-style-type: none"> <li>▪ Built-in maintenance bypass</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ 3 Years</li> </ul>	
<b>Installation/Operation</b>		
Installation	<ul style="list-style-type: none"> <li>▪ This UPS will serve as a redundant use for the existing 20 kVA APC Smart-UPS - SUVT 20KHS model. Vendor must conduct a test installation, synchronizing the offered UPS to the existing wiring infrastructure that connects with 32 x 150 Ah, 12V battery bank setup.</li> </ul>	
Monitoring	<ul style="list-style-type: none"> <li>▪ Pre-Installed Network Management, Interface Ports(s), RJ-45 10/100 Base-T Smart slot with audible and visible alarm. EMP/Temperature Sensor, Web/SNMP Management Card for remote access/management.</li> </ul>	
Documentation / Manual	<ul style="list-style-type: none"> <li>▪ CD with software/firmware, User Manual for graceful power programming.</li> </ul>	