

## Technical Specifications

### Procurement of Various ICT Equipment - MITHI 2021

#### ICT Equipment – Lot 1

<b>3,212,085.93</b>		
<b>37 units</b>	<b>Laptop</b> Specification Requirements: <ul style="list-style-type: none"><li>• Operating System: Windows 10</li><li>• Display<ul style="list-style-type: none"><li>○ Screen Size: 14 inches or larger</li><li>○ Screen Type: IPS</li><li>○ Resolution: 1920 x 1080</li></ul></li><li>• Processor: Ryzen 7 3700U or higher</li><li>• Memory: 8 GB DDR4 or higher</li><li>• Graphics: Vega 10 or higher</li><li>• Battery: 56 Wh (Rating Capacity)</li><li>• WIRELESS<ul style="list-style-type: none"><li>○ Wi-Fi: IEEE 802.11a/b/g/n/ac, 2.4 GHz and 5 GHz, 2 x 2 MIMO</li><li>○ Bluetooth 5.0, compatible with Bluetooth 4.2, Bluetooth 2.1+EDR</li></ul></li><li>• Camera: 1 MP (720p HD)</li><li>• AUDIO<ul style="list-style-type: none"><li>○ Speaker Power: 2 W each x 2</li><li>○ Number Of Microphone: 2</li></ul></li><li>• Ports<ul style="list-style-type: none"><li>○ USB-A 3.0 x 1</li><li>○ USB-A 2.0 x 1</li><li>○ USB-C x 1</li><li>○ HDMI x 1</li><li>○ 3.5mm headset and mic 2-in-1 jack x 1</li></ul></li><li>• Storage: 512 GB PCIe SSD</li><li>• 1 x Laptop Backpack Bag and Wireless Mouse</li></ul>	<b>1,850,000.00</b>

<b>2 units</b>	<p><b>High-end Laptop</b></p> <p>Specification Requirements:</p> <p><b>1 unit (Windows OS)</b></p> <ul style="list-style-type: none"> <li>• Operating System: Windows 10 Home</li> <li>• Processor: Core i7-10750H Processor 2.60 GHz 12M Cache, up to 5.00 GHz</li> <li>• Graphics: GeForce GTX 1660 Ti 6GB GDDR6 VRAM</li> <li>• Memory: 16GB DDR4 up to 3200MHz SDRAM Support up to 48GB</li> <li>• Storage: 1TB SSD</li> <li>• Display: 15.6-inch Full HD (1920x1080) IPS-level panel, 240Hz, 3ms, 100% sRGB, Pantone® Validated</li> <li>• VR Ready: Yes</li> <li>• Brushed Black: Per-key RGB lighting</li> <li>• I/O Ports: 1 x Thunderbolt? 3 with USB 3.2 Gen 2 Type-C, DisplayPort? 1.4 and Power Delivery</li> <li>• 1 x USB 3.2 Gen 2 Type-A</li> <li>• 2 x USB 3.2 Gen 1 Type-A</li> <li>• 1 x HDMI 2.0b</li> <li>• 1 x 3.5mm Audio jack (ESS Hi-Fi DAC)</li> <li>• 1 x Audio jack mic-in</li> <li>• 1 x Kensington lock</li> <li>• 1 x RJ-45 jack</li> <li>• 1 x Laptop Backpack Bag and Wireless Mouse</li> <li>• Color: Black or Grey only</li> </ul> <p><b>1 unit (Mac OS)</b></p> <ul style="list-style-type: none"> <li>• 2.0GHz quad-core 10th-generation Intel Core i5 processor</li> <li>• Turbo Boost up to 3.8GHz</li> <li>• Intel Iris Plus Graphics</li> <li>• 16GB 3733MHz LPDDR4X memory</li> <li>• 512GB SSD storage</li> <li>• 13-inch Retina display with True Tone</li> <li>• Magic Keyboard</li> <li>• Touch Bar and Touch ID</li> <li>• Four Thunderbolt 3 ports</li> <li>• 1x Earpods with 3.5mm Headphone plug</li> <li>• 1x USB-C to USB Adapter</li> <li>• 1x USB-C Digital AV Multiport Adapter</li> </ul>	<b>300,000.00</b>
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1 unit	<p><b>Live Streaming Laptop</b></p> <p>Specification Requirements:</p> <ul style="list-style-type: none"> <li>• Processor: Ryzen 7 4800H (8C / 16T, 2.9 / 4.2GHz, 4MB L2 / 8MB L3) or higher</li> <li>• Graphics: GTX 1650 4GB GDDR6 or higher</li> <li>• Memory: 1x 8GB SO-DIMM DDR4-3200 or higher</li> <li>• Storage: 512GB SSD M.2 2280 PCIe NVMe or higher</li> <li>• Display: 15.6" FHD (1920x1080) WVA 250nits Anti-glare, 120Hz, 45% NTSC</li> <li>• Ethernet: 100/1000M</li> <li>• WLAN + Bluetooth: 11ax, 2x2 + BT5.0</li> <li>• Microphone: 2x, Array</li> <li>• Operating System: Windows 10 Home 64, English</li> <li>• 1 x Laptop Backpack Bag and Wireless Mouse</li> </ul>	80,000.00
1 unit	<p><b>Mid-Ranged Laptop</b></p> <p>Specification Requirements:</p> <ul style="list-style-type: none"> <li>• <b>Processor:</b> Core i5 9300H</li> <li>• <b>Operating System:</b> Windows 10</li> <li>• <b>Memory:</b> 8 GB, up to 16 GB SDRAM</li> <li>• <b>Display:</b> 15.6" (16:9) LED-backlit FHD (1920x1080) 60Hz Anti-Glare Panel with 45% NTSC</li> <li>• <b>Graphic:</b> GTX1650 with 4GB GDDR5 VRAM</li> <li>• <b>Storage</b> <ul style="list-style-type: none"> <li>○ Solid state drive: 512GB PCIe Gen3 x2 SSD</li> <li>○ Dual HDD support</li> </ul> </li> <li>• <b>Card Reader:</b> Multi-format card reader</li> <li>• <b>WebCam:</b> HDWebcam</li> <li>• <b>Networking</b> <ul style="list-style-type: none"> <li>○ Wi-Fi Integrated Wi-Fi 5 (802.11 ac)</li> <li>○ Bluetooth 5.0</li> </ul> </li> <li>• <b>Interface</b> <ul style="list-style-type: none"> <li>○ 1 x COMBO audio jack</li> <li>○ 1 x Type-C USB 3.0 (USB 3.1 Gen 1)</li> <li>○ 1 x USB 3.0 port(s) Type A</li> <li>○ 2 x USB 2.0 port(s)</li> <li>○ 1 x HDMI</li> </ul> </li> <li>• <b>Battery:</b> 3 -Cell 42 Wh Polymer Battery</li> <li>• <b>Output :</b>20 V DC, 7.5 A, 150 W</li> <li>• <b>Input :</b>100 -240 V AC, 50/60 Hz universal</li> <li>• <b>Weight:</b> 1.8 kg or less</li> <li>• 1 x Laptop Backpack Bag and Wireless Mouse</li> </ul>	60,000.00

<p>2 units</p>	<p><b>Network Attached Storage</b> Specification Requirements:</p> <ul style="list-style-type: none"> <li>• CPU Architecture : 64 bit</li> <li>• CPU Frequency: Quad Core 1.5 (base) / 2.3 (burst) GHz or higher</li> <li>• System Memory: 8GB or higher</li> <li>• 1x4TB Storage Capacity</li> <li>• 3.5 inches</li> <li>• Optimized for NAS enclosure with Agile Array</li> <li>• Multi-user technology for increased user workload</li> <li>• SATA 6GB/s interface</li> <li>• 5900rpm spin speed</li> </ul>	<p>150,000.00</p>
<p>1 unit</p>	<p><b>HD Web Camera for Video Conference</b> Specification Requirements:</p> <ul style="list-style-type: none"> <li>• 4K Ultra HD video calling (up to 4096 x 2160 pixels @ 30 fps)</li> <li>• 1080p Full HD video calling (up to 1920 x 1080 pixels @ 30 or 60 fps)</li> <li>• 720p HD video calling (up to 1280 x 720 pixels @ 30, 60, or 90 fps)</li> <li>• Plug-and-play USB connectivity</li> <li>• Field of View: <ul style="list-style-type: none"> <li>○ Diagonal: 90°</li> <li>○ Horizontal: 82.1°</li> <li>○ Vertical: 52.2°</li> <li>○ 5x digital zoom in Full HD</li> <li>○ Autofocus</li> </ul> </li> <li>• Rightlight™ 3 with HDR for clear image in various lighting environments ranging from low light to direct sunlight.</li> <li>• Image controls with optional Camera Settings application for control of pan, tilt, and zoom</li> <li>• Built-in dual omni-directional mics with noise cancellation</li> <li>• Infrared sensor technology for Windows (SDK available for application integration)</li> <li>• External privacy shutter</li> <li>• Multiple mounting options, including clip and tripod mount</li> <li>• Supports multiple connection types, including USB 2.0 Type A and USB 3.0 Type A and C connections</li> <li>• Custom carrying case</li> </ul>	<p>15,000.00</p>

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1 unit	<b>Biometrics (Finger Scanner) with bundled software</b> <b>Specification Requirements:</b> <ul style="list-style-type: none"> <li>• Users 250,000</li> <li>• Face 10,000 (1;1)/2,000 (1;N)</li> <li>• Fingerprint 250,000 (1:1)/25,000 (1:N)</li> <li>• Log Capacity 10,000,000</li> <li>• Image Logs 20,000</li> <li>• Android OS Familiar UI such as Smart Phone Apps</li> <li>• Operation Mode: Face, Fingerprint , Card &amp; PIN</li> <li>• Communications: TCP/IP, RS-485,RS232, Wiegand In &amp; Out.</li> <li>• LCD Display : 5.0" touchpad LCD (480*800)</li> <li>• Camera: Tilt Dual Camera (Color &amp; IR)</li> <li>• FRR /FAR: 0.1% / 0.0001%</li> <li>• Power: 12-24VDC.</li> <li>• Dimension: 149.5 x 208.5 x 46</li> <li>• Fake finger detection (Patented)</li> </ul>	70,000.00
1 unit	<b>Full HD 1080p Document Camera</b> <b>Specification Requirements:</b> <ul style="list-style-type: none"> <li>• Pixels: 2MP (1920 x 1080 pixels)</li> <li>• Camera Sensor: 1/2.7 inch CMOS Sensor</li> <li>• Resolution: Up to Full HD (1080p)</li> <li>• Zoom: 10x Digital Zoom, 12x Optical Zoom</li> <li>• Weight: Approx 3.0kg</li> </ul>	35,000.00
3 units	<b>Laptop</b> <b>Specification Requirements:</b> <ul style="list-style-type: none"> <li>• Processor: Core i7-9750H Processor 2.6GHz (12M Cache, up to 4.50 GHz)</li> <li>• Memory: 16GB DDR4</li> <li>• Keyboard: RGB Keys</li> <li>• Storage: 512GB NVME SSD</li> <li>• Graphics: 6GB RTX 2060 GDDR6</li> <li>• Display: 15.6-in IPS FHD / 144</li> <li>• Operating System: Windows 10</li> <li>• 1 x Laptop Backpack Bag and Wireless Mouse</li> </ul>	349,400.01
3 units	<b>Smart-UPS C Battery Backup &amp; Surge Protector with SmartConnect</b> <b>Specification Requirements:</b>  Output: 600W / 1000 VA, Input: 220V @ 50/60 Hz ±3 Hz, 6 x NEMA 5-15R Battery Backup Outlets, 1 x NEMA 5-15P Input Connection	69,685.92

<p><b>3 units</b></p>	<p><b>Network Printer</b></p> <p>Specification Requirements:</p> <p>Printer Type:</p> <ul style="list-style-type: none"> <li>• Print, Scan, Copy</li> <li>Print Method: PrecisionCore Printhead</li> <li>• Minimum Ink Droplet Volume: 3.3 pl</li> <li>• Printer Language: ESC / P-R</li> <li>• Control Panel: 2.4 " Colour LCD</li> <li>• Print Direction: Bi-directional printing, Uni-directional printing</li> <li>• Nozzle Configuration: 400 nozzles Black, 128 nozzles per colour (Cyan, Magenta, Yellow)</li> <li>• Maximum Resolution: 4800 x 1200 dpi (with Variable-Sized Droplet Technology)</li> <li>• Automatic 2-sided printing: Yes (up to A4)</li> </ul> <p>Print Speed:</p> <ul style="list-style-type: none"> <li>• Photo Default - 10 x 15 cm / 4 x 6 ""*2 #3: Approx. 69 sec per photo (Border) *1</li> <li>Approx. 92 sec per photo (Borderless) *1</li> <li>• Draft, A4 (Black / Colour): Up to 33 ppm / 20 ppm *1</li> <li>• ISO 24734, A4 Simplex (Black / Colour): Up to 15 ipm / 8.0 ipm *1</li> <li>• ISO 24734, A4 Duplex (Black / Colour): Up to 6.5 ipm / 4.5 ipm *1</li> </ul> <p>Copy Function:</p> <ul style="list-style-type: none"> <li>• Copy Resolution:600 x 1200 dpi</li> <li>• Max Copies:99 copies</li> <li>• Reduction / Enlargement:25 - 400%, Auto Fit Function</li> <li>• Maximum Copy Size:A4, Letter</li> </ul> <p>Copy Speed:</p> <ul style="list-style-type: none"> <li>• ISO 29183, A4, Simplex (Black / Colour):Up to 11 ipm / 5.5 ipm</li> <li>• Copy Quality:Normal / Best quality</li> </ul> <p>Scan Function:</p> <ul style="list-style-type: none"> <li>• Scanner Type:Flatbed colour image scanner</li> <li>• Sensor Type:CIS</li> <li>• Optical Resolution:1200 x 2400 dpi</li> <li>• Maximum Scan Area:216 x 297 mm (8.5 x 11.7 ")</li> <li>• Scanner Bit Depth (Colour):48-bit input, 24-bit output</li> <li>• Scanner Bit Depth (Grayscale):16-bit input, 8-bit output</li> <li>• Scanner Bit Depth (Black &amp; White):16-bit input, 1-bit output</li> </ul> <p>Scan Speed:</p>	<p><b>60,000.00</b></p>
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	<ul style="list-style-type: none"> <li>Flatbed (Black / Colour):200dpi: 12 sec / 27 sec</li> </ul> <p>Paper Handling: Number of Paper Trays:</p> <ul style="list-style-type: none"> <li>1 (Paper Cassette)</li> <li>Standard Paper Input Capacity: Up to 150 sheets, A4 Plain Paper (80 g/m2)</li> <li>Up to 20 sheets, Premium Glossy Photo Paper</li> <li>Output Capacity: Up to 30 sheets, A4 Plain Paper</li> <li>Maximum Paper Size: 215.9 x 1200 mm (8.5 x 47.24 ")</li> <li>Paper Feed Method: Friction feed</li> <li>Paper Size: Legal, 8.5 x 13 ", Letter, A4, 195 x 270 mm, B5, A5, A6, 100 x 148 mm, B6, 5 x 7 ", 4 x 6 ", Envelopes #10, DL, C6</li> <li>Print Margin: 0 mm top, left, right, bottom via, custom settings in printer driver (except plain paper) *4</li> </ul>	
<b>41 units</b>	<p><b>UPS for Workstations</b></p> <p>Specification Requirements:</p> <ul style="list-style-type: none"> <li>At least 650VA</li> <li>180V - 270V Input Voltage</li> <li>2-4 Universal Sockets</li> </ul>	<b>123,000.00</b>
<b>2 units</b>	<p><b>Printer</b></p> <p>Specification Requirements:</p> <ul style="list-style-type: none"> <li>All-in-One Inkjet Printer</li> <li>Print, Scan, Copy, Fax,</li> <li>Max Print Resolution: 4800 x 1200 dpi, Max Print Size: 8.5 x 47.2",</li> <li>Print Speed: 20 ppm</li> </ul>	<b>50,000.00</b>

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