ANNEX "B"

Technical Specifications

ll. The		ical Specifications be brand-new and of a reputable brand. Refurbished equipment are not	Statement of
	eptable.		Compliance
		all provide SLSU Main Campus the Goods with the following minimum	(Indicate also the brand name,
spe	cifications:		model and detailed specificatio with supporting brochure and
tem	Quantity	Minimum Specifications	related literature)
		ICT EQUIPMENT	
1		> LAPTOP	
		End-user: Business Affairs Office	
		Specifications:	
		Intel Core i5-7200* 2.5 GHz Processor (3M Cache, up to 4GB DDR4 2400MHz)	
		upgradeable to 32 GB using two soDIMM,	
		14" HD 1366 x 768 Resolution Acer ComfyViewTM LED-backlit 16:9 aspect ratio	
	4	Ultra-Slim Design	
	1 unit	NVIDIA GeForce 940MX with 2GB of dedicated GDDR5 1TB 2.5-inch 5400 RPM	
		HD camera with 1280 x 720 resolution	
		720p HD audio/video recording High dynamic range imaging (HDR)	
		8x DVD-Writer, WLAN intel Dual Band Wireless-AC	
		802.11ac, featuring 2x2 MIMO WPAN Bluetooth 4.0, LAN Gigabit Ethernet, Wake-on	
		LAN-ready, Two Built-in digital microphone	
		Warranty: 1 year warranty on parts and labor End-user: BOR	
		Specifications:	
		Processor: Intel Core i3-7100U Processor (3M Cache, 2.40 GHz) Memory : 4GB of DDR4 system memory, upgradable to 32 GB using two	
		soDIMM modules	
		Storage :1TB SATA HDD Display :14 HD 1366 x 768 resolution, high-brightness LEDbacklit TFT	
		LCD 16:9 aspect ratio Ultra-slim design Mercury free, environment	
		friendly Graphics:NVIDIA GeForce MX150 with 2 GB of dedicated GDDR5 VRAM,	
	1 unit	Optical Drive:DVD Super Multi Burner	
		Wireless :WLAN	
		802.11a/b/g/n/ac wireless LAN Operates at 2.4 GHz and 5 GHz	
		1x1 MU-MIMO technology	
		WPAN Bluetooth 4.1	
		LAN	
		Gigabit Ethernet, Wake-on-LAN ready Operating System: Windows 10 Home	
		Audio: Compatible with Cortana with Voice	

	Certified for Skype for Business headphone-like audio and powerful sound Two built-in stereo speakers Built-in digital microphone Dimension:343 (W) x 248 (D) x 23.7/30 (H) mm (13.5 x 9.76 x 0.93/1.18 inches) Battery :2.1 kg (4.63 lbs.) with 4-cell battery pack 3-pin 65 W AC adapter 41.4 Wh 2800 mAh 14.8 V 4-cell Li-ion battery Camera :HD camera with: 1280 x 720 resolution 720p HD audio/video recording High dynamic range imaging (HDR) I/O Ports: Two USB 3.0 ports with one featuring power-off USB charging USB 2.0 port SD Card reader Ethernet (RJ-45) port HDMI port with HDCP support External display (VGA) port 3.5 mm headphone/speaker jack, supporting headsets with built-in microphone Warranty:1 Year Parts - 1 Year Labor Only (1-1-0)
2	> PRINTER
1 unit	End-user: Accounting Specifications: Printer Type: Print, Scan, Copy, Fax with ADF Printing Technology: Print Method: PrecisionCore TM Printhead Minimum Ink Droplet Volume: 2.8 pl Print Direction: Bi-directional printing, Uni-directional printing Nozzle Configuration: 400 x 2 nozzles Black, 128 x 2 nozzles per colour (Cyan, Mageria, Yellow) Maximum Resolution: 4,800 x 2,400 dpi (with Variable-Sized Droplet Technology) Automatic 2-sided printing: Yes (up to A3) Print Speed: Photo Default - 10 x 15 cm / 4 x 6 " *2: Approx. 42 sec per photo (with Border) *1 ISO 24734.2, A3 Simplex (Black / Colour): Up to 10 ipm / 5 ipm *1 ISO 24734.2, A3 Sumplex (Black / Colour): Up to 5 0 ipm / 3.7 ipm *1 Copy Function: Reduction / Enlargement: 25 - 400%, Auto Fit Function Maximum Copy Size: A3 Copy Resolution: 600 x 600 dpi Max Copies: 99 copies Superb Quality and Cost-savings Superb Quality and Cost-savings Superb Quality and Cost-savings High Speed Duplex Printing Duplex Automatic Document Feeder Convenient Connectivity Print up to A3+ Superb Quality and Standalo
1 unit	End-user: CCSIT
Tochnicol Cross	Printing Technology:
Technical Spec	ifications SLSU MAIN CAMPUS y & Installation of Various ICT Equipment & Accessories PB 2019 – G&S - 09

			-
		Print Method: On-demand inkjet (Piezoelectric)	
		Maximum Print Resolution: 5760 x 1440 dpi (with Variable-Sized Droplet	
		Technology)	
		Minimum Ink Droplet Volume: 1.5pl	
		Automatic Duplex Printing: No	
		Print Direction: Bi-directional printing, Uni-directional printing	
		Nozzle Configuration: 90 per colour (Cyan, Light Cyan, Magenta, Light	
		Magenta, Yellow, Black)	
		Print Speed: Draft, A4 (Black / Colour):	
		Up to 15ppm / 15ppm *1	
		Photo Default: 10x15cm/4x6" - Approx. 45 sec per photo (Borderless) *1	
		Paper Handling:	
		Number of Paper Trays: 1	
		Standard Paper Input Capacity:	
		Up to 100 sheets, A4 Plain paper (75g/m2)	
		Up to 30 sheets, Premium Glossy Photo Paper	
		Output Capacity:	
		Up to 50 sheets, A4 Plain paper	
		Up to 20 sheets, Premium Glossy Photo Paper	
		Maximum Paper Size: 12.95 x 44"	
		Paper Sizes: A3+, A3, B4, A4, A5, A6, B5, 10x15cm (4x6"), 13x18cm (5x7"),	
		16:9 wide size, Letter (8.5x11"), Legal (8.5x14"), Half Letter (5.5x8.5"), 9x13cm	
		(3.5x5"), 13x20cm(5x8"), 20x25cm(8x10"), Envelopes: #10(4.125x9.5"),	
		DL(110x220mm), C4 (229x324mm), C6(114x162mm)	
		Paper Feed Method: Friction feed	
		Print Margin: 0mm top, left, right, bottom via custom settings. Otherwise 3mm	
		top, left, right, bottom.	
		Connectivity:	
		Standard: USB 2.0	
		Supported OS and Applications:	
		Supported OS: Windows XP / Vista / 7 / 8 / 8.1 / 10	
		Mac OS X 10.5.8 or later	
		Dimensions and Weight:	
		Dimensions (W x D x H): 705 x 322 x 215 mm	
		Weight: 12.5kg	
		Warranty:1 Year Parts - 1 Year Labor Only	
3		> SMART TV	
.			
		End-user: Computer Engineering	
		Specifications:	
		TV Type LED , Smart TV	
		SIZE: 55"	
		Backlight: Direct LED	
		Display Resolution: PAL/NTSC	
		HDR: Ultra HD 3840×2160	
	1		
		Dynamic Contrast Ratio: 3.000.000.1	
		Dynamic Contrast Ratio: 3,000,000:1 Aspect Ratio: 16:9	
		Aspect Ratio: 16:9	
	_		
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4)	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4) Antenna Input: x2 (NTSC)	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4) Antenna Input: x2 (NTSC) Composite Audio /Video Input: x1	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4) Antenna Input: x2 (NTSC)	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4) Antenna Input: x2 (NTSC) Composite Audio /Video Input: x1	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4) Antenna Input: x2 (NTSC) Composite Audio /Video Input: x1 SPDIF: x1 (Optical), Earphone Output: x1 Invisible Speakers: ✓, Wake On LAN: ✓	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4) Antenna Input: x2 (NTSC) Composite Audio /Video Input: x1 SPDIF: x1 (Optical), Earphone Output: x1 Invisible Speakers: ✓, Wake On LAN: ✓ OSD Multi Language: ✓	
	5 units	Aspect Ratio: 16:9 Brightness: 500 cd/m2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓, DLNA: ✓, Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: x2 (2.0), x2 (1.4) Antenna Input: x2 (NTSC) Composite Audio /Video Input: x1 SPDIF: x1 (Optical), Earphone Output: x1 Invisible Speakers: ✓, Wake On LAN: ✓	

		1
	General Power Requirement : 100-240V 50/60Hz AC Power Consumption: 170W Standby Power Consumption: <1W Net/Gross Weight (KG): 16.0Kg / 21.0Kg Warranty: 2 Years Remote Control: ✓, Wall Bracket: ✓ Digital Antenna: ✓, WIFI Module: Built-in	
2 units	End-user: MIS (1) Teacher Education (1) Specifications: TV Type LED , Smart TV SIZE: 50" Backlight: Direct LED Display Resolution: PAL/NTSC HDR: Ultra HD 3840×2160 Dynamic Contrast Ratio: 3,000,000:1 Aspect Ratio: 16:9 Brightness: 500 Cd/M2 Viewing Angles (H/V): 1780/1780 WIFI / LAN: ✓ DLNA: ✓ Bluetooth: ✓ USB 3.0: JPEG, MP3, MKV x1 USB 2.0: JPEG, MP3, MKV x1 HDMI Input: X2 (2.0), X2 (1.4) Antenna Input: x2 (NTSC) Composite Audio /Video Input: x1 SPDIF: x1 (Optical) Earphone Output: X1 Invisible Speakers: ✓ Wake On LAN: ✓ OSD Multi Language: ✓ Sleep Timer 120 Mins: ✓ General Power Requirement: 100-240V 50/60Hz AC Power Consumption: 170w Standby Power Consumption: <1w Net/Gross Weight (Kg): 16.0kg/21.0kg Warranty: 2 Years Remote Control: ✓ Wall Bracket: ✓ Digital Antenna: ✓ WIFI Module: Built-In	
4	> Mini PC	
2 units	End-user: Internet Café Specifications: Form Factor: Mini PC Processor: Intel Core i3-8100T 3.10 GHz Processor: Main Features 64 bit Quad-Core Processor Cache Per Processor: 6 MB L3 Cache Memory: 4GB DDR4 2400 Storage: 500 GB 7200 RPM Graphics: Intel UHD Graphics 630 Power Supply: 65W Operating System: Windows 10 Pro 64-Bit Communications LAN Speed: 10/100/1000Mbps WLAN: 802.11ac Wireless LAN Bluetooth: Bluetooth 4.0 Front Panel Ports: 1xUSB3.1Gen1Type-C 4 x USB 3.1 Gen 1 Type-A (1 w/ quick charging) 1 x Headphone out, 1 x Mic-in	
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		1 Display Port, 1 HDMI Rear USB: 1xUSB3.1Gen1Type-A, 2 x USB 2.0 RJ45: 1 port, USB Keyboard, USB Mouse 35.56 mm x 175.26 mm x 175.26 mm, 1.80 kg	
5		LCD Projector	
		End-user: RDP	
	1 unit	Specifications: White and Colour Brightness at 4,000lm, XGA resolution, 12,000 hours lamp life in eco-mode, MHL-enabled, Multi-PC Projection, Horizontal Keystone SliderConnectivity, Network: Wired LAN:1, Wireless LAN: Optional (using ELPAP10), Analog RGB Input: D-Sub 15Pin: 2 (Blue Molding), Analog input: Composite: RCA x 1 (Yellow), Digital Input: HDMI: 2 (1 with MHL support), Analog Output: D-Sub 15Pin:1, Audio Input: Stereo Mini Jack:1, Mic I/O: Stereo Mini Jack:1, Control I/O: RS-232C:1, USB Input: USB Type A: 1 (For USB Memory, USB Document Camera, Wireless LAN and Firmware Update), USB Type B: 1 (For USB Display, Mouse, K/B, Control and Firmware Update)	
		End-user: CCSIT	
		Technology: Projection System: 3LCD Technology, RGB liquid crystal shutter LCD Panel: 0.55 inch with MLA (D10) Image: Colour Light Output: 3,600 Lumen- 2,235 Lumen (economy) in accordance with IDMS15.4 White Light Output: 3,600 Lumen - 2,235 Lumen (economy) in accordance with ISO 21118:2012 Resolution: XGA, 1024 x 768, 4:3 Aspect Ratio: 4:3 Contrast Ratio: 15,000 : 1 Light source: Lamp Lamp: UHE, 210 W, 6,000 h durability, 10,000 h durability (economy mode) Keystone Correction: Auto vertical: ± 30 °, Manual horizontal ± 30 ° Colour Processing: 10 Bits 2D Vertical Refresh Rate: 100 Hz - 120 Hz Colour Reproduction: upto 1.07 billion colours Optical: Projection Ratio: 1.48 - 1.77:1 Zoom: Manual, Factor: 1.2 Lens: Optical Image Size: 30 inches - 300 inches Projection Distance Wide/Tele: 1.8 m - 2.17 m (60 inch screen) Projection Lens F Number: 1.49 - 1.72 Focal Distance: 16.9 mm - 20.28 mm Focus: Manual Offset: 8 : 1 Connectivity: USB Display Function: 2 in 1: Image / Mouse Interfaces: USB 2.0 Type A, USB 2.0 Type B, VGA in, HDMI in, Composite in, Cinch audio in, Wireless LAN IEEE 802.11b/g/n (WiFi 4) (optional) Advanced Features: Security: Kensington lock, Security cable hole, Wireless LAN unit lock, Password protection 3D: No 2D Colour Modes: Dynamic, Cinema, Presentation, sRGB, Blackboard Features: AV mute slide, Automatic keystone correction, Bull-tin speaker, Horizontal and vertical keystone correction, Long lamp life, Quick Corner Video Colour Modes: Blackboard, Cinema, Dynamic, Presentation, sRGB General: Energy Use: 282 Watt, 203 Watt (economy), 0.2 Watt (standby), On mode power consumption as defined in JBMS-84 257 Watt Supply Voltage: AC 100 V - 240 V, 50 Hz - 60 Hz Product weight: 2.5 kg Noise Level: Normal: 37 dB (A) - Economy: 28 dB (A)	
		Temperature: Operation 5°C - 35°C, Storage -10°C - 60°C	
Tech	nical Specific	Humidity: Operation 20% - 80%, Storage 10% - 90%	Main Campus

	Options: Air filter Loudspeaker: 2 Watt		
	Colour: White		
6	 PROJECTOR with Brand design(compatible) CEILING MOUNT (WHITE) 		
1 unit	End-user: MIS Specifications: Projection Technology: Projection Technology: RGB liquid crystal shutter projection system Brightness*2: White Light Output (Normal/Eco):3,600lm / 2,235lmColour Light Output:3,600lm Connectivity: USB Interface: USB Type A: 1 (for USB Memory, USB Document Camera, for Wireless LAN Unit, Firmware Update) USB Type B: 1 (for USB Display, Mouse, K/B, Control, Firmware Update) USB Type B: 1 (for USB Display, Mouse, K/B, Control, Firmware Update) USB Type B: 1 (for USB Display, Mouse, K/B, Control, Firmware Update) USB Type B: 1 (for USB Display, Mouse, K/B, Control, Firmware Update) USB type B: 1 (for USB Display, Mouse, K/B, Control, Firmware Update) USB type B: 1 (for USB Display, Mouse, K/B, Control, Firmware Update) Use Standard Statio: Contrast Ratio: Contrast Ratio: Contrast Ratio: Supported Speed for Each Mode:IEEE 802.11b (2.4GHz): 11Mbps IEEE 802.11n (2.4GHz): 130 Mbps Wireless LAN Security: Quick Mode: WPA2-PSK, Advanced Mode:		
7	> SCANNER		
3 units	<i>End-user: GIS (1) BAC (1) VPAF (1)</i> Specifications: Scan Function: Scanner Type: A4 sheet-fed, simplex colour scannerSensor Type: CISLight Source: RGB LEDOptical Resolution: 600 x 600 dpiOutput Resolution: 50 – 1,200 dpi (in 1 dpi increments)Scanner Bit Depth (Colour): 48-bit input, 24-bit outputScanner Bit Depth (Grayscale): 16-bit input, 8-bit outputScanner Bit Depth (Black & White): 16-bit input, 1-bit outputMax Document Size: 216 x 1,117mmOutput File Formats: JPEG, TIFF, Multi-TIFF, PDF, Searchable PDF, BMP, PNG Document Capture Pro (Win): JPEG, BMP, PDF, Searchable PDF, TIFF, Multi- TIFF, PNG, DOCX, XLSX, PPTX Scan Speed: ADF Monochrome (Simplex / Duplex): 200 dpi: 25ppm / 50ipm, 5.0ppm / 10ipm (USB Bus Power) 300 dpi: 25ppm / 50ipm 5.0ppm / 10ipm (USB Bus Power) 600 dpi: 5.0ppm / 10ipm 5.0ppm / 10ipm (USB Bus Power)ADF Colour		
Technical Spec	600 dpi: 5.0ppm / 10ipm 5.0ppm / 10ipm (USB Bus Power)ADF Colour ifications SLSU	J Main Campus 019 – G&S - 09	

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		(Simplex / Duplex): 200 dpi: 25ppm / 50ipm 5.0ppm / 10ipm (USB Bus Pov	wer)
		600 dpi: 5.0ppm / 10ipm 5.0ppm / 10ipm (USB Bus Power) Scanner Type: A4 Sheet-fed, one-pass duplex colour scannerOptical Sen CISLight Source: RGB LEDOptical Resolution: 600 x 600 dpiOu	tput
		Resolution: 50 dpi - 1,200 dpi (1 dpi increments)Min Document Size: 50 70mmMax Document Size: 216 x 1,117mmSupport Paper Thickness: 51 128gsmADF Capacity: 20 sheetsAutomatic Duplex Scanning: YesDaily E	.8 –
8		Cycle: up to 500 pages / day, Multi-feed Detection: Length Detection	
•			
		End-user: MIS Specifications: 50 inches LED TV	
		Dimensions and Weight	
		Stand Width Approx. 728 mm	
		Dimension of TV with Floor Stand (W x H x D)	
		Screen Size (inch, measured diagonally): 50 in (49.5 in)	
		Weight of TV with floor stand Screen Size (cm, measured diagonally): 125.7 cm	
		Weight of Package Carton (Gross): Approx. 16 kg	
		Weight of TV without Stand: Approx. 11 kg	
		VESA® Hole Pitch(W x H): 200 x 200 mm Dimension of TV without Stand (W x H x D):	
		Approx. 1130 x 660 x 68 mm	
		Weight of TV with Stand: Approx. 11.4 kg	
		Dimension of Package Carton (W x H x D): Approx. 1228 x 786 x 143 mm	
		Dimension of TV with Stand (W x H x D):	
		Approx. 1130 x 719 x 268 mm	
		Connectivity HDCP: HDCP1.4	
		USB drive format support: FAT16/FAT32/NTFS	
		Component Video (Y/Pb/Pr) Input(s): No	
		HDMI inputs total: 2 (Side) Composite Video Input(s): 1 (Rear)	
	1 unit	RS-232C Input(s): No	
	i unit	Subwoofer Output(s)	
		1 (Side/Hybrid with Headphone Out) Digital Audio Output(s): 1 (Rear)	
		IF (satellite) input(s): No	
		USB HDD Recording: No MHL®: No	
		HDMI Audio Return Channel (ARC): Yes (ARC)	
		RF (Terrestrial/Cable) Connection Input(s): 1(Side)	
		Headphone Output(s): 1 (Side) USB ports: 2 (Side)	
		USB playback codecs: WMA/JPEG	
		Wi-Fi Standard: Wi-Fi Certified 802.11b/g/n	
		HDMI-CEC: Yes Smartphone connectivity: Photo Sharing Plus, Media Connect	
		Audio Output(s): 1 (Side/Hybrid with Headphone Out)	
		Bluetooth profile support: No Ethernet inputs: 1 (Rear)	
		Picture (Panel)	
		Display resolution (H x V, pixels): 1920 x 1080	
		Display type: LCD Backlight type	
		Direct LED	
		Viewing Angle (X-Wide Angle)	
		- Simulated surround sound	
		S-Force Front Surround	
Techni	ical Specif	ications	SLSU MAIN CAMPUS

		TV CENTER SPEAKER MODE	
		- FM Radio: Yes Sound processing: ClearAudio+ Software Twin Picture: No On/Off Timer: Yes Voice Search: No Sleep Timer: Yes Operating System: Linux Internet Browser: VEWD Electronic Program Guide (EPG): Yes Closed Captions (Analog/Digital) (Analog)-, (Digital)Caption	
		Content Bar: No On-board Storage (GB) Teletext: No Display Language	
		End-user: MIS Specifications: 35 inches LED TV SMART FUNCTIONS: OPERATING SYSTEM: Vidaa U2.5 TV Browser APP STORE: VEWD App Store VIDEO STREAMING: Youtube, Viewster Anyview Cast, Netflix, Deezer RECEPTION:	
		Built-in ISDB-T, SAP/MTS VIDEO: Resolution: Full HD 1920 x 1080, 60Hz Vivid Motion Dynamic Contrast Ration: 3,000,000:1 Aspect Ratio: 16:9, Response Rate: 8ms Digital Comb Filter AUDIO:	
	1 unit	Equalizer, Surround Sound System Auto Power Output: 8Wx2 CONNECTIVITY: WiFi/LAN DLNA USB 2.0: JPEG, MP3, MKV x2 HDMI Input: x3 (1.4) Antenna Input: x1 (NTSC) Composite Audio/Video Input: x1 SPDIF: x1 (Optical) Earphone Output: x1	
9		OTHERS FEATURES: Invisible Speakers, Wake on LAN OSD Multi Language, Zoom, Sleep Timer GENERAL: Power Requirement: 100-240V - 50/60Hz AC Power Consumption: 70W	
	2 units	Gigabit Switch (16 ports) End-user: MIS Specifications:	
	cal Specifi DFLIVFRY &	cations SL	SU Main Campus 2019 – G&S - 09

	Total Number of Network Ports: 16 Number of PoE (RJ-45) Ports: 8 Number of Network (RJ-45) Ports : 8 Port/Expansion Slot Details : 16 x Gigabit Ethernet Network Media Type Supported Twisted Pair Ethernet Technology Gigabit Ethernet Network Technology 10/100/1000 Base-T Network & Communication: Layer Supported: b2 Management & Protocols: Manageable: No Physical Characteristics: Form Factor : Wall Mountable Rack-mountable Height: 1.8", Width: 11", Depth: 6.7"		
	Weight (Approximate): 4.15 lb. Wireless Access Point (End-user: MIS)		
	Specifications: Wireless Radio Specifications AP type: Indoor, dual radio, 5GHz 802.11ac 4x4 MIMO and 2.4GHz 802.11n 2x2 MIMO Software-configurable dual radio supports 5GHz (Radio 0) and 2.4GHz (Radio 1) 5GHz: Four spatial stream Single User (SU) MIMO for up to 1,733Mbps wireless data rate to individual 4x4 VHT80 or 2x2 VHT160 client devices 2.4GHz: Two spatial stream Single User (SU) MIMO for up to 400 Mbps wireless data rate to individual 2x2 VHT40 client devices (300Mbps for HT40 802.11n client devices) 5GHz: Four spatial stream Multi User (MU) MIMO for up to 1,733 Mbps wireless data rate to up to three MU-MIMO capable client devices simultaneously Support for up to 255 associated client devices per radio, and up to 16 BSSIDs per radio		
4 units	Supported radio technologies: 802.11b: Direct-sequence spread-spectrum (DSSS) 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM) Supported modulation types: 802.11b: BPSK, QPSK, CCK 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM Maximum (conducted) transmit power (limited by local regulatory requirements): 2.4GHz band: +18 dBm per chain, +21dBm aggregate (2x2) 5GHz band: +18 dBm per chain, +24dBm aggregate (4x4) Note: conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain Supported data rates (Mbps): 802.11b: 1, 2, 5.5, 11 /802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 / 802.11n (2.4GHz): 6.5 to 300 (MCS0 to MCS15) 802.11n (5GHz): 6.5 to 600 (MCS0 to MCS31) / 802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4 for VHT20/40/80, NSS = 1 to 2 for VHT160) / 802.11ac very high throughput (VHT) support: VHT 20/40/80/160		
	Wi-Fi Antennas Four integrated dual-band downtilt omni-directional antennas for 4x4 MIMO with maximum antenna gain of 3.1dBi in 2.4GHz and 5.0dBi in 5GHz. Built-in		
	antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30 degrees.		
	Other Interfaces One 10/100/1000BASE-T Ethernet network interface (RJ-45) Auto-sensing link speed and MDI/MDX 802.3az Energy Efficient Ethernet (EEE)		
Technical Specific		MAIN CAMPUS	

	USB 2.0 host interface (Type A connector) Bluetooth Low Energy (BLE) radio Up to 4dBm transmit power (class 2) and -91dBm receive sensitivity Integrated antenna with roughly 30 degrees downtilt and peak gain of 3.4dBi (AP-314/IAP-314) or 1.5dBi (AP-315/IAP-315) Visual indicators (multi-color LEDs): for System and Radio status Reset button: factory reset (during device power up) Kensington security slot Power Sources and Consumption The AP supports direct DC power and Power over Ethernet (POE) When both power sources are available, DC power takes priority over POE Mounting The AP ships with two (white) mounting clips to attach to a 9/16-inch or 15/16- inch flat T-bar drop-tile ceiling. Mechanical Dimensions/weight (unit, excluding mount accessories): 182mm(W) x 180mm(D) x 48mm (H)650g/23oz	
1 unit	Camera Tripod <i>(End-user: RDP)</i> Specifications: 1.5M Foldable Telescoping Tripod with Fluid Drag Head Padded Bag	
1 unit	Branded CPU End-user: RDP Specifications: Desktop Type Desktop Type CPU Intel Core i3-8100 Processor Model i3-8100: 3.6 GHz CPU Cache : 6MB GPU Model NVIDIA GeForce GT 730 RAM 8GB Memory Speed2666MHz DDR4 Storage Type HDD 1TB HDD Format3.5 inches Rotational Speed7200 rpm Optical Drive8X DVD-Writer, 9.0 mm slim Resolution FHD 1920 x 1080 Ethernet Yes WiFi802.11ac/a/b/g/n wireless LAN Connectivity HDMI , USB2.0 , USB3.0 , Bluetooth , Card Reader OS Ver Windows 10 Home Keyboard & Mouse	
1 unit	Projector Stand End-user: GIS Specifications:	
1 unit	1.5m Foldable telescoping Tripod self-aligning metal quick-flip leg locks Rack LCD Console End-user: GIS Specifications: Rack LCD Console with Integrated 8-port Analog KVM Switch	
1 unit	Server Hard Drive 12TB or Higher Digitally Signed Firmware End-user: GIS	
1 unit	Camera Mic End-user: Extension	
1 unit	Gigabit Switch 48 ports (rack mount) End-user: MIS	
Technical Speci	Hardware Features fications SLSL	Main Campus
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SUPPLY, DELIVERY & INSTALLATION OF VARIOUS ICT FOUIPMENT & ACCESSORIES

PB 2019 – G&S - 09

	Standards and Protocols: IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x	
	Interface: 48 10/100/1000Mbps RJ45 Ports (Auto Negotiation/Auto MDI/MDIX) Network Media: 10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) 100BASE-TX/1000BASE-T: UTP category 5, 5e or above cable (maximum	
	100m)	
	Fan Quantity: 2 Power Supply: 100-240VAC, 50/60Hz	
	Power Consumption: Maximum: 32.3W	
	Dimensions (W x D x H): 17.32*8.7*1.73 in. (440*220*44 mm) Mounting: Rack Mountable	
	Max Power Consumption: 32.29W(220V/50Hz) Max Heat Dissipation: 110.17BTU/h	
	Performance	
	Switching Capacity: 96Gbps Packet Forwarding Rate: 71.4Mpps	
	MAC Address Table: 16K Buffer Memory: 12Mb	
	Jumbo Frame: 12KB	
	Transfer Method: Store-and-Forward Others	
	Certification: FCC, RoHS	
	Package Contents: 48-Port Gigabit Rackmount Switch, Power Cord, Installation Guide, Rackmount Kits, Rubber Feet	
	Environment Operating Temperature: 0°C~40°C (32°F~104°F);	
	Storage Temperature: -40°C~70°C (-40°F~158°F);	
	Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing	
	Gigabit Switch 24 ports (rack mount)	
	End-user: MIS	
	Hardware Features	
	Standards and Protocols IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab , IEEE 802.3x	
	Interface: 24 10/100/1000Mbps RJ45 Ports (Auto Negotiation/Auto MDI/MDIX) Network Media: 10BASE-T: UTP category 3, 4, 5 cable (maximum 100m),	
	100BASE-TX/1000BASE-T: UTP category 5, 5e or above cable (maximum	
	100m) Fan Quantity: Fanless	
	Power Supply: 100-240VAC, 50/60Hz Power Consumption: Maximum: 13.1W (220V/50Hz)	
	Dimensions (W x D x H) 17.3*7.1*1.7 in. (440*180*44 mm)	
	Mounting: Rack Mountable Max Power Consumption: 13.08W(220V/50Hz)	
1 unit	Max Heat Dissipation: 44.63BTU/h <i>Performance</i>	
	Switching Capacity: 48Gbps	
	Packet Forwarding Rate: 35.7Mpps MAC Address Table: 8K	
	Jumbo Frame: 10KB QoS: 802.1p/DSCP QoS*	
	*Only for V11 and later version	
	Green Technology: Yes Transfer Method: Store-and-Forward	
	Others Certification: FCC, CE, RoHS	
	Package Contents: 24-Port Gigabit Rackmount Switch, Power Cord,	
	Installation Guide, Rackmount Kits, Rubber Feet Environment: Operating Temperature: 0°C~40°C (32°F~104°F);	
	Storage Temperature: -40°C~70°C (-40°F~158°F); Operating Humidity: 10%~90% non-condensing;	
	Storage Humidity: 5%~90% non-condensing	
Technical Specifi		

		Gigabit Switch 8 ports End-user: MIS	
		Hardware Features Standards and Protocols: IEEE 802.3 / 802.3u / 802.3ab/ 802.3x /802.1p Interface: 8 10/100/1000Mbps Ports, Auto-Negotiation, Auto-MDI/MDIX	
		Fan Quantity: Fanless Power Consumption: Maximum: 3.97 (220V/50Hz)	
		External Power Supply: External Power Adapter (Output: 9VDC / 0.6A)	
		Buffer Size: 1.5Mb LED Indicator: System Power Link, Speed and activity indicators per port built	
		into each RJ-45 port	
		Dimensions (W x D x H): 6.2 x 4.0 x 1.0 in. (158 x 101 x 25 mm) Max Power Consumption : 3.31W(220V/50Hz)	
		Max Heat Dissipation: 11.29BTU/h	
	2 units	Performance Packet Forwarding Rate: 11.9Mpps	
	2 units	MAC Address Table: 4K	
		Packet Buffer Memory: 1.5Mb Jumbo Frame: 15KB	
		Software Features	
		Advanced Features: Green Technology, saving power up to 82%, 802.3X Flow Control, 802.1p/DSCP QoS1, IGMP Snooping1	
		Transfer Method: Store and Forward	
		Others Certification: CE, FCC ,RoHS	
		Package Contents: 8-Port 10/100/1000Mbps Desktop Switch, Power Adapter,	
		Installation Guide	
		Environment Operating Temperature: 0°C~40°C (32°F~104°F)	
		Storage Temperature: -40°C~70°C (-40°F~158°F)	
		Operating Humidity: 10% ~ 90%, non-condensing Storage Humidity: 5%~90% non-condensing	
	Qualita	HDMI Cable 10 meters	
	2 units	End-user: MIS	
		10 Meters Shielded HDMI Cable HDTV	
I. 1	Ferms of Tec	chnical Support	
4		ier shall provide 24/7 telephone, e-mail, chat, and remote technical support	
1	services co request.	overing all Goods with a two-day response time from SLSUs posting of support	
		er shall provide next-business-day onsite support for technical issues not resolved	
2		e actions described in the preceding paragraph. Hardware defects/errors in any	
	component	t of the Goods shall automatically require onsite support.	
V. V	Narranty		
	The Suppli	er shall replace Goods found to have satisfactory defects immediately.	
1			
1	The Goods	must have a minimum one-year warranty inclusive of cost of replacement/repair	
1 2	The Goods of parts and	must have a minimum one-year warranty inclusive of cost of replacement/repair d labor.	

1	The Supplier shall deliver the goods within forty-five (45) working days from the receipt of the Notice to Proceed.	
2	The Supplier must repair Goods that are under warranty within five (5) working days.	
	In case replacement or repair will take longer than five (5) working days, the Supplier shall provide a temporary replacement unit of equal capability and features as the item to be replaces/repaired.	
VI. Terms of Payment		
1	All payments shall be inclusive of Value-Added Tax (VAT) and other lawful charges.	
VII.	Miscellaneous	
1	The Supplier shall agree with the definitions and terms found in the General Conditions of Contract (GCC) and Special Conditions of Contract (SCC) contained in the Philippine Bidding Documents for Procurement of Goods issued by the Government Procurement Policy Board (GPPB).	

Note:

Bidder must state compliance to each of the provisions in the Terms of Reference/Technical Specifications, as well as to the Schedule of Requirements. The STATEMENT OF COMPLIANCE must be signed by the authorized representative of the Bidder, with proof of authority to sign and submit the bid for and in behalf of the Bidder concerned. If the Bidder is a joint venture, the representative must have authority to sign for and in behalf of the partners to the joint venture.

Conformé:

[Signature/s] [Name of Bidder's Authorized Representative/s]

[Position]

[Date]