

Supply of IT Equipment

Lot #	Lot Name	Approved Budget
Lot 1	Computers & accessories	5,283,500.00
Lot 2	GPS	400,000.00
Lot 3	Mobile Tablets	365,000.00
Lot 4	Physics Equipment	200,000.00
Lot 5	Printer	180,000.00
Lot 6	Printer – Large Format	1,067,000.00
Lot 7	Printer – 3D	360,000.00
Lot 8	Presentation Equipment	1,435,000.00
Lot 9	Server	888,000.00
Lot 10	Architecture Laboratory	4,668,000.00
Lot 11	Communication Arts Laboratory	2,254,000.00
Lot 12	Econometrics Laboratory	1,440,000.00
Lot 13	Software – Citation Software	15,000.00
Lot 14	Software – Design	2,855,000.00
Lot 15	Software – Office Use	438,000.00
Lot 16	Software – Plagiarism Detection	100,000.00
Lot 17	Software – Data Analysis	340,000.00
Lot 18	Software – Video Editing	15,000.00
Lot 19	Software – Mathlab	50,000.00
Lot 20	Software – STATA	490,000.00
Lot 21	Software – SPSS	370,000.00
Lot 22	SOM IT Equipment & Peripherals	800,400.00
Lot 23	Laptop	2,993,000.00

TOTAL

27,006,900.00

TECHNICAL SPECIFICATIONS

Item No.	DESCRIPTION	QUANTITY	Statement of Compliance
	LOT 1 – Computers and Accessories		
1	512 GB USB 3.0 Flash/Thumb drive or 512 GB SSD Portable Drive USB 3.0	2	
2	Audience clickers Set of 30	2	
3	Branded Desktop Computers <i>Usage: Office productivity</i> <i>Processor: Intel i3 Processor</i> <i>Memory: at least 4GB</i> <i>Hard drive: at least 500GB HDD</i> <i>Screen size: approx. 21”</i> <i>Display: LED</i> <i>Resolution: FHD</i> <i>Audio: High definition</i> <i>Operating System: Windows 10 64bit</i> <i>Integrated LAN: fast ethernet,</i> <i>WLAN+Bluetooth 4.0</i> <i>Ports: Full Size HDMITM 1.4a</i> <i>(2) USB 3.0</i> <i>(1) USB 2.0</i> <i>(1) VGA</i> <i>Super multi-drive DVD, card reader</i> <i>Battery: 48 Whr</i> <i>Accessories: USB speakers, Mouse, keyboard, UPS</i>	1	
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6	<p>Computer wifi package 1 unit - Wireless dual band gigabit router 10 unit - 300Mbps wireless-N wifi repeater 1 units – network attached storage</p>	1	
7	<p>Desktop computer set 22" display 3.5ghz, Intel Core i7 processor 1TB HDD hard drive 16GB 1600MHz RAM Optical drive: Ultra slim tray Super Multi DVD Burner Software inclusion: Microsoft Office Home and business 2016 edition & internet security/virus scanner OS: Windows 10</p>	15	
8	<p>Desktop computer set Display: 32" full HD Smart TV monitor compliant display Intel Core i7-4700 series or higher Intel HD graphics or with dedicated video card 4GB or better, 16GB DDR3-1600, 2xPCS 1TB HDD, built-in 7in1 memory card reader Optical drive: ultra slim tray Super multi DVD burner Software inclusion: Microsoft Office Home and Business 2016 edition & internet security/virus scanner OS: Windows 10</p>	4	
9	<p>Desktop Computers Intel Core i7 processor 8GB RAM 500GB HDD 21" Monitor</p>	20	
10	<p>Digital AV multiple adapter for Apple USB-C port to USB 3.0/2.0/1.1 and USB-C/Male to 3"USB3.0-A/Female+USB-C Power Delivery</p>	2	
11	<p>Digital AV Multiple adapter for Apple USB-C port to USB3.0/2.1/1.0 and All-in-One Desktop</p>	9	

12	External Hard Drive 1TB with protective casing	8	
13	External Hard Drive 4TB with protective casing	4	
14	External Hard Drive 4TB with protective casing (for storage server)	5	
15	IC Tester 24-pin or higher display portable, light, usable with batteries device supported by 74 serial, 40 serial, 75 serial and driver (ULN) with display and power adaptor	3	
16	Power banks At least 50000mAH with protective casing	4	
17	Storage Server	1	
18	UPS At least 500 VA Single phase AVR	9	
19	Workstations Intel Xeon processor 128GB RAM 2TB HDD 40" Montior	5	
LOT 2 – GPS			
1	GPS 272x480 pixels display touch screen water resistant with battery (16-22 hrs life) 200mAH high speed USB and NMEA D183 compatible 5MP camera with autofocus and auto-geotagging electronic compass 3GB memory Micro-SD slot automatic routing 4000 waypoints	3	
2	GPS 8 MP camera Compatible with several mounts Dual orientation Wireless communication Electronic compass waterproof	2	
3	GPS Handheld high sensitivity GPS device with 3-axis compass, barometric altimeter, bluetooth, sunlight-readable, 2.6" 160x240 color display, 4GB memory, dual battery system, waterproof	4	
LOT 3 – Mobile Tablets			
1	Tablet Octacore processor 3GB RAM 15GB ROM 10" Display OS: Android (latest)	25	

2	<p>Android Tablet GSM / HSPA / LTE 198.6 x 134.8 x 5.6 mm (7.82 x 5.31 x 0.22 in) 265 g (Wi-Fi) / 272 g (LTE) (9.59 oz) Nano-SIM Super AMOLED capacitive touchscreen, 16M colors 8.0 inches (~74.0% screen-to-body ratio) 1536 x 2048 pixels (~320 ppi pixel density) Multitouch Android OS, v6.0.1 (Marshmallow) - T719N Qualcomm MSM8976 Snapdragon 652 - T719N Octa-core (4x1.8 GHz Cortex-A72 & 4x1.4 GHz Cortex-A53) - T719N Adreno 510 - T719N MicroSD, up to 256 GB (dedicated slot) 32/64 GB, 3 GB RAM 8 MP, autofocus primary camera 1440p@30fps 2.1 MP secondary camera Vibration; MP3, WAV ringtones Can loud speaker Has 3.5mm jack Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, hotspot V4.1, A2DP, LE With A-GPS, GLONASS MicroUSB v2.0 (MHL TV-out) Fingerprint, accelerometer, gyro, proximity, compass SMS(threaded view), MMS, Email, Push Email, IM HTML5 - ANT+ support - MP4/H.264/WMV player - MP3/WAV/eAAC+/WMA/Flac player - Photo/video editor - Document editor Non-removable Li-Ion 4000 mAh battery Up to 27 h (3G) battery Up to 74 h music play White, black gold</p>	1	
3	<p>IOS Tablet 9.7 inches (~71.6% screen-to-body ratio) iOS 7, upgradable to iOS 9.3.3, planned upgrade to iOS 10 Chipset: Apple A7 Dual-core 1.3 GHz Cyclone (ARM v8-based) 5 MP, f/2.4, 33mm Wi-Fi 802.11 Non-removable Li-Po 8600 mAh battery (32.4 Wh) 64 GB, 1 GB RAM DDR3</p>	1	
<p>Lot 4 – Physics Equipment</p>			

1	<p>Physics Equipment</p> <ul style="list-style-type: none"> 3 sets Force Table 3 sets Motion Sensor 1 set Picket fence 4 sets 50N Force sensor hanging masses 2 sets projectile launcher friction block 3 sets force table 5 sets mass hangers 5 sets mass set with hook 3 sets vernier caliper 3 sets micrometer caliper 5 sets smart pulley 4 sets motion sensors 3 force table sets with 25 cm diameter table with detachable legs and 3 adjustable super pulleys with clamps and spool of thread 3 sets motion sensor with minimum range: 0.15 meters <ul style="list-style-type: none"> maximum range: 8 meters resolution: 1 mm transducer rotation: 360 degrees cable length: 1.8 meters 1 set picket fence with use for conducting free fall experiments, the distance from the leading edge of each black bar to the leading edge of the next black bar is 5.0 cm <ul style="list-style-type: none"> it has 8 black bars and is 40 cm long 4 sets 50N Force Sensor with force range: -50N to +50N <ul style="list-style-type: none"> resolution: 0.03N or 3.1grams zero(Tare) function:Push-button Force overload protection: mechanical stop prevents forces of more than 50N from damaging the sensor Pin configuration: 8-pin DIN plug Mounts on standard 12.7mm support rods 2 Projectile launcher (mini launcher) set with range: 0.5, 1, 2m <ul style="list-style-type: none"> launch angle: 0 to +90 and 0 to -45 launcher length: 18cm includes: launcher base, loading rod, 2-D collision accessory, projectile balls, safety glasses, and manual 1 set friction block with wooden friction block has felt on two sides, so frictional coefficients for felt or wood can be measured <ul style="list-style-type: none"> dimensions: 13cm x 5cm x 1.7cm approximate mass: 110g 3 sets vernier caliper with metric/English calipers (18cm/6in.) and have an expanded vernier scale of 20 divisions 3 sets micrometer caliper with measurements from 0 to 25 mm with 0.1 mm resolution 5 sets smart pulley (super pulley) with low friction: dual precision ball-bearings <ul style="list-style-type: none"> lightweight: the sheave is only 5.5grams precision dimensions: precision spacing of 10 spokes 4 sets mass and hanger set (hanging masses) with features precision 5 gram mass hangers with steel posts and each hanger can hold up to 50g <ul style="list-style-type: none"> includes: four masses (5 g each) $\pm 2\%$ 	1	
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Lot 5 – Printers			
1	Printer 24 pins 136 columns dot matrix printer Carbon copies: 5+1 original Printing resolution: 360x180dpi Interfaces: USB	1	
2	Multifunction Printer Wireless Continuous ink tank system With fast scanner	1	
3	Printer Colored Inkjet with continuous ink and replaceable cartridge	7	
4	Multifunction Colored Laser Printer Specifications Type: Colored Multifunction Laser Printer/Copier Functions: Print, copy, scan With touch screen colored LCD panel Resolution: (black and colored) 600 dpi quality Processor Speed: at least 800MHz Cartridges: 1 black, 1 cyan, 1 magenta, 1 yellow Print Speed (black/colored): Up to 19 pages per minute Input capacity: 250 sheet universal cassette Interface: USB, Fast Ethernet Memory: 256MB With installer/user guide With additional set of cartridges (1 black, 1cyan, 1magenta, 1yellow) Compatible with Windows XP and higher versions	1	
Lot 6 – Printer-Large Format			
1	Plotter – black and coloured 36-in (914-mm) printer specifications Memory, standard 1GB Power and operating requirements Input tray: A4, A3 Manual feed: A2, A1, A0 Operating temperature range: 5-40°C	2	
2	Large Format Printer Enhanced resolution: 9600 dpi Optical resolution: 1200 dpi Should be able to print 6ft width	1	
3	Printer, A3 Colour inkjet multifunction printer Functions: A3 print, A4 scan/copy/fax, PC fax, direct photo print, A4 2-sided print, wired/wireless networking	1	
4	Wide Format Printer, Tabloid (11x17") Photo and graphic printing	1	

5	Multifunction Large Format Printer Enhanced resolution: 9600 dpi Optical resolution: 1200 dpi Scan speed 3 color: 15 cm/sec (6in/sec) Grayscale: 33 cm/sec (13 in/sc) Max scan size: 0.91 x 26 m (36 x 1024 in); 0.6 x 37.9 m (24 x 1491 in); 0.3 x 75.8 (12 x 2991 in) Max scan width: 1067 mm (42 in) supported file formats PDF, TIFF, JPEG, JPE Data capture: 48bit Color, 16bit mono	1	
Lot 7 – Printer – 3D			
1	Printer 2+ 3D Size (LxWxH cm): 44x44x58 cm Layer resolution: max up to 20 microns or 0.02mm Connectivity: LCD display control SD card support USB printing direct	2	
Lot 8 – Presentation Equipment			
1	Document Camera <i>Usage: Laboratory / Live demo</i> <i>Resolution: Full HD</i> <i>Sensor: 1 / 2.7" CMOS Sensor</i> <i>Zoom: 12x optical</i> <i>Focus: Auto</i> <i>Image Freeze capable</i> <i>PC free usage</i> <i>Internal memory: 1GB</i> <i>With SD card</i> <i>Accessories:</i> <i>Power adapter</i> <i>Carrying case</i> <i>User guide</i>	5	
2	Projector HD ready 720p 3D home cinema projector At least 3200lm VGA and HDMI connectivity with connectors Projector screen Ceiling mount brackets Includes installation at CHSS	10	
3	Interactive Pen Display Pen and Tablet 13:3HD Display (1920x1080) with wide viewing angle, pressure (2048 levels) and tilt sensitive pen with 3-position display stand and with 3in1 cable for PC and MAC, comfortable, compact, lightweight design	7	
4	Interactive White Board 79" Dual touch, 4x3 aspect ratio, multi touch interactive whiteboard, software included (for conference room)	1	
5	Projector Usage: outdoor At least 7000lm VGA and HDMI connectivity	3	

6	Projector <i>Usage: Outdoor</i> <i>Resolution: WXGA, Full HD</i> <i>Brightness: 10000lm or higher</i> <i>Connectivity: HDMI, VGA</i> <i>Network: Wifi</i> <i>Accessories:</i> <i>Wifi dongle (if not built-in)</i> <i>Power adapter</i> <i>VGA Cable</i> <i>Remote control with battery</i> <i>Lens cap</i> <i>Carrying case</i> <i>User guide</i> <i>Tripod screen</i>	1	
Lot 9 – Server			
1	Server 1U Rack Server Intel Xeon E5-2620 v3 2.4Ghz Intel C610 15MB Cache 16GB DDR4-2133/PC4-17000 Serial ATA/600 6Gb/s SAS Controller 2TB SAS 6Gb/s 2 gigabit ethernet Memory card supported: microSD Max turbo speed: 3.20GHz Network (RJ45): yes 1 PCI express x16 slots 1 PCI express x8 slots 2 processors supported 2 expansion slots 24 total memory slots 5 USB 3.0 ports 8GT/s quickpath interconnect Remote management WEEE With VGA, USB2.0 and DVD-ROM	1	

2	<p>Server for Document Management System Rack Server Processor: Intel Xeon E5-2640 v3 2.6GHz, 20M Cache, 8.00GT/s QPI, Turbo, HT, 8C/16T (90W) Max Mem 1866MHz Memory / Max: 2 x 8GB RDIMM, 2400MT/s, Single Rank, x8 Data Width HD Capacity: 2 x 500GB 7.2K RPM NLSAS 6Gbps 2.5in Hot-plug Hard Drive,3.5in HYB CARR (max 8 HDD) OpticalDVD+/-RW, SATA, Internal RAID: RAID 1 for H330/H730/H730 (2 HDDs or SSDs) RAID: PERC H730 Integrated RAID Controller, 1GB Cache Server Management: iDRAC8 Enterprise, integrated Dell Remote Access Controller, Enterprise Onboard NICsOn-Board LOM 1GBE (Dual Port for Towers, Quad Port for Racks) Power Supplies: Single, Hot-plug Power Supply (1+0), 750W Static Rail: ReadyRails Sliding Rails With Cable Management Arm Base Service: 3Yrs Basic Core NBD</p>	1	
Lot 10 – Architecture Laboratory			
1	<p>Branded Desktop Computer Operating System: Windows 10 Intel Core i7 6th Gen 8GB DDR4 RAM 1TB HDD 72000 RPM 4GB video/graphics card Super multi-drive Integrated HD 5.1-channel surround sound WLAN 802.11b/g/n wireless LAN and Bluetooth 4.0 LE LAN Gigabit Ethernet F/S I/O Ports: D-Sub port(s), HDMI port(s), LAN port(s), Audio jack(s), USB 2.0 port(s) Accessories: Keyboard, mouse, speakers Software: MS Office Home and Business 2016</p>	30	
2	1500KVA UPS	30	
3	<p>Fabricated computer tables Includes power and network</p>	30	
4	Ergonomic Computer Chairs	30	
5	<p>Autodesk Revit Mep 2016 Includes installation, activation, basic training</p>	15	

6	Projector Wireless At least 3200 lm Ceiling mounted Power-on and off through switch With VGA and HDMI connection	2	
7	Structured cabling For 30 computers Includes but not limited to: 2 units layer 2 manageable switch 1 unit 24 ports patch panel	1	
8	Setup and installation Computer table and chairs setup Computers and accessories setup Installation and activation of software Setup and installation of projector Other necessary networking and electrical wiring requirements	1	
	Warranty At least 1 year on hardware At least 2 years on computer table, network and electrical wiring		
Lot 11 – Communication Arts Laboratory			
1	Branded Desktop Computer 15 units All-in-one 21.5” 3.3GHz quad-core Intel i7 turbo boost up to 3.6GHz 8Gb onboard memory (configurable to 16GB) 1TB (54000 RPM) Hard drive Intel Iris Pro Graphics 6200 Display 4096x2304 resolution Operating System included Software: Microsoft Office Home and Business, Adobe Creative Suite 6 Master Collection (Photoshop CS6 Extended, Illustrator CS6, InDesign CS6, Acrobat X Pro, Flash Catalyst CS6, Flash professional CS6, Flash builder 4.5, Dreamweaver CS6, Fireworks CS6, Contribute CS6, Premier CS6) Accessories: keyboard, mouse	1	
2	Computer table		
	Warranty At least 1 year on hardware		
Lot 12 – Econometrics Laboratory			

1	Laptop Operating System: Windows 10 Processor: Intel Core i7 Memory: 8GB Storage: 1TB 3.5" 7200 RPM HD Graphics Super multidrive Integrated HD audio 5.1 channel surround sound Connectivity: WLAN 802.11b/g/n wireless LAN and Bluetooth 4.0 LE LAN Gigabit Ethernet F/S I/O Ports: D-Sub port(s), HDMI, LAN, Audio jack(s), USB Accessories: USB Keyboard, mouse, speakers 15" LED display Software: MS Office Home and Business 2016	15	
2	Computer table Fabricated, wooden finish With network and power provisions Inclusive of network and power cabling and installation	15	
3	Laptop Storage Cabinet Can store 15-20 15" laptop Has charging ports Fireproof	1	
4	Wireless router Dual-band gigabit router At least 3Gbps data transfer rate With 4-port ethernet switch	1	
5	Warranty and Service Includes quarterly maintenance for 3 years 24 hour replacement of defective units	1	
	Warranty At least 1 year on hardware		
Lot 13 – Software – Citation Software			
1	Bibliographical, Citation, and referencing	1	
Lot 14 – Software – Design			
1	Adobe Creative Suite 5.5 Master Suite Master Collection Photoshop CS5 extended, Illustrator CS5, InDesign CS5.5, Acrobat X Pro, Flash Catalyst CS5.5, Flash Professional CS5.5, Flash Builder 4.5, Dreamweaver CS5.5, Fireworks CS5.5, Contribute CS5, Premiere Pro CS5.5, After Effects CS5.5, Audition CS5.5, OnLocation CS5.5, Encore CS5.5, Bridge CS5, Device Central CS5.5	2	
2	Adobe Creative Suite 6 Master Suite Master Collection Photoshop CS6 Extended, Illustrator CS6, InDesign CS6, Acrobat X Pro, Flash Catalyst CS6, Flash professional CS6, Flash builder 4.5, Dreamweaver CS6, Fireworks CS6, Contribute CS6, Premier CS6	1	
3	Adobe Photoshop CS6	10	
4	AutoCAD	5	
5	Autodesk Revit Mep 2016	15	

6	Vray for Sketchup Software	15	
Lot 15 – Software – Office Use			
1	Desktop Publishing Software	3	
2	Microsoft Project Standard 2016 64 bit (latest model)	15	
3	MS Office Professional	3	
Lot 16 – Software – Plagiarism Detection			
1	Subscription Turnitin Online Plagiarism Detection / Originality Checking Software 5 years Instant formative feedback on faculty/student writing, online checking, online feedback and grading summative assessment of faculty/student writing	1	
Lot 17 – Software – Data Analysis			
1	NVIVO 11 Qualitative Data Analysis Software for Social Sciences	2	
2	SPSS Quantitative Data Analysis Software for Social Sciences with training	3	
Lot 18 – Software – Video Editing			
1	Video Editing Software	1	
Lot 19 – Software – Mathlab			
1	Mathlab Software with optimization toolbox image processing toolbox statistics and machine learning toolbox global optimization toolbox	5	
Lot 20 – Software – STATA			
1	STATA 14 IC-10 User student lab license for windows, perpetual license	1	
2	STATA 14 IC-5 User Academic License for Windows, perpetual license	1	

<p>STATA 14 Detailed Specifications</p> <p>STATA 14 PDF Documentation Set (Includes the following PDF documentation) Getting Started with Stata for Windows Getting Started with Stata for Mac Getting Started with Stata for Unix</p> <p>User's Guide Base Reference Manual Data-Management Reference Manual Graphics Reference Manual Functions Reference Manual New</p> <p>Subject-specific statistics reference manuals: Bayesian Analysis New Item Response Theory New Longitudinal-Data/Panel-Data Multilevel Mixed-Effects Multiple-Imputation Multivariate Statistics Power and Sample-Size Structural Equation Modeling Survey Data Survival Analysis Time Series Treatment Effects</p> <p>Programming reference manuals: Programming Mata Matrix Programming Glossary and Index</p> <p>Technical Support To assist in the installation of the software and to deliver the items</p>		
<p>Lot 21 – Software – SPSS</p>		

<p>1</p>	<p>SPSS Statistics Base plus Regression and AMOS Authorized with User License, Perpetual FEATURES: Statistics Base - 1. Descriptive Statistics 2. Test to Predict Numerical Outcomes and Identify Groups a. Factor Analysis b. K-Means Cluster Analysis c. Hierarchical Cluster Analysis d. Two Steps Cluster Analysis e. Discriminant f. Linear Regression g. Ordinal Analysis h. Nearest Neighbor Analysis Regression - Multinomial Logistic Regression (MLR) 2. Binary Logistic Regression 3. Nonlinear Regression (NLR) and Constrained Nonlinear Regression (CNLR) 4. Weighted Least Squares (WLS) 5. Two-stage Least Squares (2SLS) 6. Probit Analysis AMOS- Psychology – Develop models to understand how drug, clinical, and art therapies affect mood</p> <ul style="list-style-type: none"> • Medical and healthcare research – Confirm which of three variables –confidence, savings, or research – best predicts a doctor’s support for prescribing generic drugs • Social sciences – Study how socioeconomic status, organizational membership, and other determinants influence differences in voting behavior and political engagement • Educational research – Evaluate training program outcomes to determine impact on classroom effectiveness • Market research – Model how customer behavior impacts new product sales or analyze customer satisfaction and brand loyalty • Institutional research – Study how work-related issues affect job satisfaction • Business planning – Create econometric and financial models and analyze factors affecting workplace job attainment • Program evaluation – Evaluate program outcomes or behavioral models using SEM to replace traditional stepwise regression <p>Provide a DVD-copy of the downloadable SPSS Installer With 12 month Software Subscription and Technical support on the following: <i>Help with errors during installation</i>• <i>Help with failed installation; program will not run</i>• <i>On-site installation of customer's software</i>• <i>Provide guidance updating encryption codes</i>• <i>Provide details on recommended resource settings and how to set them.</i>• <i>Walk through update of encryption code, providing customer with step-by-step instructions over the phone.</i>• <i>In situations in which common troubleshooting techniques have been unsuccessful, "walk through" the installation procedure with the customer.</i></p> <p>Free installation and a 2days on-site training (includes one set of training handout, data files) Free upgrade for one year.</p>	<p>1</p>	
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Lot 22 – SOM IT Equipment and Peripherals			
1	Monitor 23" LED monitor aspect ratio - 16:9 contrast ratio static - 3000:1 resolution - 1920x1080 viewing angle (H/V) - 178°/178° OS Compatibility - Windows, Mac Accessories - HDMI & VGA cables for laptop connection	12	
2	USB Keyboard		
3	USB Mouse with mouse pad		
4	UPS at least 500 VA		
5	Portable Hard drive 2 TB, USB 3.0 no external power needed no software install no configuration	4	
6	Branded Desktop Computer Operating System: Windows 10 Processor: Intel Core i7 Memory: 8GB Storage: 1TB 3.5-inch 7200RPM Graphics: HD Optical Drive: Super-Multi drive Audio: Integrated high-definition, 5.1-channel surround sound Connectivity: WLAN 802.11b/g/n wireless LAN and Bluetooth 4.0 LE LAN Gigabit ethernet F/S I/O Ports: D-Sub port(s), HDMI-port(s), LAN port(s), audio jack(s), USB2.0 port(s) Accessories: USB Keyboard, mouse and speakers Display: 22" LED Software: Microsoft Office Home and Business 2016	3	

7	<p>UPS 1KVA Back UPS Output Power Capacity: 600 Watts / 1000 VA Nominal Output Voltage: 230V Output Connections: (2) IEC 320 C13 (Surge Protection), (6) IEC 320 C13 (Battery Backup) Nominal Input Voltage: 230 V Input Frequency: 47 - 63 Hz +/- 3 Hz Battery Type: Maintenance-free sealed Lead-Acid battery with suspended electrolyte : leakproof (RBC32) Typical Recharge / Backup time: 15 hour recharge time, 16.6min half load 300w, 5.9min full load 600w Control Panel: LED status display with On Line : On Battery : Replace Battery and Overload indicators Audible Alarm: Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm Dataline Protection: USB Port / RJ-11 Modem/Fax/DSL protection (two wire single line),RJ45 10/100 Base-T Ethernet protection Surge Energy Rating: 180 Joules</p>	3	
8	<p>Smart TV 60" UHD Flat; can access Skype & Youtube, w/ wireless LAN Built-in Resolution: 3840 x 2160 Ultra clear panel HD Audio Connectivity: HDMI, USB, Composite in, Digital Out Audio: Dolby Digital Plus Accessory: mini wall mount support With installation to SOM rooms</p>	2	
9	<p>LCD Projector 3LCD Technology RGB liquid crystal shutter projection system Native resolution: WXGA Wireless LAN Brightness: 3200lm Throw ratio: 1.30-1.56 (wide-Tele) Life (Normal/Eco): 5,000hrs/10,000hrs Screen Size: 33"-320" Contrast ratio: 15,000:1 Connectivity: Composite, S-Vidio, HDMI, USB Warranty: 3 years on parts; 1 year on lamp or 1000hrs whichever comes first</p>	3	
Lot 23 – Laptop			

1	<p>Laptop 15.6" 19.9hd Processor: Intel Core i7-5500U 2.4 ghz processor (4M cache, up to 3.00ghz) Operating System: Windows 10 Memory: 4GB DDR3L 1600MHz SDRAM Storage: 1TB HDD Optical Drive: Super-multi DVD Card reader: 3in1 card reader (SD/SDHC/SDXC) Software inclusion: Microsoft Office Home and Business 2016 edition & Internet Security/Virus Scanner</p>	17	
2	<p>Laptop <i>Usage: Outdoor</i> <i>Processor: Intel i5 Processor (5th gen), 2.2GHz or better</i> <i>Memory: at least 4GB</i> <i>Hard drive: 1TB HDD + 16GB SSD</i> <i>Screen size: approx. 14"</i> <i>Display: LED, antiglare</i> <i>Resolution: FHD</i> <i>Video: Integrated HD Graphics 5500</i> <i>Audio: High definition</i> <i>Operating System: Windows 10 64bit</i> <i>Bluetooth: Dual Band wireless-AC + Bluetooth 4.0</i> <i>Webcam: HD capable</i> <i>Microphone: dual array</i> <i>Ports: VGA, miniDP, USB, Integrated Smart Reader, mic/headphone combo, RJ45, FPR, 14-in-1 card reader</i> <i>Super multi-drive DVD, card reader</i> <i>Battery: 3 cell front and 3 cell rear</i> <i>Accessories: headset with microphone, laser pointer/presenter</i> <i>Ruggedness and durability tested against high pressure, humidity, vibration, dust, etc</i> <i>Other inclusions: MS Office Home and Business 2016</i> <i>Portable external DVD RW Drive</i></p>	5	
3	<p>Laptop 15.6" LED antiglare FHD Processor: Intel Core i5 processor (5th gen), 2.2GHz or better 1TB HDD Operating System: Windows 10 Memory: at least 4GB Optical Drive: Super-multi DVD Video: Integrated HD Graphics 5500 Audio: High definition Bluetooth: Dual band wireless-AC + Bluetooth 4.0 Webcam: HD capable Microphone: dual array Ports: VGA, miniDP, USB, Integrated Smart reader, mic/headphone combo, RJ45, FPR, 14-in-1 card reader Battery: 3-cell front and 3 cell rear Software inclusion: Microsoft Office Home and Business 2016 edition</p>	3	

4	<p>Laptop <i>Usage: Office productivity</i> <i>Processor: Intel i3 Processor</i> <i>Memory: at least 4GB</i> <i>Hard drive: at least 500GB HDD</i> <i>Screen size: approx. 14"</i> <i>Display: LED</i> <i>Resolution: FHD</i> <i>Audio: High definition</i> <i>Operating System: Windows 10 64bit</i> <i>Integrated LAN: fast ethernet,</i> <i>WLAN+Bluetooth 4.0</i> <i>Ports: Full Size HDMITM 1.4a</i> <i>(2) USB 3.0</i> <i>(1) USB 2.0</i> <i>(1) VGA</i> <i>Super multi-drive DVD, card reader</i> <i>Battery: 24 Whr</i> <i>Accessories: Mouse, other accessories</i></p>	1	
5	<p>Laptop 13.3-inch (diagonal) LED-backlit Retina display 3.1GHz dual-core Intel Core i7 processor Turbo Boost up to 3.4GHz Up to 10 hours battery life1 Up to 1TB SSD2 Force Touch trackpad 1.58 kg (3.48 pounds) Additional accessories: VGA Adpator for projector USB 3.0 to Ethernet Adaptor HDMI connector for projector USB Optical Mouse Headset</p>	2	

6	<p>Laptop Intel Core i7-6700HQ Quad Core 6M Cache, up to 3.5 GHz Hard Drive: 500 SSD RAM Included: 16 GB DDR4 SDRAM, 2133 Mhz RAM Slots: 2 DIMM Slot(s) Release OS Version : Windows 10 Screen Size: 15.6 inch (Touch Screen) Pixel Density: 282 PPI Display Technology: IGZO Resolution: 3,840 x 2,160 Pixels Aspect Ratio: 16:9 Graphics Card: NVIDIA GeForce GTX 960M Audio Features: Waves MaxxAudio Pro Battery Type: Lithium Ion (Li-Ion) Battery Details: 6-Cell Lithium-Ion 84 Whr Measurements: 14.06 in. x 9.27 in. x 0.66 in. Wireless Connectivity: DW1830 3x3 802.11ac 2.4/5GHz + Bluetooth 4.1 A/C Adapter: 130W AC adapter Ports: 1 HDMI 2 USB 3.0 with PowerShare 1 Kensington Lock slot or Noble Lock 1 SD card reader (SD, SDHC, SDXC) 1 Headphone Output 1 Thunderbolt™ 3 Supports: Power In / Charging PowerShare Thunderbolt 3 (40Gbps Bi-Directional) 3.1 USB Gen 2 (10Gbps)+ VGA, HDMI, Ethernet and USB-A via Dell Adapter (Sold Separately) Exterior Chassis Materials: CNC machined aluminum Edge-to-edge Corning® Gorilla® Glass NBT™ on 4K Ultra HD display Carbon fiber composite palm rest with soft touch paint Keyboard: Full size, backlit chiclet keyboard; 1.3mm travel Memory Slots: 2 x SoDIMMs Touchpad: Precision touchpad, seamless glass integrated button Dimensions: Height: 0.45 – 0.66" (11-17mm) Width: 14.06" (357mm) Depth: 9.27" (235mm) Weight: 4.4 lbs (2kg)3 with 84Whr battery, SSD and touch display Additional accessories: HDMI to VGA Adpator USB 3.0 to Ethernet Adaptor 3 in 1 Mini Display Port Thuderbolt to DVI, HDMI & VGA Adaptor (VGA, HDMI, DVI & MiniDP) USB Optical Mouse</p>	3	