

| DESCRIPTION   | QUANTITY | BID BULLETIN   |
|---|----------|--|
| <b>LOT 1 - CCTV SYSTEM</b>  |          |  |
| <b>A. Passive and Active components</b>   |          |  |
| <b>Server</b><br>- To be configured as NAS server or VMS Server<br>- minimum Intel Xeon Quad Core Processor(the higher the better)<br>- minimum 64 GB PC4-1866 (DDR4-2133P) Registered DIMMs (RDIMMs)<br>- minimum of 2 Gigabit LAN ports<br>- rack mountable chassis<br>- minimum 32 TB SAS, 10K rpm SAS drive, 2.5 in<br>- hardware RAID supported<br>- dual power supply   | 1        | <b>Server</b><br>- To be configured as NAS server or VMS Server<br>- minimum Intel Xeon Quad Core Processor(the higher the better)<br>- minimum 64 GB PC4-1866 (DDR4-2133P) Registered DIMMs (RDIMMs)<br>- minimum of 2 Gigabit LAN ports<br>- rack mountable chassis<br>- minimum 32 TB SAS, 10K rpm SAS drive, 2.5 in<br>- hardware RAID supported<br>- dual power supply<br>- OS: Windows 10  |
| <b>Workstation for the Control Room</b><br>- Should be installed with free VMS for monitoring<br>- Small form factor<br>- Intel Core i5-4590 or better, 3.3 GHz, 64 bit Quad-Core Processor, 6 MB L3 Cache<br>- Memory – minimum of 8 GB DDR3 1600(the higher the better)<br>- Storage – 1 TB 7200RPM SATA<br>- Gigabit LAN port<br>- Windows 7 Professional<br>- Graphics card 16 GB<br>- Can support monitors at least 3 monitors Daisy Chain<br>- Mini display port, HDMI, DVI, VGA, S-Video inputs<br>- 2 units - UPS 3 KVA | 3        | <b>Workstation for the Control Room</b><br>- Should be installed with free VMS for monitoring<br>- Small form factor<br>- Intel Core i5-4590 or better, 3.3 GHz, 64 bit Quad-Core Processor, 6 MB L3 Cache<br>- Memory – minimum of 8 GB DDR3 1600(the higher the better)<br>- Storage – 1 TB 7200RPM SATA<br>- Gigabit LAN port<br>- Windows 10<br>- Graphics card 16 GB<br>- Can support monitors at least 3 monitors Daisy Chain<br>- Mini display port, HDMI, DVI, VGA, S-Video inputs<br>- UPS 650 VA |
| <b>Wall Monitors for VMS Operator Client</b><br>- 32 inch LED Monitor<br>- Full HD 1920 x 1080 resolution<br>- Precise color reproduction<br>- Mini display port, HDMI, DVI, VGA, S-Video inputs<br>- Fast response time<br>- Support the video card of the workstations<br>- High contrast ratio of 3,000:1<br>- Color enhancement engine and built-in speaker<br>- Includes the necessary mounting for wall monitor setup   | 6        |  |
| <b>POE+, 24 ports, layer 2, 10/100 mbps, 2 SF module ports</b><br>- Layer 2 Manageable type switch<br>- 24 Ports (10/100Mbps)<br>- Autosensing Ports<br>- Power over Ethernet (PoE+)<br>- 1 RJ-45 Serial Console Port<br>- 2 Mini-GBIC SFP Ports<br>- 2 Gigabit Ethernet (10/100/1000BaseT) Ports   | 4        |  |
| <b>POE+, 8 ports, layer 2, 10/100 mbps, 2 SF module ports</b><br>- Layer 2 Manageable type switch<br>- 8 Ports (10/100Mbps)<br>- Autosensing Ports<br>- Power over Ethernet (PoE+)<br>- 1 RJ-45 Serial Console Port<br>- 2 Mini-GBIC SFP Ports<br>- 2 Gigabit Ethernet (10/100/1000BaseT) Ports   | 2        |  |
| <b>Patch Panel, Cat6, 1U, 24 ports</b><br><b>SFP</b><br>- Small form-factor pluggable (SFP) Gigabit LH transceiver that provides a full- duplex Gigabit solution up to 70 km on single-mode fiber   | 6<br>10  | <b>Patch Panel, Cat6, 1U, 24 ports, loaded</b>   |
| <b>Single mode Fiber Optic Patch Cords (3 meters)</b><br>SC-LC<br>Length: 3 meters<br>Fiber Compatibility: 9/125µm<br>Fiber Type: Singlemode<br>Fiber Cable Type: Jacketed<br>Fiber Cable Size: 3 millimeters diameter<br>Cable Color: Yellow<br>Cable Type: Duplex End Configuration: UPC-SC to LC<br>Fiber Count: 2<br>Flammability Rating: Riser (OFNR)<br>Insertion Loss Test: 0.15dB typical. Test results should be noted at cable packaging.   | 6        |  |

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| <p><b>B. IP Cameras</b><br/> - bundled with Video Management Software<br/> - should support Network Attached Storage (NAS)<br/> - motion detect recording<br/> - all cameras should be POE+ except for the wireless cameras</p>   |          | <p><b>B. IP Cameras</b><br/> - bundled with Video Management Software<br/> - should support Network Attached Storage (NAS)<br/> - motion detect recording<br/> - all cameras should be POE+</p>  |
| <p><b>Video Management Software (VMS)</b><br/> - Support Video Recording<br/> - Supports PTZ camera<br/> - Support Video Compression to save storage (Compression: H.264, MJPEG)<br/> - VMS Operator Client must be included<br/> - Support of 3rd party cameras via RTMP, RTSP, HTTP, JPEG, ONVIF Profile S<br/> - Supports MPEG-4 &amp; H.264 encoders, MPEG-4 &amp; H.264 IP cameras and IP AutoDome cameras in SD &amp; HD format, decoders, DVRs, Recording Station,<br/> - Supports HD resolutions: at least 720p<br/> - Perpetual license / Free without subscription</p>  |          |  |
| <p><b>PTZ Dome Camera</b><br/> - Resolution: HD 1080p or Better<br/> - Compression:H.264, MJPEG<br/> - Max. frames per second (fps) 30 @ 1080p<br/> Varifocal<br/> - Indoor Camera that support a wide dynamic range, dynamic noise reduction and Day/ Night, Infra Red at least 100 m<br/> - Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS)<br/> - Support RTMP/ RTSP streaming protocol<br/> Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4)<br/> Support Preset Positions<br/> Audio In/Out Support<br/> Built-in microphone<br/> Integrated optical zoom, at least 36x<br/> Automatic Back Focus<br/> Can be live stream on streaming channel like Youtube, Livestream, uStream and etc.<br/> Flexible mounting options, Include the needed mounting accessory</p> | 5        | <p><b>PTZ Dome Camera</b><br/> - Resolution: HD 1080p or Better<br/> - Compression:H.264, MJPEG<br/> - Max. frames per second (fps) 30 @ 1080p<br/> Varifocal<br/> - Indoor Camera that support a wide dynamic range, dynamic noise reduction and Day/ Night, Infra Red at least 100 m<br/> - Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS)<br/> - Support RTMP/ RTSP streaming protocol<br/> Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4)<br/> Support Preset Positions<br/> Audio In/Out Support<br/> Built-in microphone<br/> Integrated optical zoom, at least 30x<br/> Automatic Back Focus<br/> Can be live stream on streaming channel like Youtube, Livestream, uStream and etc.<br/> Flexible mounting options, Include the needed mounting accessory<br/> IP66 type of camera</p> |
| <p><b>Bullet Type, Outdoor</b><br/> - Resolution: HD 1080p or Better<br/> - Compression:H.264, MJPEG<br/> - Max. frames per second (fps) 30 @ 1080p<br/> Varifocal<br/> - Outdoor Camera that support a wide dynamic range, dynamic noise reduction and Day/ Night, Infra red at least 100 m<br/> - Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS)<br/> - Support RTMP/ RTSP streaming protocol<br/> - Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4)<br/> - Flexible mounting options<br/> - Include the needed mounting accessory<br/> - Four units will be installed via wireless. Video feeds from these camera should have no delay/lags</p>   | 13-23    | <p><b>Bullet Type, Outdoor</b><br/> - Resolution: HD 1080p or Better<br/> - Compression:H.264, MJPEG<br/> - Max. frames per second (fps) 30 @ 1080p<br/> Varifocal<br/> - Outdoor Camera that support a wide dynamic range, dynamic noise reduction and Day/ Night, Infra red at least 100 m<br/> - Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS)<br/> - Support RTMP/ RTSP streaming protocol<br/> - Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4)<br/> - Flexible mounting options<br/> - Include the needed mounting accessory<br/> - Four units will be installed via wireless. Video feeds from these camera should have no delay/lags<br/> IP66 type of camera</p>   |

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| <b>Dome (half spherical), Indoor</b><br>- Resolution: HD 1080p or Better<br>- Compression:H.264, MJPEG<br>- Max. frames per second (fps) 30 @ 1080p<br>Varifocal<br>- Indoor Camera that support a wide dynamic range, dynamic noise reduction and Day/Night<br>- Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS)<br>- Support RTMP/ RTSP streaming protocol<br>- Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4)<br>- Audio In/Out Support<br>- Integrated optical zoom<br>- Automatic Back Focus<br>- Built-in storage<br>- Flexible mounting options<br>- Include the needed mounting accessory | 40-51    |   |
| <b>Camera Metal Post</b><br>- Supply, delivery and installation of camera posts (Min height = 5 meters)<br>- Camera should be extended horizontally by at least 1 m from the pole<br>- Metal should be GI pipe 3 inches diameter, rust proofing painted, gauge 40<br>- Electrical power should be tapped from University allowed outlets<br>- Supplied with 500 VA UPS<br>- Supplied with utility box for UPS and other active components<br>- Pole should be installed on top of a concrete foundation (1m x 0.5 m. x 0.5m)   | 5        | <b>Camera Metal Post</b><br>- Supply, delivery and installation of camera posts (Min height = 5 meters)<br>- Camera should be extended horizontally by at least 1 m from the pole<br>- Metal should be GI pipe 3 inches diameter, rust proofing painted, 40 mm<br>- Electrical power should be tapped from University allowed outlets<br>- Supplied with 500 VA UPS<br>- Supplied with utility box for UPS and other active components<br>- Pole should be installed on top of a concrete foundation (1m depth x 1ft x 1ft) with 1ft pedestal |
| <b>ABC = 3,330,000.00</b>  |          |   |
| <b>LOT 2 - Security Equipment</b>  |          |   |
| <b>Security Electronic Gadgets</b><br>Input voltage: AC 220V+-20% 50Hz<br>Protection Distance: 75-150cm<br>Dimension: 1450*400*32mm<br>Work environment: 10C-40C<br>Detection Magnetic Stripe 6cm (including 6cm)<br>Protection distance: 75-150cm<br>Detection Height: 170cm<br>Material: Steel glass   | 1        |   |
| <b>Fire Alarm Control Panel</b><br>Main supply – 240V AC 50-60Hz<br>Battery Voltage – 24V DC<br>Sounder Output – 24V nominal EDL 10R<br>AUX Contacts – 30V DC 1A Max NC/NC<br>Zone EOL – 5.6R Resistor<br>12=Zone<br>Compatible for smoke detector   | 1        |   |
| <b>ABC = 190,000.00</b>  |          |   |
| <b>TOTAL ABC = 3,520,000.00</b>  |          |   |