

Scope of Work

- Wah Medical College is committed to attain the best network practice and Online infrastructure throughout the campus therefore we need active and passive network solution for our Campus.
- Our campus comprises of more than 24 different Switch segments. We need Fiber connectivity as per the standard for each existing and scalable to newly under construction Hostels and Hospital.
- Complete LAN/WLAN Turn-Key solution with High Performing Core Switch and Access Switch and Fiber connectivity is required.
- The Supplier shall be liable to install, check and commission of the active equipment at the site Wah Medical College and complete Fiber connectivity of existing buildings and Hostel shall be able to add more Links.
- Bidder must conduct a survey of the site to understand the layout of the building, any physical constraints, and the locations of existing infrastructure that might impact fiber installation.
- IP scheme with multiple VLANs to segregate and identify network traffic must be completely specified
- New LAN/WLAN equipment and design must be compatible and include the existing equipment integration and compatibility.
- Core Access Switch and AP must be of same brand.
- Firm must have technical team ready to work on site and support for 1 year minimum will be part of proposal.
- Firm shall be liable to install switches WIFI access points configuration support and services for 1 years.
- Firm must give power to newly installed switches racks and Wifi Access Points.
- Complete upgradation and integration with existing network will be responsibility of firm.
- Migration of old network to new network without giving downtime will be complete responsibility of firm.
- All equipment must be brand new with 3 years support and warranty
- 70% payment Shall be made in advance with purchase order 30% on delivery of items and remaining Installation & Configuration Charges shall pay after successfully and complete installation of network
- Taxes will be applicable as per the Govt Rules.
- Quotation must include all charges Taxes transportation importation and delivery of equipment at site Wah Medical College.
- Solution must be compatible and integrated to our already existing infrastructure of LAN and Wireless System. Survey shall be conducted in that case.
- Firm participating in tender must have sufficient technical and supporting staff at their disposal those shall have complete understanding of network and Design.
- Bidder must specify the Brand of each item in technical proposal.
- List of Equipment required to complete our requirement is Annexure –A.

Annex-A

S/N	Equipment name	Specifications Dimensions	Quoted Brand	Qty
01	Core Switch	24 Port Fully Managed Enterprise Class Layer 3 Fiber 20x10GE SFP+ Fiber Switch ,4 x 10GE/25GE SFP28 ports, 2x40GE QSFP+ Uplink Ports, 760 Gbps Switching Capacity,570 Mpps Forwarding performance and BGP4+ Support, VLAN Support, Dual AC Power Supply with 2 Fans, Support. (RG-CS86-20XS4VS2QXS-D or Cisco Equivalent)		02
02	DAC Cable/Transceiver	Single Mode 40xGE QSFP+ Transceiver /DAC Cable		02
03	Distribution Switch	24 Port Fully Managed Fiber Switch 24x1GE SFP+ Fiber Switch ,4 x 10GE SFP+ Uplink Ports, 128 Gbps Switching Capacity,95 Mpps Forwarding performance VLAN Support, Dual AC Power Supply with Fan, Support, Centralized Management Platform. (RG-3200/5200 Series or Cisco Equivalent)		01
04	Access Switch	24 Port Fully Managed Enterprise Class Layer 3 Switch 24xRJ 45 ports with 4x10 GE SFP Uplink Ports, RJ 45 Console Port, 370 Watt POE Budget, 128 GBps Switching Capacity 95 Mpps Forwarding Performance, DHCP service IPv4 Routes, OSPF support. VLAN Support Centralized Management Platform, Core and Access Switches must be of Same Brand, (RG-CS83 or Cisco Equivalent)		28
05	Controller Based Access Points With License (High End)	Controller Based Enterprise Class Wifi 6 Access Points For Offices, Combined Data Rate of 2.4 Gbps, Support, Dual-radio 2.4 GHz, two spatial streams, 2x2 MU-MIMO, Radio 2: 5 GHz, two spatial streams, 2x2 MU-MIMO, Access Point Must be Able to work Controller based and Stand, Alone Mode and Cloud Controller to provide better connectivity, (RG-RAP-820L or Cisco Equivalent)		15
06	Controller Based Access Points With License	Controller Based Enterprise Class Wifi 6 Access Points For Offices, Combined Data Rate of 1.7Gbps, Support, Dual-Band Radio 1: 2.4 GHz, two spatial streams, 2x2 MU-MIMO, Radio 2: 5 GHz, two spatial streams, 2x2 MU-MIMO, Access Point Must be Able to work Controller based and Stand, Alone Mode and Cloud Controller to provide better connectivity, (RG-RAP 810L or Cisco Equivalent)		30
07	Controller Based Access Points With License (Outdoor)	Controller Based Enterprise Class Wifi 6 Access Points For Outdoor Area , Dual Band Outdoor Wi-Fi6 Access Point, IP68 waterproof, Support up to 1000 users, 2.9Gbps overall speed, Radio 1: 2.4 GHz, 574 Mbps , Radio 2: 5 GHz, 2.402, 802.11a/b/g/n/ac, 2x2 MIMO, 1 x 10/100/1000BASE-T port ,1 x 1GE SFP port, Must be Able to work Controller based and Standalone Mode and Cloud Controller to provide better connectivity, (RG-AP680-L outdoor, Ruijie Cisco or Equivalent)		04
08	Power	Power Cable, Light Plug and Energizing of Switches		1 Job

09	Transceiver	Single Mode 10 GE SFP+ Modules with 10Km Range Ruijie, Cisco Equivalent		100
10	Integration of Wifi and Network	Integration with Existing Network, Integration and Configuration of Core Switch With Existing Firewall, CCTV, Hostels, Integration and Configuration of Access Switches , Configuration of Access Point, Integration of Access Point with Existing Network to Support Roaming,		1 Job
11	Cabinets	6U/9U- 600mm Depth or Double Section Depth Rack Black Color Metal Body		22
12	Date Center Rack	42 U Imported Server Rack 800/1000 with Perforated Mesh Door Wheels Fans and PDU		01
13	Cable Tray	12x3 SWG 18 Perforated Powder Coated Cable Tray for Data Center with Bend, Threading rods , with Cover and Installation in Feet		30
14	96 Port ODF	96 Port Rack Mount ODF Metal Body with Single Coupler and Adaptor		04
15	Fiber Patch Cord	3-meter Single/Multimode Fiber Patch Cord 10 GE Supported		100
16	12 Core Cable	12 Core Single Mode Fiber 10GE Supported Cable in Meter		2800
17	96 Core Cable	96 Core Armored Single Mode Fiber Cable		800
18	Fiber Cable Laying	Laying of Fiber Cable in Pipe and Duct within Campus Building End to End from Data Center till Every Access Switch		1 Job
19	12 Port ODF	12 Port Metal Body ODF Loaded/ Repair Coupler, Adaptors and Pigtails for Access		20
20	Splicing	Splicing of Fiber and OTDR Testing with Couple and Adaptor/ Pigtails		736
21	Cable Roll	Pure Copper 23 AWG Standard Cat 6 Cable Roll (Corning Molex or Equivalent)		30
22	Face Plate	Dual Shutter Face Plate with Back Box (Corning Molex or Equivalent)		300
23	I/O	Cat 6 I/O (Corning Molex or Equivalent)		300
24	Patch Panel	Fully Loaded Cat 6 Patch Panel (Corning Molex or Equivalent)		28
25	Patch Cords	Slim Patch Cords		300
26	Relocation of Existing Wifi Points	Dismantling of Old Racks and Access Switches, Installation and relocation of existing Access Points, Configuration of Switches, Laying and Ducting of Ethernet Cable for Wifi Access Point, Laying and Ducting of Ethernet Cable For Complete Library, Laying and Ducting of Cable for Academic Block		1 Job
27	Fiber Outside Laying	Fiber Cable Laying and Digging Excavation and refilling of Fiber = 400 meter Laying of Fiber in HDPE Pipe using Warning Tape and Duct when used inside building=50 meter 24 Core Joint Enclosure Qty 1		1 Job

		Hard Surface Trench/Bore with Back Filling Depth 3' With Marking Tape=30 meter Soft Surface Trench with Back Filling Depth 3' With Marking Tape=320 meter Road Cutting and Bore & Repair with same material=20 Meter Fiber Cable, End to End Connectivity of Gate with Data Center		
28	Support and Warranty	1 Year On Site Support and Warranty for Complete Network Includes troubleshooting, Hardware replacement, Optional quarterly health checks and performance assessments to ensure optimal network performance. and assistance for Core, Access Switch and Wifi Access Points		1 Job
29	Duct Pipe	Duct PVC Pipe 16x25, 16x36,40x40, GI Cable Tray or Pipe Whichever Feasible for Networking and Access Points		1 Job
30	Connector Box	RJ 45 Connector Box		200
31	Cage Nuts	Cage Nuts		300