

INVITATION FOR QUOTATION

TEQIP-III/2018/gcej/Shopping/53

12-Oct-2018

To,

Sub: Invitation for Quotations for supply of Goods (Networking).

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Brief Description	Quantity	Delivery Period(In days)	Place of Delivery	Installation Requirement (if any)
1	10G LR Modules	14	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
2	Adapter Plate	32	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
3	Adapters	96	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
4	CAT6 Patch Panel	36	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
5	CAT6 UTP Cable	115	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes

6	Core Switch	1	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
7	Distribution Switch	7	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
8	Edge Switch	24	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
9	Fiber Patch Cords	14	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
10	Fibre Termination Box	10	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
11	HDPE Conduit	1250	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
12	Information Outlets	630	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
13	Network Enclosures	29	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
14	OFC	1250	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
15	Patch Cables (Rack Side)	664	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	

16	Patch cables (User side)	630	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
17	Pigtails	168	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
18	PVC Duct/Conduit	9000	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
19	Surface Mount Box	630	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes
20	Wall Plates	630	30	Principal Govt. College of Engineering & Technology Chak Bhalwal, Jammu-181122 (J&K)	Yes

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. Quotation,
 - 3.1 The contract shall be for the full quantity as described above.
 - 3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
 - 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
 - 3.4 Applicable taxes shall be quoted separately for all items.
 - 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
 - 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
6. Evaluation of Quotations,

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

6.1 are properly signed ; and

6.2 confirm to the terms and conditions, and specifications.

7. The Quotations would be evaluated for all items together.

8. Award of contract:

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

9. Payment shall be made in Indian Rupees as follows:

Delivery and Installation - 90% of total cost

Satisfactory Acceptance - 10% of total cost

10. All supplied items are under warranty of **60** months from the date of successful acceptance of items.

11. You are requested to provide your offer latest by **16:00** hours on **03-Nov-2018**.

12. Detailed specifications of the items are at Annexure I.

13. Training Clause (if any) **YES**

14. Testing/Installation Clause (if any) **YES**

15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.

16. Sealed quotation to be submitted/ delivered at the address mentioned below,

Chak Bhalwal, jammu

17. We look forward to receiving your quotation and thank you for your interest in this project.

18. Detailed list of material, layout and specifications are enclosed as Annexure-II.

19. Other terms and conditions are enclosed as Annexure-III.



PRINCIPAL
(Authorized Signatory)
Jammu College of Engg & Tech
Jammu
Name & Designation

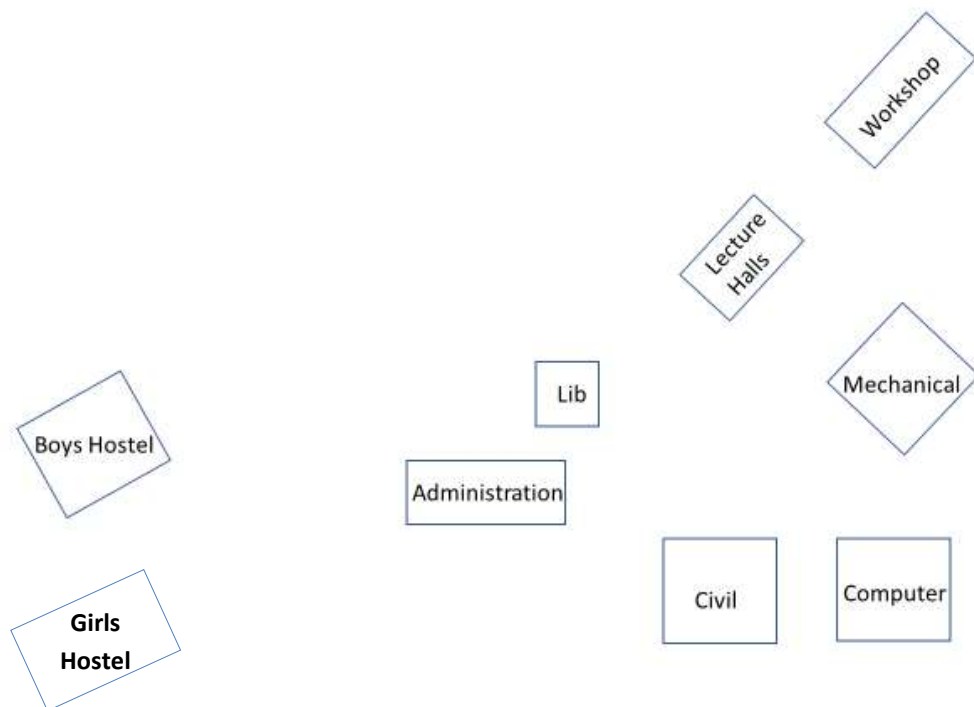
Annexure I

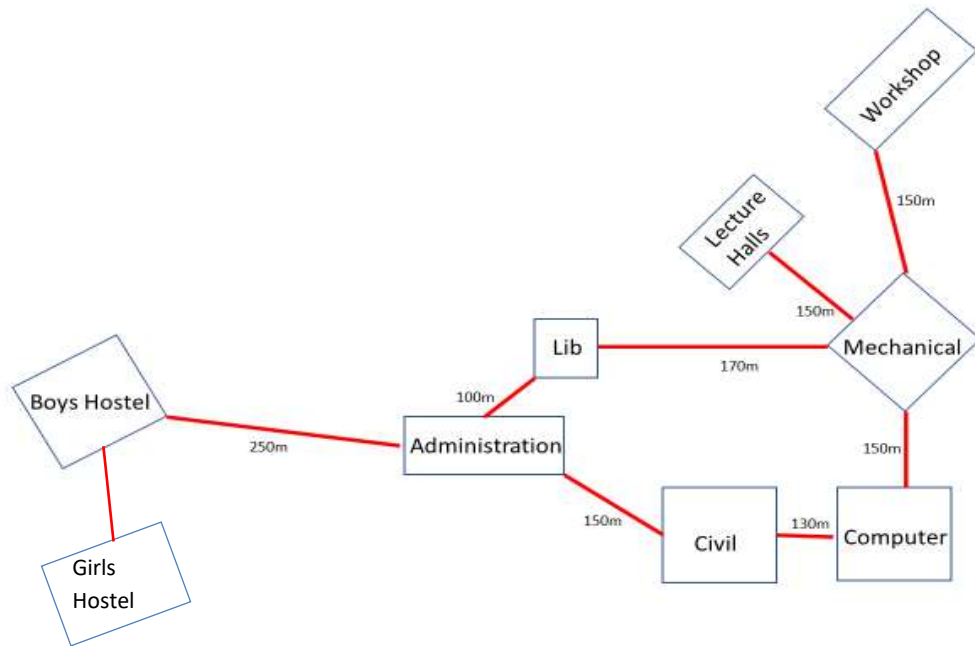
Sr. No	Item Name	Specifications
1	10G LR Modules	10G LR, Single-mode fiber, 10 km module (In Nos.)
2	Adapter Plate	6 port Adapter plate(In Nos.)
3	Adapters	SM LC Type Duplex Adapters (In Nos.)
4	CAT6 Patch Panel	Patch Panel Cat 6 Keystone- 24 Port Loaded (In Nos.)
5	CAT6 UTP Cable	Solid Cable Cat 6 UTP 4 pair-305m (Per Box)
6	Core Switch	24 port Gigabit layer 3 Switch with 4 SFP+ Slots (Nos.)
7	Distribution Switch	24 Port Gigabit layer 2 switch with 4 SFP+ slots (In Nos.)
8	Edge Switch	24 Port Gigabit layer 2 switch (In Nos.)
9	Fiber Patch Cords	PATCH CORD LC-LC SM DUPLEX LENGTH- 3m (In Nos.)
10	Fibre Termination Box	LIU 24 Port Rack Mount with Splice Tray and Cable spool (In Nos.)
11	HDPE Conduit	Supply of 40/33 mm HDPE Lubricated Pipe (in mtrs)
12	Information Outlets	Jack Cat 6 Keystone UTP (In Nos.)
13	Network Enclosures	9U Wall Mount Rack with 1U Cable Managerx2, 1x5 A (In Nos.) Skts PDB and Mounting Hardware
14	OFC	O.F. Cable 12F Outdoor Armored SM (In mtrs.)
15	Patch Cables (Rack Side)	Patch Cord Cat 6 UTP 1m- Rack Side (In Nos.)
16	Patch cables (User side)	Patch Cord Cat 6 UTP 2m- User side (In Nos.)
17	Pigtails	PIGTAIL LC SM (9 um) SIMPLEX LENGTH- 1m (In Nos.)
18	PVC Duct/Conduit	Supply of 1"/1.5" PVC Conduit with accessories (In mtrs.)
19	Surface Mount Box	Universal Back Box for Single, Square(In Nos.)
20	Wall Plates	Universal Face Plate- Single (In Nos.)

EXISTING NETWORK EQUIPMENT DETAIL

S.No.	Equipment	Type
1	Mux & Router	Tejas& Juniper make- Installed by NIC
2	DLINK 3000 series & 1000 series switches	Core & Access Switches
3	Cat5E Unstructured Copper cabling	Horizontal Cabling on each floor
4	Accessories	Patch panels, patch cords, Information outlets, Wall enclosures etc.

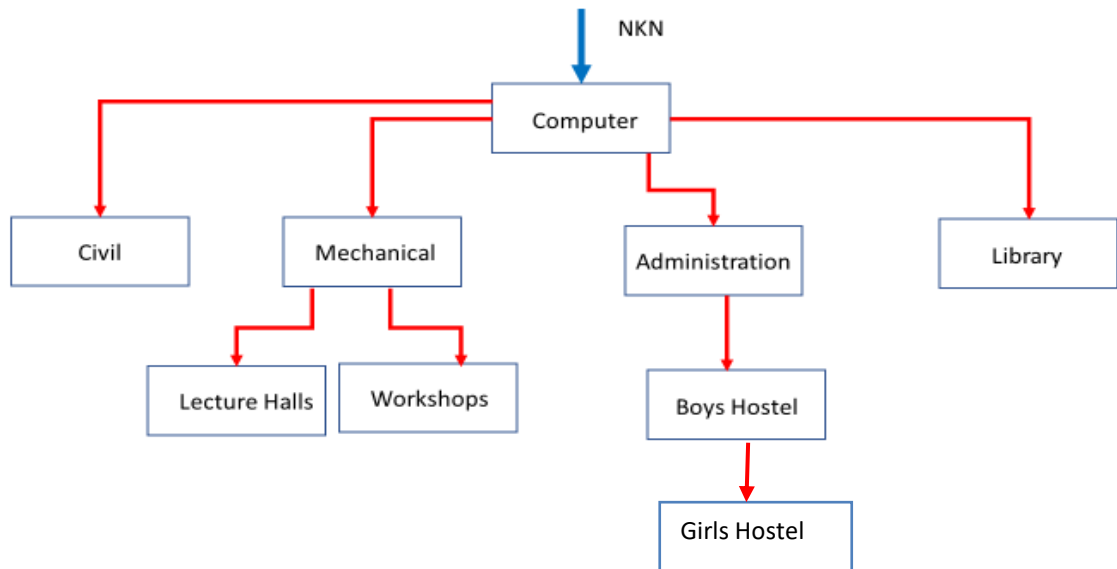
GCET Campus Layout





The logical Connectivity of the LAN is being proposed as under.

GCET Campus LAN Logical Connectivity



Distribution of Passive Components(Copper)

Building/ Department	Floor	Users	9U Rack	305m Cable Box	Information Outlets	Patch Panels	Patch cables Rack Side	Patch cables user side
Computer	Ground	170	7	30	170	9	180	170
	First	50	2	10	50	3	55	50
Civil	Ground	30	2	6	30	2	32	30
	First	15	1	3	15	1	15	15
Mechanical	Ground	15	1	3	15	1	15	15
	First	30	2	6	30	2	32	30
Administration	Ground	20	1	4	20	1	20	20
	First	15	1	3	15	1	15	15
Library	Ground	10	1	2	10	1	10	10
	First	10	1	2	10	1	10	10
Workshop	Ground	10	1	2	10	1	10	10
Lecture Halls	Ground	20	1	4	20	1	20	20
Boys Hostel		235	8	40	235	12	250	235
	Grand Total	630	29	115	630	36	664	630

Distribution of Passive Components(Fiber Cable)

S. No.	Segment		Appox. Length (m)
	From	To	
1	Computer Engineering	Civil Engineering	130
2	Computer Engineering	Mechanical Engineering	150
3	Mechanical Engineering	Library	170
4	Mechanical Engineering	Workshops	150
5	Mechanical Engineering	Lecture Halls	150
6	Civil Engineering	Administration	150
7	Administration	Library	100
8	Administration	Boys Hostel	250
	Total		1250

Distribution of Passive Components (Fiber)

Building	24 port LIU	6 port Adapter plate	Duplex Adapters SM LC Type	Pigtail LC Type SM	Patch Cable SM LC-LC
Computer	1	4	12	24	4
Civil	1	4	12	12	1
Mechanical	2	8	24	36	3
Administration	2	6	18	36	2
Library	1	4	12	24	1
Lecture Halls	1	2	6	12	1
Workshops	1	2	6	12	1
Boys Hostel	1	2	6	12	1
Total	10	32	96	168	14

Distribution of Switches & Accessories

Building	Floor	Users	L3 24 port Gigabit Switch+4 SFP+	L2 24 Port Gigabit Switch+4 SFP+	L2 24 Port Gigabit Switch	10G LR Module
Computer	Ground	170	1		8	4
	First	50			2	
Civil	Ground	30		1	1	1
	First	15			1	
Mechanical	Ground	15		1		3
	First	30			2	
Administration	Ground	20		1		2
	First	15			1	
Library	Ground	10		1		1
	First	10				
Workshop	Ground	10		1		1
Lecture Halls	Ground	20		1		1
Boys Hostel		235		1	9	1
Total		630	1	7	24	14

Detailed List of Material to be used

S.NO	Component	DESCRIPTION	UOM	QTY
1	UTM	Supply, Installation, configuration & Commissioning of 500 users UTM Appliance with 3 years Comprehensive Subscription for all threats, anti-virus, spams, malware, spyware and content filtering	Nos	1
2	Core Switch	Supply, Installation, configuration & Commissioning of 24 port Gigabit Layer 3 switch with 4 SFP+ slots	Nos	1
3	Distribution Switch	Supply, Installation, configuration & Commissioning of 24 Port Gigabit Layer 2 Switch with 4 SFP+ slots	Nos	7
4	Edge Switch	Supply Installation, configuration & Commissioning of 24 Port Gigabit Layer 2 Switch	Nos	24
5	10G LR Modules	Supply & Installation of 10G LR, Single-mode fiber, 10km module	Nos	14
6	CAT6 UTP Cable	Supply & Laying of Solid Cable Cat 6 UTP 4 pair - 305m	Box	115
7	CAT6 Patch Panel	Supply, Installation & Termination of Patch Panel Cat 6 Keystone -24 Port Loaded	No	36
8	Information Outlets	Supply & Installation of Jack Cat 6 Keystone UTP	No	630
9	Wall Plates	Supply & Installation of Universal Face Plate - Single	No	630
10	Surface Mount Box	Supply & Installation of Universal Back Box for Single, Square	No	630
11	Patch cables	Supply & Installation of Patch Cord Cat 6 UTP 1m-Rack Side	No	664
12	Patch cables	Supply & Installation of Patch Cord Cat 6 UTP 2m-User Side	No	630
13	OFC	Supply & Underground/Over the walls laying of O. F. Cable 12F Outdoor Armored SM	Mtrs	1250
14	Fiber Termination Box	Supply & Installation of LIU 24 Port Rack Mount with Splice Tray and Cable spool	Nos	10
15	Pigtails	Supply & Termination/ fusion splicing of PIGTAIL LC SM (9 um) SIMPLEX LENGTH- 1m	Nos.	168
16	Adapter Plate	Supply & Installation of 6 port Adapter plate	Nos.	32
17	Adapters	Supply & Installation of SM LC Type Duplex Adapters	Nos.	96
18	Fiber Patch cords	Supply & Installation of PATCH CORD LC-LC SM DUPLEX LENGTH- 3m	Nos	14
19	Network Enclosures	Supply, Installation & Dressing of 9U Wall Mount Rack with 1U Cable Managerx2, 1x5A Skts PDB and Mounting Hardware	No	29
20	PVC Duct/Conduit	Supply & over the walls/Ceiling laying of 1"/1.5" PVC Conduit with accessories	Mtr	9000
21	HDPE Conduit	Supply & Underground/Over the walls laying of 40/33 mm HDPE Lubricated Pipe	Mtrs	1250

The above list has been prepared as per the requirement of the campus network after the survey conducted by committee.

Technical Specifications

Following are the minimum required technical specifications of Switches & UTM.OEMs should be under leader's category of Gartner's Magic Quadrant for Switches &UTM's respectively and should have its support Centre in India.

Core Switch-1 No.

24-Port Gig with 4-Port 10-Gigabit Stackable Managed Layer-3 Switch		
1	Interfaces	24-Port Gig with 4-Port 10-Gigabit Stackable Managed Switch
2	CPU/ Memory	256 MB and 32MB flash
3	Performance Summary	Switching fabric: 128 Gbps Line-rate (non-blocking fabric)
		Throughput: 95 Mpps
		Address database size: 16,000 MAC addresses
		VLAN ID Range: 1 - 4096
		Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP) Up to 8 ports per group with 16 candidate ports for each (dynamic) 802.3ad link aggregation
		supports 1K multicast groups (source-specific multicasting is also supported)
4	L2 Services	Spanning Tree Protocol (STP)
		VLAN and Voice VLAN
		Multicast TV VLAN
		Q-in-Q VLAN
		Generic VLAN Registration Protocol (GVRP)/Generic Attribute Registration Protocol (GARP)
		Unidirectional Link Detection (UDLD)
		Dynamic Host Configuration Protocol (DHCP) Relay at Layer 2
		Internet Group Management Protocol (IGMP) versions 1, 2, and 3 snooping
		IGMP Querier
		Head-of-line (HOL) blocking
5	L3 Services	Wire-speed routing of IPv4 packets Up to 2K (2048) static routes and up to 256 IP interfaces
		Up to 2K (2048) static routes and up to 128 IPv6 interfaces
		Classless Inter-Domain Routing (CIDR)
		Configuration of layer 3 interface on physical port, LAG, VLAN interface or Loopback interface
		Relay of DHCP traffic across IP domains
		Relay of broadcast information across Layer 3 domains for application discovery or relaying of BootP/DHCP packets
		Switch functions as an IPv4 DHCP Server serving IP addresses for multiple DHCP pools/scopes Support for DHCP options
6	Security	Secure Shell (SSH) Protocol & Secure Sockets Layer
		Secure Sockets Layer (SSL)
		802.1X: RADIUS authentication and accounting, MD5 hash; guest VLAN; unauthenticated VLAN, single/multiple host mode and single/multiple sessions Supports time-based 802.1X Dynamic VLAN assignment
		Should have security mechanism to protect the network from invalid configurations. A port enabled for BPDU Guard is shut down if a BPDU message is received on that port.

24-Port Gig with 4-Port 10-Gigabit Stackable Managed Layer-3 Switch		
		STP Root Guard
		DHCP snooping
		IP Source Guard (IPSG)
		Dynamic ARP Inspection (DAI)
		IP/Mac/Port Binding (IPMB)
		Secure Core Technology (SCT)
		Secure Sensitive Data (SSD)
		Layer 2 isolation Private VLAN Edge (PVE) with community VLAN
		The ability to lock Source MAC addresses to ports and limits the number of learned MAC addresses.
		Supports RADIUS and TACACS authentication.
		Broadcast, multicast, and unknown unicast
		RADIUS accounting
		DoS prevention
		Support for up to 512 ACL rules
7	Quality of Service (QoS)	4 hardware queues
		Strict priority and weighted round-robin (WRR) Queue assignment based on DSCP and class of service (802.1p/CoS)
		Port based; 802.1p VLAN priority based; IPv4/v6 IP precedence/type of service (ToS)/DSCP based; Differentiated Services (DiffServ); classification and re-marking ACLs, trusted QoS.
		Ingress policer; egress shaping and rate control; per VLAN, per port, and flow based.
		A TCP congestion avoidance algorithm is required to minimize and prevent global TCP loss synchronization.
8	IPv6	IPv6 host mode
		IPv6 over Ethernet Dual IPv6/IPv4 stack
		IPv6 neighbor and router discovery (ND) IPv6 stateless address auto-configuration
		Path maximum transmission unit (MTU) discovery
		Duplicate address detection (DAD) ICMP version 6
9	LEDs	System, Link/Act, Speed, LED power saving option
10	Certifications	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A

Distribution Switches-7 Nos.

S.No.	Technical Specifications	
	24-port 10/100/1000 Base-T L2+ Managed Switch	
1	Interfaces	24 # 10/100/1000 Base-T RJ-45 auto-sensing ports.
		Switch should have 2*10GB Copper and 2*10G SFP+ uplink ports.
2	CPU/ Memory	512 MB and 256MB flash
3	Performance Summary	Switching fabric: 128 Gbps Line-rate (non-blocking fabric)
		Throughput: 95 Mpps
		Address database size: 64 MAC addresses
		VLAN ID Range: 1 – 4096
		Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP) Up to 8 ports per group with 16 candidate ports for each (dynamic) 802.3ad link aggregation
		supports 1K multicast groups (source-specific multicasting is also supported)
4	L2 Services	Spanning Tree Protocol (STP)
		VLAN and Voice VLAN
		Multicast TV VLAN
		Q-in-Q VLAN
		Generic VLAN Registration Protocol (GVRP)/Generic Attribute Registration Protocol (GARP)
		Unidirectional Link Detection (UDLD)
		Dynamic Host Configuration Protocol (DHCP) Relay at Layer 2
		Internet Group Management Protocol (IGMP) versions 1, 2, and 3 snooping
		IGMP Querier
		Head-of-line (HOL) blocking
5	L3 Services	Wire speed routing of IPv4 packets Up to 8K static routes and up to 256 IP interfaces
		Classless Inter-Domain Routing (CIDR)
		Configuration of layer 3 interface on physical port, LAG, VLAN interface or Loopback interface
		Relay of DHCP traffic across IP domains
		Relay of broadcast information across Layer 3 domains for application discovery or relaying of BootP/DHCP packets
		Switch functions as an IPv4 DHCP Server serving IP addresses for multiple DHCP pools/scopes Support for DHCP options
6	Security	Secure Shell (SSH) Protocol & Secure Sockets Layer
		Secure Sockets Layer (SSL)
		802.1X: RADIUS authentication and accounting, MD5 hash; guest VLAN; unauthenticated VLAN, single/multiple host mode and single/multiple sessions Supports time-based 802.1X Dynamic VLAN assignment
		Should have security mechanism to protect the network from invalid configurations. A port enabled for BPDU Guard is shut down if a BPDU message is received on that port.
		STP Root Guard

S.No.	Technical Specifications	
	24-port 10/100/1000 Base-T L2+ Managed Switch	
		DHCP snooping
		IP Source Guard (IPSG)
		Dynamic ARP Inspection (DAI)
		IP/Mac/Port Binding (IPMB)
		Secure Core Technology (SCT)
		Secure Sensitive Data (SSD)
		Layer 2 isolation Private VLAN Edge (PVE) with community VLAN
		The ability to lock Source MAC addresses to ports and limits the number of learned MAC addresses.
		Supports RADIUS and TACACS authentication.
		Broadcast, multicast, and unknown unicast
		RADIUS accounting
		DoS prevention
		Support for up to 512 ACL rules
7	Quality of Service (QoS)	4 hardware queues
		Strict priority and weighted round-robin (WRR) Queue assignment based on DSCP and class of service (802.1p/CoS)
		Port based; 802.1p VLAN priority based; IPv4/v6 IP precedence/type of service (ToS)/DSCP based; Differentiated Services (DiffServ); classification and re-marking ACLs, trusted QoS.
		Ingress policer; egress shaping and rate control; per VLAN, per port, and flow based.
		A TCP congestion avoidance algorithm is required to minimize and prevent global TCP loss synchronization.
8	IPv6	IPv6 host mode
		IPv6 over Ethernet Dual IPv6/IPv4 stack
		IPv6 neighbor and router discovery (ND) IPv6 stateless address auto-configuration
		Path maximum transmission unit (MTU) discovery
		Duplicate address detection (DAD) ICMP version 6
9	LEDs	System, Link/Act, Speed, LED power saving option
10	Certifications	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A

Edge Switches-24 Nos.

S.No.	Technical Specifications	
	24-port 10/100/1000 Base-T L2 Managed Switch with Fiber Uplinks	
1	Interfaces	24 # 10/100/1000 Base-T and 2 SFP ports. 2 Gigabit Ethernet combo
2	CPU/ Memory	128 MB and 16MB flash
3	Performance Summary	Switching fabric: 56 Gbps Line-rate (non-blocking fabric) Throughput: 41 Mpps Address database size: 16,000 MAC addresses VLAN ID Range: 1 - 4096 Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP) Up to 8 ports per group with 16 candidate ports for each (dynamic) 802.3ad link aggregation supports 1K multicast groups (source-specific multicasting is also supported)
4	L2 Services	Spanning Tree Protocol (STP) VLAN and Voice VLAN Multicast TV VLAN Q-in-Q VLAN Generic VLAN Registration Protocol (GVRP)/Generic Attribute Registration Protocol (GARP) Unidirectional Link Detection (UDLD) Dynamic Host Configuration Protocol (DHCP) Relay at Layer 2 Internet Group Management Protocol (IGMP) versions 1, 2, and 3 snooping IGMP Querier Head-of-line (HOL) blocking
5	L3 Services	Wirespeed routing of IPv4 packets Up to 512 static routes and up to 128 IP interfaces Classless Inter-Domain Routing (CIDR) Configuration of layer 3 interface on physical port, LAG, VLAN interface or Loopback interface Relay of DHCP traffic across IP domains Relay of broadcast information across Layer 3 domains for application discovery or relaying of BootP/DHCP packets Switch functions as an IPv4 DHCP Server serving IP addresses for multiple DHCP pools/scopes Support for DHCP options
6	Security	Secure Shell (SSH) Protocol & Secure Sockets Layer Secure Sockets Layer (SSL) 802.1X: RADIUS authentication and accounting, MD5 hash; guest VLAN; unauthenticated VLAN, single/multiple host mode and single/multiple sessions Supports time-based 802.1X Dynamic VLAN assignment Should have security mechanism to protect the network from invalid configurations. A port enabled for BPDU Guard is shut down if a BPDU message is received on that port. STP Root Guard DHCP snooping

S.No.	Technical Specifications	
	24-port 10/100/1000 Base-T L2 Managed Switch with Fiber Uplinks	
		IP Source Guard (IPSG)
		Dynamic ARP Inspection (DAI)
		IP/Mac/Port Binding (IPMB)
		Secure Core Technology (SCT)
		Secure Sensitive Data (SSD)
		Layer 2 isolation Private VLAN Edge (PVE) with community VLAN
		The ability to lock Source MAC addresses to ports and limits the number of learned MAC addresses.
		Supports RADIUS and TACACS authentication.
		Broadcast, multicast, and unknown unicast
		RADIUS accounting
		DoS prevention
		Support for up to 512 ACL rules
7	Quality of Service (QoS)	4 hardware queues
		Strict priority and weighted round-robin (WRR) Queue assignment based on DSCP and class of service (802.1p/CoS)
		Port based; 802.1p VLAN priority based; IPv4/v6 IP precedence/type of service (ToS)/DSCP based; Differentiated Services (DiffServ); classification and re-marking ACLs, trusted QoS.
		Ingress policer; egress shaping and rate control; per VLAN, per port, and flow based.
		A TCP congestion avoidance algorithm is required to minimize and prevent global TCP loss synchronization.
8	IPv6	IPv6 host mode
		IPv6 over Ethernet Dual IPv6/IPv4 stack
		IPv6 neighbor and router discovery (ND) IPv6 stateless address auto-configuration
		Path maximum transmission unit (MTU) discovery
		Duplicate address detection (DAD) ICMP version 6
9	LEDs	System, Link/Act, Speed, LED power saving option
10	Certifications	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A

ANNEXURE-III

Other Terms and Conditions:

1. The tenderer should visit the campus before submitting the quotation and quote the final price after deducting the existing infrastructure in place.
2. The tenderer should give the warranty/free maintenance for a period of five years after installation.
3. The tenderer should train the manpower of the college after installation of the networking.
4. The tenderer should have executed the similar type of networking project of similar amount in govt. organizations/ educational institutes.
5. OEM should be Nationally/Internationally reputed Company.
6. Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between tenderer specification and supporting documents etc. may lead to rejection of the bid.
7. Manufacturer's/Supplier's warranty certificate.
8. Onsite Installation of the equipment will be done by the Tenderer and will get the satisfactory installation certificate by the concerned department.
9. On Site support to be provided by the Bidder or the OEM. Declaration for the same to be submitted along with the bid.
10. The tenderer must submit Income tax clearance certificate from the concerned IT circle.
11. The tenderer must submit a report on financial standing and should have an annual turnover of 3 crores.
12. The tenderer must submit performance Security (3% of the order value) in the form of Bank Guarantee after the placement of purchase order.

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To:

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ————— months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____