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इलाहाबाद-211004 (भारत)  
**Motilal Nehru National Institute of Technology Allahabad**  
 Allahabad-211004 (India)  
 An Institute of National Importance as Declared by NIT Act, GOI,  
 2007

**INVITATION FOR SUPPLY & INSTALLATION OF EQUIPMENTS FOR WIFI EXTENSION**  
*(For Contracts value estimated to cost less than Rs.25lakhs)*

1	<b>Closing Date/Time for submission of Quotations</b>	15/09/2016; 11:00 Hrs.
2	<b>Opening Date/Time of Quotations</b>	15/09/2016; 11:30 Hrs.
3	<b>Quotations to be submitted at</b>	The Office of Faculty-In-charge (Purchase) M.N.N.I.T. Allahabad, Allahabad-211 004 (U.P.)
4	<b>Place of opening of quotations</b>	The Office of Faculty-In-charge (Purchase) M.N.N.I.T. Allahabad, Allahabad-211 004 (U.P.)
5	<b>Tender Fee</b>	Rs. 200.00 (Non-refundable), in form of a Demand Draft drawn in favor of DIRECTOR, MNNIT Allahabad.
6	<b>Earnest Money Deposit (EMD)</b>	<b>Rs. 57,400/- (Rs. In words Fifty Seven thousand four hundred only)</b> , in form of FDR/Bank guarantee, from any of the Commercial Banks, drawn in favour of "Director, MNNIT Allahabad" payable at Allahabad, and valid for a period of 45 days beyond the final bid validity period

To,

**Dear Sir**

You are invited to submit your most competitive quotation for the following goods/equipments. The quotation should be sent directly to the undersigned under Sealed Cover marked "Quotation Reference No., Date", and "The Due Date":

Sl. No.	Brief Description of the Goods	Quantity	Place Of Delivery	Installation Requirement
1.	Rack Mountable Manageable Layer 2 Access Switch with 24-port 10/100 Mbps port and atleast 2 no's of Gigabit SFP and UTP Uplinks Ports. [Cisco WS-C2960-plus-24 TC-L or equivalent with three years of Comprehensive Warranty].	08 Nos.	M.N.N.I.T. Allahabad	YES
2.	Rack Mountable Manageable Layer 2 Access Switch with 24-port 10/100/1000 Mbps port and having an option of atleast 4 SFP based Gigabit Ethernet Ports in addition of the Copper Ports. [Cisco WS2960X TS-L or equivalent with three years of Comprehensive Warranty].	01 No.		
3.	1000BASE-T SFP transceiver module compatible with Cisco WS2960X TS-L (Cisco GLC-TSPF) or equivalent	01 No.		
4.	Supply, Installation and Configuration of Access Points with dual antenna, dual B/W, DHCP Server with three year comprehensive warranty. Wireless Access Point of D Link 2360 or equivalent.	66 Nos.		
5.	UTP Components	-		
6.	Cabling and Wiring/Installation. (Detailed Specification attached at 'Annexure-B')	-		

The sealed tenders must be submitted in the Office of the Faculty In-charge (Purchase), on or before **due date & time as mentioned above** in the office of the undersigned, in the presence of bidder's authorized representatives, who choose to attend and shall sign a register evidencing their attendance.

The tender/quotations NOT submitted in the prescribed format or Incomplete in any respect will be outrightly rejected.

**Faculty in-Charge (Purchase)**  
**MNNIT Allahabad**

## GENERAL TERMS & CONDITION (GCC)

1. **Bid Price**
  - (a) The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
  - (b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.
  - (c) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
  - (d) The prices should be quoted in Indian Rupees only for indigenous items. For imported items/Equipments, the prices should be quoted in foreign currency.
  - (e) Each bidder shall submit only one quotation.
2. **Validity of Quotation**

Quotation shall remain valid for a period not less than **120 days** after the deadline date specified for submission.
3. **Evaluation of Quotations**
  - (a) The purchaser will evaluate and compare the quotations determined to be substantially responsive, i.e., which
    - (i) are properly signed; and
    - (ii) conform to the terms and conditions, and specifications.
    - (iii) will be with tender fees, and EMD required, if any.
  - (b) The Quotations would be evaluated separately for each item.
4. **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.

  - 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.
  - The bidder whose bid is accepted will be notified for 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 if falls under Govt. purchase rules, i.e., GFR-2005
5. **Formats and Signing of Bid**
  - Each & every pages of the submitted bid must carry the page numbers.
  - The bidders are not allowed to make additional and alteration in the tender document, any additions and alteration in the tender document, any additions and alterations shall be at bidder's risk. Conditional/modified tender are liable to be rejected.
  - The tender/quotations NOT submitted in the prescribed format or Incomplete in any respect will be outrightly rejected.
  - If the bid submitted without compliance sheet details of equipments the bid will be outrightly rejected.
  - The bid shall be typed or written in indelible ink and shall be signed by the Bidder/Tenderer or a person or persons duly authorized to bind the Bidder/Tenderer to the Contract. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
  - Any interlineations, erasure or overwriting shall be valid only if they are initiated by the persons or persons signing the bid.
  - The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.
6. **Payment condition:** 100% Payment shall be made only after satisfactory delivery and installation of the goods. Advance payment is not permitted.
7. Normal Commercial warranty/ guarantee shall be applicable to the supplied goods.
8. **Payment will be cleared through e-payment mode (Format of e-payment form given at Annexure-D)**

## INSTRUCTIONS/GUIDELINES TO BIDDERS (ITB)

1. Bidders who had supplied the Government departments, PSUs/NITs/IITs/IIITs and reputed Institutions and Organizations should only apply.
2. The bidder should enclose the client list with contact address along with Phone/Fax for reference, for the quoted item.
3. Please quote the prices of F.O.R. Motilal Nehru National Institute of Technology Allahabad, Allahabad.
4. The Bidders are requested to submit their Quotation with EMD in the form of Demand Draft/ Bank Guarantee/ Short term Deposit of the cost of equipments/items in favor of "The Director, MNNIT, Allahabad" payable at Allahabad. Quotation without EMD will be summarily rejected. EMD's of all Bidders will be returned back after the purchase order /contract agreement is issued to successful bidder.
5. Successful Bidders must have to submit the performance security @10% of the purchase order or contract value and it will be retained up to the warranty period.
6. The bidder should enclose relevant documents wherever necessary to substantiate his eligibility.
7. The Institute is eligible for and can provide necessary documentation for Custom/Excise and Octroi exemption on demand, if permitted under rule.
8. Motilal Nehru National Institute of Technology Allahabad, Allahabad, reserves the right to reject, accept any or whole or part of any of the tender without assigning any reason thereof and no claim will be heard. In case of dispute, the decision of The Director, MNNIT, and Allahabad will be final and binding.
9. If the successful bidder is not able to supply the goods items within the delivery date specified in the purchase order, the purchase order will be automatically treated as cancelled after expiry of delivery date period. The vendor will have to submit an undertaking in this regard that this condition is acceptable to him. In case of extra ordinary circumstances the vendors must send a request for extension of validity of purchase orders, with proper justification prior to the expiry of validity date for consideration.
10. In case of sophisticated equipments, an on-site training needs to be provided with no extra cost.
11. The quotation must be accompanied by leaflets/operation manuals/books etc.
12. Wherever applicable the vendors must quote the branded /desired items.

CHECK LIST  
(ON THE LETTER HEAD OF THE BIDDER)

The Bid will be the compilation of following documents, along with required supporting documents. No document in support of minimum eligibility criteria will be accepted / entertained after opening of tender.

Sl. No	Documents
1.	Cover letter by bidder (On the Letter Head of the Bidder)
2.	Tender Fee
3.	Earnest Money Deposit (EMD), if required
4.	Cliental List for quoted item
5.	<b>Annexure-A</b> : Bid Proposal Sheet (On the Letter Head of the Bidder)
6.	<b>Annexure-B</b> : Compliance of bidder with reference to various equipments (On the Letter Head of the Bidder)
7.	<b>Annexure-C</b> : PRICE BID (On the Letter Head of the Bidder)
8.	<b>Annexure-D</b> : PROFORMA FOR DIRECT PAYMENT/TRANSFER TO BANK ACCOUNT BY MNNIT ALLAHABAD
9.	<b>Annexure-D</b> : PROFORMA FOR MANUFACTURER AUTHORIZATION FORM (MAF)

ANNEXURE-A

BID PROPOSAL SHEET  
(ON THE LETTER HEAD OF THE BIDDER)

To  
Faculty In-charge (Purchase)  
MNNIT Allahabad, Allahabad

**Subject:** Supply and Installation of “Equipments for Wifi Extension” at MNNIT Allahabad, Allahabad.

Dear Sir,

We, the undersigned Tenderers, having read and examined in detail the specifications as specified in this document in respect of Supply and Installation of **Equipments for Wifi Extension** at MNNIT Allahabad, Allahabad do hereby propose to supply the required products and services.

Tender No.				
Tender Fees submitted		YES / NO (Please strike off whatever is not applicable)		
Amount	Mode	Date of Issue	Name of Bank	Valid up to
	Demand Draft			
EMD submitted		YES / NO (Please strike off whatever is not applicable)		
Amount	Mode	Date of Issue	Name of Bank	Valid up to
	Demand Draft			

- (i) **ADDITIONAL PURCHASE/WORK ORDER:** We understand that the MNNIT Allahabad, Allahabad, in case of the requirements may also place repeat purchase order/work order on the company. In such cases, we shall accept and execute all the purchase/work order placed on us by MNNIT Allahabad, Allahabad.
- (ii) **BID PRICING:** We further declare that the prices stated in our proposal are in accordance with your Terms & Conditions in the bidding document. We further understand that the quantities as specified in this Tender may increase or decrease at the time of Award of Purchase Order as per the requirements of MNNIT Allahabad, Allahabad.
- (iii) **QUALIFYING DATA:** We confirm that we satisfy the qualifying criteria and have attached the requisite documents as documentary proofs. In case you require any further information/documentary proof in this regard during evaluation of our bid, we agree to furnish the same in time to your satisfaction.
- (iv) **CONTRACT PERFORMANCE SECURITY:** We hereby declare that in case the contract is awarded to us, we shall submit the performance Guarantee Bond in the form of Bank Guarantee for the amount mentioned at **clause No. 5 in ITB** of the total order value.
- (v) **PAYMENT TERMS:** We hereby declare that in case the contract is awarded to us, we agree with payment terms specified in the tender documents.
- (vi) **CERTIFICATE AND DECLARATION:**
  - a) I/We certify that no addition/modification/alteration has been made in the Original Tender Document. If at any stage addition /modification /alteration is noticed in the Original Document, I/We will abide by the terms and conditions contained in the original tender document, failing which MNNIT Allahabad reserves the right to reject the tender and/or cancel the contract
  - b) It has been certified that all information provided in tender form is true and correct to the best of my knowledge and belief. We hereby declare that our proposal is made in good faith, without collusion or fraud. No forged /tampered document(s) are produced with tender form for gaining unlawful advantage. We understand that MNNIT Allahabad is authorized to make enquiry to establish the facts claimed and obtained confidential reports from clients.
  - c) In case it is established that any information provided by us is false / misleading or in the circumstances where it is found that we have made any wrong claims. Further MNNIT Allahabad is also authorized to blacklist our firm/company/agency and debar us in participating in any tender/bid in future.
  - d) I / We assure the Institute that neither I /We, nor any of my /our workers, will do any act which is improper / illegal during the execution in case the tender is awarded to us.
  - e) I / We assure the Institute that I / We will NOT be outsourcing any work specified in the tender document, to any other firm.
  - f) Neither I / We, nor anybody on my /our behalf will indulge in any corrupt activities /practices in my /our dealing with the Institute.
  - g) Our Firm / Company / Agency is not been blacklisted or banned by any Govt. Department, PSU, University, Autonomous Institute or any other Govt. Organization.
  - h) I/We certify that, I have understood all the terms & conditions (GCC and ITB etc.), as indicated in enquiry of the tender document, and hereby accept all the same completely.
  - i) I/We, further certify that I/We, possess all the statutory /non-statutory registrations, permissions, approvals, etc., from the Competent Authority for providing the requisite services,
  - j) We understand that you are not bound to accept the lowest or any bid you may receive.
  - k) I/We hereby declare that this tender on acceptance communicated by you shall constitute a valid and binding contract between us.
  - l) I/We certify that the submitted quotation is duly paginated and contains from page no. 1 to .....

Date:

Signature and Seal of the Manufacturer/Bidder

Technical Compliance of Goods  
(ON THE LETTER HEAD OF THE BIDDER)

Sl. No.	Descriptions/Specification	Quantity	Compliance (Yes/No)	Quoted Model
	<b>Access Switch: Qty-08 No's [Cisco WS-C2960-plus-24 TC-L or equivalent]</b>			
	Specification	Details		
	Port Density Capability	<ul style="list-style-type: none"> <li>• 24 Ports 10/100 Base T.</li> <li>• 2 Ports 10/100/1000 (SFP or 1000BASE-T)</li> <li>• With Cisco LAN Base IOS.</li> </ul>		
	Memory	<ul style="list-style-type: none"> <li>• 64MB DRAM and 32MB Flash Memory support.</li> </ul>		
	Switching Capacity and Performance throughput	<ul style="list-style-type: none"> <li>• 16 Gbps Switching Fabric.</li> <li>• 8.8 Gbps Forwarding Bandwidth.</li> <li>• 6.5 Mpps.</li> </ul>		
	MAC Address Support	<ul style="list-style-type: none"> <li>• 8000 MAC address, 255 IGMP groups.</li> </ul>		
	VLAN Support	<ul style="list-style-type: none"> <li>• IEEE802.1Q VLAN with 255 VLANs.</li> </ul>		
	Switching Services	<ul style="list-style-type: none"> <li>• L2 Switching, L2-L4 services.</li> <li>• DHCP Relay &amp; Server, DHCP Type-82.</li> <li>• UDLD and VTP Support.</li> <li>• Per-port Unicast, broadcast, multicast storm control prevention.</li> <li>• Egress committed rate (ECR).</li> </ul>		
	Power Supply Support	<ul style="list-style-type: none"> <li>• Support for Redundant Power Supply.</li> </ul>		
	Protocol Support	<ul style="list-style-type: none"> <li>• IEEE802.1Q, 802.1p, 802.1D, 802.3x, 802.3ad, 802.1w.</li> <li>• IGMP v1, v2, v3 and IPv4.</li> </ul>		
	Management	<ul style="list-style-type: none"> <li>• Web View, Telnet, SNMP, Console, RMON, TDR, UDLD, L2 trace route.</li> <li>• Local and remote mirroring of the ports.</li> </ul>		
	QoS	<ul style="list-style-type: none"> <li>• 802.1p prioritization with minimum of four priority queues for support of critical applications like Voice/IP telephony.</li> <li>• L2, L3, L4 traffic classification.</li> <li>• Strict priority queuing, Weighted Fair Queuing and Rate Limiting.</li> <li>• SAA Support.</li> <li>• Control-plane and Data-plane ACLs support on all ports to ensure proper treatment on a per-packet basis.</li> <li>• Shaped Round Robin (SRR).</li> <li>• Asynchronous data flows upstream and downstream.</li> </ul>		
	Technology Support	<ul style="list-style-type: none"> <li>• IEEE802.1s, IEEE802.1w, IEEE802.1x, IEEE802.3ad.</li> <li>• IEEE802.3ah (100Base-X single/multimode fiber only).</li> <li>• IEEE802.3x full duplex on 10Base-T ports.</li> <li>• IEEE802.1D STP.</li> <li>• IEEE802.1p CoS Prioritization, IEEE802.1Q VLAN.</li> <li>• IEEE802.3 10Base-T specification.</li> <li>• IEEE802.3u 100Base-TX specification.</li> <li>• IEEE802.3ab 1000Base-T specification.</li> <li>• IEEE802.3z 1000Base-X specification.</li> </ul>		
	Security	<ul style="list-style-type: none"> <li>• 802.1x Port based network access control.</li> <li>• IEEE802.1x with VLAN assignment allows a dynamic VLAN assignment for a specific user regardless of where the user is connected.</li> <li>• Hardware based L2 ACLs and QoS ACLs support.</li> <li>• ACLs based on source and destination MAC addresses IP addresses or TCP/UDP ports.</li> <li>• Users can be assigned a VLAN upon authentication.</li> <li>• Spanning-Tree Root Guard.</li> <li>• Multilevel security on console access.</li> <li>• SSHv2, SNMPv3, MAC Address Locking and RADIUS support.</li> </ul>		
	<b>Access Switch: Qty-01 No. [Cisco 2960 TS-L or equivalent]</b>			
	Specification	Details		
	Physical Specification	<ul style="list-style-type: none"> <li>• Should be rack mountable with 24-port 10/100/1000 Mbps ports and having an option of at least 4 SFP- based Gigabit Ethernet ports in addition to the Copper Ports</li> </ul>		
	General Specifications	<ul style="list-style-type: none"> <li>• Switch with 176Gbps switching fabric with min 80Gbps of forwarding bandwidth</li> <li>• Min. 40 million packets per second forwarding rate on 64-byte packets</li> <li>• 8000 MAC address supported</li> <li>• 255 IGMP groups</li> <li>• Should support Redundant Power Supply</li> <li>• Should have USB console and flash</li> <li>• Should Support Ipv6 (ready to use)</li> <li>• Should Support Stacking and Redundant Power Source</li> </ul>		
	Layer-2 Features	<ul style="list-style-type: none"> <li>• IEEE 802.1Q VLAN encapsulation. Up to 255 VLANs per</li> </ul>		

		<ul style="list-style-type: none"> <li>switch and up to 4000 VLANIDs</li> <li>Support for Automatic Negotiation of Trunking Protocol, to help minimize the configuration &amp; errors</li> <li>Centralized VLAN Management. VLANs created on the Core Switches should be propagated to all the other switches automatically, thus reducing the overhead of creating / modifying / deleting VLANs in all the switches in turn eliminating the configuration errors &amp; troubleshooting.</li> <li>Spanning-tree Port Fast for fast convergence</li> <li>802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1xREV, 802.1ab, 802.3ad,</li> <li>Spanning-tree root guard to prevent other edge switches becoming the root bridge.</li> <li>IGMP snooping v1, v2 and v3</li> <li>Link Aggregation Protocol (LACP)</li> <li>Support for Detection of Unidirectional Links and to disable them to avoid problems such as spanning – tree loops</li> <li>Should be able to discover the neighboring device of the same make giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems.</li> <li>Support for Switch port auto recovery (err disable) to automatically re-enable a link that is disabled because of a network error.</li> <li>Should support Multicast VLAN registration</li> <li>Should support DHCP Server enabling a convenient deployment option for the assignment of IP addresses in networks that do not have a dedicated DHCP server.</li> <li>Should support Local Proxy Address Resolution Protocol (ARP) works in conjunction with Private VLAN Edge to minimize broadcasts and maximize available bandwidth</li> <li>Should support LLDP and LLDP-MED including client location information. Should exchange link and device information in multivendor networks.</li> <li>Should support configuration rollback to replace current configuration with any saved Configuration file.</li> <li>Should support link state tracking which provides layer2 redundancy in the network when used in conjunction with server teaming.</li> </ul>			
	QoS Features	<ul style="list-style-type: none"> <li>Standard 802.1p QoS and DSCP classification using marking and reclassification on a per-packet basis by source and destination IP address, source and destination MAC address, or Layer 4 TCP or UDP port number.</li> <li>Control – and Data-plane QoS ACLs</li> <li>No performance penalty for highly granular QoS functions</li> <li>Four egress queues per port to enable differentiated management of up to four traffic types</li> <li>Weighted tail drop (WTD) to provide congestion avoidance</li> <li>Strict priority queuing mechanisms</li> <li>Rate limiting support based on source and destination IP address, source and destination MAC address, Layer 4 TCP and UDP information, or any combination of these fields, using QoS ACLs (IP ACLs or MAC ACLs), class maps, and policy maps.</li> <li>Up to 64 aggregate or individual policers for per Fast Ethernet or Gigabit Ethernet port.</li> <li>Support for Automatic Quality of Service for easy configuration of QoS features for critical applications</li> </ul>			
	Network Security Features	<ul style="list-style-type: none"> <li>IEEE 802. 1x to allow dynamic, port-based security, providing user authentication</li> </ul>			
		<b>Wireless Access Point: Qty-66 No's [D-Link 2360 or equivalent]</b>			
	<b>Specification</b>	<b>Details</b>			
	WAN interface and the networking features should support	<ul style="list-style-type: none"> <li>DHCP client/Server/Relay and fixed IP address assignment.</li> <li>PPPoE client, PPPoE pass-through.</li> <li>VPN pass-through.</li> <li>NAT.</li> <li>VLAN.</li> <li>Switch and gateway mode.</li> </ul>			
	The wireless network should support the following wireless standards.	<ul style="list-style-type: none"> <li>802.11b/g access point mode.</li> <li>Support repeater mode.</li> <li>Support CPE mode.</li> <li>An 802.11b client will NOT force the wireless connections of other devices to fall back to 802.11b for the same SSID(AP)</li> </ul>			
	The RF setting should support the following:	<ul style="list-style-type: none"> <li>AP model with multiple radios is preferred</li> <li>Comply US FCC Standard (Channel 1-11).</li> <li>Allow 2.4GHz channel scan to show the signal and noise figures on all channels.</li> <li>Allow manual/automatic channel selection.</li> <li>Bandwidth control on RF- airtime control or throughput control.</li> <li>Transmit and receive diversity.</li> </ul>			
	The wireless interface should have the following	<ul style="list-style-type: none"> <li>4 SSIDs or more.</li> <li>Each SSID can be in broadcast or suppressed mode.</li> </ul>			

SSID supports:	<ul style="list-style-type: none"> <li>Each SSID can have independent wireless encryption setting, e.g. no encryption, WEP, WPA and WPA2 etc and that will not affect other SSIDs.</li> <li>Each SSID can have independent QoS configuration (fixed profiles include "Very High", "High", "Normal", "Low" as well as profiles according to TCP/UDP ports, TOS or WMM priority values)</li> </ul>			
The wireless interface should supports:	<ul style="list-style-type: none"> <li>Preferred AP association.</li> <li>WDS.</li> <li>Auto ACK Timeout Calculation by Distance Input.</li> <li>Click to Connect</li> <li>MAC based access control.</li> </ul>			
Quality of Service(QoS) Support	<ul style="list-style-type: none"> <li>Fixed QoS Policy (Very High-for Voice, High, Normal, Low) DHCP Relay &amp; Server, DHCP Type-82.</li> <li>ToS / 802.1p / 802.11e WMM.</li> <li>Traffic prioritization-allow voice and video traffic to have higher priority transmission.</li> </ul>			
Video Support	<ul style="list-style-type: none"> <li>2-3 simultaneous MPEG-2 or 4-6 MPEG-4 standard definition streams or single 10 Mbps HD stream.</li> </ul>			
WIFI-VOIP support	<ul style="list-style-type: none"> <li>Should support WIFI-VOIP.</li> </ul>			
Per SSID, the wireless interface should support the following encryption modes:	<ul style="list-style-type: none"> <li>NO encryption</li> <li>128-bit WEP (Shared Key and Dynamic WEP).</li> <li>128-bit TKIP-MIC.</li> <li>128-bit AES-CCMP.</li> </ul>			
Authentication Support	<ul style="list-style-type: none"> <li>WPA (PSK or Dynamic Key by 802.1x).</li> <li>WPA2 (PSK or Dynamic Key by 802.1x).</li> <li>Universal Access Method (UAM).</li> <li>802.1x Mutual Authentication support.</li> </ul>			
UAM (Universal Access Method)	<ul style="list-style-type: none"> <li>In this access mode, no authentication is needed and the PC can associate to the wireless interface of the AP freely.</li> </ul>			
802.1x Mutual Authentication support	<ul style="list-style-type: none"> <li>For each SSID configured to use 802.1x authentication, the client PC cannot associate to the wireless interface unless the client is authenticated successfully with 802.1x standard.</li> </ul>			
Radius Support	<ul style="list-style-type: none"> <li>Support Radius Server IP and port configuration.</li> <li>Support Radius Authentication.</li> </ul>			
Management	<ul style="list-style-type: none"> <li>Web-based Administration Tool.</li> <li>SNMP v1/v2c.</li> <li>SNMP Manager Access Control List.</li> <li>Remote Firmware Upgrade.</li> <li>Performance Monitoring.</li> <li>RF Statistics Reporting.</li> <li>Radio Interference Management for APs.</li> <li>Syslog Support.</li> <li>TR-069 Support</li> </ul>			
<b>CAT-6 UTP Cable: Qty-6000Mts</b>				
<b>Specification</b>	<b>Details</b>			
Type	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801			
Conductors	23 AWG solid bare copper			
Insulation	Polyethylene			
Jacket	Flame Retardant PVC			
Pair Separator	Cross-member (+) fluted Spline.			
Approvals	(a) UL Listed / UL Verified (b) ETL verified to TIA / EIA Cat 6			
Operating temperature	-20 Deg. C to +60 Deg. C			
Storage Temperature	-20 Deg. C to +80 Deg. C			
Frequency tested up to	Minimum 550 MHz			
Packing	Box of 305 meters			
Cable Outer Diameter	.23 inches			
Delay Skew	45ns MAX.			
Bend Radius	4 * Cable Diameter			
UL/NEC Ratings	CMR Rated			
Mutual Capacitance	5.6 NF MAX /100 Mtr.			
Conductor Resistance	66.58 Ohms Max / KM			
Propagation Delay	536 ns/100 Mtrs. MAX @ 250 Mhz			
Performance characteristics	Attenuation, Pair-to-pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR			
ROHS Compliance	ROHS Complaint			
<b>UTP Jack/ IO: Qty-64 No's</b>				
<b>Specification</b>	<b>Details</b>			
Type	PCB based, Unshielded Twisted Pair, Category 6, TIA /EIA 568-C.2 and ISO/IEC 11801			
Modular Jack	750 mating cycles			
Wire terminal	200 termination cycles			
Accessories	Integrated bend-limiting strain-relief unit for cable entry			
	Integrated hinged dust cover or dust protection at user side information outlet			

		Support cable pair termination process on the jacks at 90 degree angle.			
		Bidder should have a mechanism to maintain the quality of the termination ir-respective of the skill level of the termination staff.			
	Housing	Polyphenylene oxide, 94V-0 rated.			
	110 Blocks	polycarbonate, 94V-0 rated			
	Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate			
	Wiring blocks	Polycarbonate, 94V-0 rated			
	Approvals	(a) UL Listed / CSA Approved			
		(b) ETL verified to TIA / EIA Cat 6			
	Performance Characteristics	Attenuation, NEXT, PS NEXT, FEXT and Return Loss			
	ROHS Compliance	ROHS Complaint			
<b>UTP Jack/ Patch Panel: Qty-08 No's</b>					
	<b>Specification</b>	<b>Details</b>			
	Type	24-port, Modular, PCB based, Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 and ISO/IEC 11801			
	Ports	24			
	Port arrangement	Configured as 6 Port Module with individually replaceable CAT-6 Jacks			
	Circuit Identification Scheme	Front of each module shall be capable of accepting 9 mm to 12 mm labels			
	Port Identification	9mm or 12mm Labels on each of 24-ports (to be included in supply)			
	Height	1 U (1.75 inches) for 24-Ports and 2 U for 48-ports			
	Interface	Polyester Molding Compound, Black			
	Modular Jack	750 mating cycles			
	Wire terminal	200 termination cycles			
	Accessories	Integrated bend-limiting strain-relief unit for cable entry			
	Housing	Polyphenylene oxide, 94V-0 rated			
	Wiring blocks	Polycarbonate, 94V-0 rated			
	Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate			
	Panel	Black, powder coated steel			
	Approvals	UL listed / ETL Verified			
	Termination Pattern	TIA / EIA 568 A and B;			
	ROHS Compliant	ROHS Compliant			
<b>UTP Patch Cord 3': Qty-64 No's</b>					
	<b>Specification</b>	<b>Details</b>			
	Type	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801			
	Conductor	24 AWG 7 / 32, stranded copper conductors 100 Ohm			
	Length	3/4 feet			
	Plug Protection	Transparent Slim boot			
	Warranty	25-year component			
	Insulation	Flame Retardant Polyethylene			
	ROHS Compliance	ROHS Complaint			
<b>Faceplate: Qty-64 No's</b>					
	<b>Specification</b>	<b>Details</b>			
	Type	Single Gang, BS			
	Material	ABS / UL94 V-0			
	No. of ports	One/Two			
	Shutter	ABS UL94V-0			
	Spring of Shutter	Steel, Stainless			
	Holder, Jack	ABS UL 94V-0			
	Cover Label	Acrylic UL94V-0			
	ROHS Compliance	ROHS Complaint			

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PRICE BID  
(ON THE LETTER HEAD OF THE BIDDER)

Sl. No.	Brief Description of the Goods	Qty	Quoted Unit Rate in Rs	Total Amount (in Rs.)		Tax	
				In Figures	In Words	VAT	Any other charges (if any)
1.	Rack Mountable Manageable Layer 2 Access Switch with 24-port 10/100 Mbps port and atleast 2 no's of Gigabit SFP and UTP Uplinks Ports. [Cisco WS-C2960-plus-24 TC-L or equivalent with three years of Comprehensive Warranty].	08 Nos.					
2.	Rack Mountable Manageable Layer 2 Access Switch with 24-port 10/100/1000 Mbps port and having an option of atleast 4 SFP based Gigabit Ethernet Ports in addition of the Copper Ports. [Cisco WS2960X TS-L or equivalent with three years of Comprehensive Warranty].	01 No.					
3.	1000BASE-T SFP transceiver module compatible with Cisco WS2960X TS-L (Cisco GLC-TSPF) or equivalent	01 No.					
4.	Supply, Installation and Configuration of Access Points with dual antenna, dual B/W, DHCP Server with three year comprehensive warranty. Wireless Access Point of D Link 2360 or equivalent.	66 Nos.					
5.	UTP Components	-					
6.	Cabling and Wiring/Installation.	-					
(Detailed Specification attached at 'Annexure-B')							

**Note: Each bidder (except OEM) must submit Manufacturer Authorization Form (MAF) from OEM (of Current Financial Year i.e. 2016-2017) with bid. [Sample MAF is attached in Annexure-E]**

We agree to supply the above goods in accordance with the technical specifications for a total contract price of \_\_\_\_\_ within the period specified in the Invitation for Quotations.

We also confirm that the normal commercial warrantee/guarantee of \_\_\_\_\_ months shall apply to the offered goods.

**Signature and Seal of the Manufacturer/Bidder**

ANNEXURE-D

**PROFORMA FOR DIRECT PAYMENT/TRANSFER TO BANK ACCOUNT BY MNNIT ALLAHABAD**

Sl. No.	Particulars	Information
1.	Firm [Beneficiary] Name	
2.	Code No. allotted by the MNNIT Allahabad [If code is not allotted yet, please enclose a cancelled cheque and copy of PAN card. Cancelled cheque & PAN card is to be submitted only once]	
3.	Complete Bank Account No. of the Firm [beneficiary]. [in case of change in bank account vendor should write to Account Office]	
4.	Bank Name	
5.	Branch Address	
6.	IFSC Code No.	
7.	Permanent Account Number	
8.	Mobile No. [for SMS]	
9.	Email ID [for information]	

We undertake that all information provided above is correct and MNNIT Allahabad will not be responsible in case of any error on the part of firm.

[Seal and Signature of the firm]

ANNEXURE-E

**MANUFACTURERS AUTHORIZATION FORM (MAF)  
(ON THE LETTER HEAD OF THE BIDDER)**

No. \_\_\_\_\_  
To \_\_\_\_\_

Dated \_\_\_\_\_

The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.

Date: [insert date (as day, month and year) of Bid Submission]  
Tender No.: [insert number from Invitation For Bids]

To: [insert complete name and address of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 21 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ [insert date of signing]

Yours faithfully,  
(Name)  
(Name of manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. It should be included by the Bidder in its bid.

**[8/8]**

**Signature (in ink, with date) & Seal of Bidder/Tenderer**