مولانا آزادنيشتل أر دويو نيور ٹي मौलांना आंज़ाद नेशनल उर्दू यूनिवर्सिटी

MAULANA AZAD NATIONAL URDU UNIVERSITY (A Central University established by an Act of Parliament in 1998) Gachibowli, Hyderabad – 500 032

No: MANUU/Purchase/F.144/2016-17/T.No.08

Date: 3rd February 2017

Cost of tender form: Rs. 5,000/- through DD favouring MANUU payable at Hyderabad

TENDER DOCUMENT FOR SUPPLY AND INSTALLATION OF THE ACTIVE AND PASSIVE NETWORKING COMPONENTS FOR EXTENSION OF ITS LAN IN GIRLS HOSTEL AND COACHING ACADEMY



Last date & time of submission of technical and financial bids	:	24 th February 2017 at 3:00 p.m.
Date and time of opening of technical bids	:	24 th February 2017 at 3:00 p.m.

TENDER NOTICE

Tenders Under two bid systems are invited for Supply & Installation of Active and Passive Network components and accessories at Maulana Azad National Urdu University for the extension of its Campus wide Local Area Network in Girls' Hostel and CSE Coaching Academy.

All interested eligible bidders are invited to participate. They are expected to go through this Tender document and understand all clauses and their implications. Failure to furnish all information required in the Tender Document or submission of a bid not fully responsive to the Tender Document in every respect will be at the Bidder's risk and may result in outright rejection of the bid.

1.1 Tender Fee

- (i) Cost of Tender Document: Rs. 5,000/- (Exemption as per Gol rules will be considered on production of documentary proof)
- (ii) **Earnest Money Deposit** (EMD) Amount Rs. 1,00,000/- (Exemption as per Gol rules will be considered on production of documentary proof)
- (iii) The EMD should be in the form of an Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the commercial banks in an acceptable form.
- (iv) The EMD should be in the name of the Maulana Azad National Urdu University, Hyderabad, payable at Hyderabad.
- (v) Unsuccessful Bidder's bid security will be returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity prescribed by the University.
- (vi) The successful Bidder's bid security will be discharged upon the Bidder accepting the purchase order and furnishing the Performance Guarantee.

(vii) The bid security may be forfeited, if:

- Bidder withdraws its bid during the period of bid validity; or
- Bidder makes any statement or encloses any form which turns out to be false, incorrect and/ or misleading at any time and/ or conceals or suppresses material information; or
- The successful Bidder, fails to sign the Agreement or to furnish performance guarantee.

(viii) Submission of Bid.

S.No.	Activity	Date	Time	Venue
1.	Last Date of Submission of Tender Document	24.02.2017	03.00 p.m.	Purchase & Stores Sections
3.	Opening of Technical Bids (If required, the bidders may depute their authorized representatives at the time of opening of the Technical bid)	24.02.2017	03.00 p.m.	Purchase & Stores Sections
4.	Opening of Financial Bids of technically qualified bids (in presence of the authorized representatives of the bidder)	Schedule will be sep notified to the tech shortlisted bidders		Purchase & Stores Sections

1.2 Procedure for Submission of Bids

Bid is to be submitted in three SEALED ENVELOPES:

- i. Envelope-I: Covering Letter and Earnest Money Deposit.
- ii. Envelope II: Technical Proposal.
- iii. Envelope-III: Commercial Bid.

All the three envelopes should clearly bear the name and address of the Bidder and super-scribed with the words "Bid/Proposal for Supply & Installation of Active and Passive Network Equipment at Maulana Azad

National Urdu University. (Tender No: MANUU/Purchase/F.144/2016-17/08 due at 3:00 p.m. on 21.02.2017, NOT TO BE OPENED BEFORE TIME".

All the three envelopes viz. Covering Letter and Earnest Money Deposit, Technical Bid and Commercial Bid prepared and sealed as described hereinafter are to be kept in a single sealed cover super-scribed with the words "Bid/Proposal for Supply & Installation of Active and Passive Network Equipment at Maulana Azad National Urdu University. (Tender No: MANUU/Purchase/F.144/2016-17/08, due at 3:00 p.m. on 24.02.2017, NOT TO BE OPENED BEFORE TIME".

The Bid is to be submitted on or before the prescribed date and time at the following address:

The Assistant Registrar (Purchase), Maulana Azad National Urdu University, Gachibowli, Hyderabad - 500 032.

1.2.1 Technical Proposal:

The Technical Proposal should be submitted in bounded form with all pages continuously and serially numbered in one lot as one document. Brochures/leaflets etc. should be submitted in the bound document and not in loose form. Bidders must ensure that all the documents are sealed and signed by authorized signatory.

The Technical Proposal should have an Index page giving page numbers of all relevant parts of the Technical Bid. The following documents should be attached in the Technical Bid:

- Bid Proposal Forwarding Letter (Annexure-I)
- Documents in support of "Eligibility Criteria" of the bidder and the OEM as laid down in this Tender document
- Compliance to the, Bill of Material, Terms and Conditions, Technical Specifications, Scope of work and Deviation declarations (Section 4.0) of the Tender.
- Project Plan Document describing the requirements/responsibilities of the bidder, MANUU and the total estimated time period for project completion, various schedules (delivery of equipment and accessories etc.).
- Technical Literature of the Products quoted showing compliance to the Technical Specifications as given in the tender document.

The University reserves its right to cross verify whether the offered components meet the desired specifications. The Technical Bid submitted in response to this Tender Document along with the supporting material, will become the property of the University.

1.2.2 Commercial Bid:

Commercial Bid should be neatly typed or hand-written in the prescribed format on letter head of the Bidder. The bid should also be signed and stamped by the authorized signatory.

1.2.3 Costs Incurred on Bidding

The bidder shall bear all costs associated with the preparation and submission of its Bid, including cost of presentation for the purposes of clarification of the Bid, if so desired by the University. MANUU will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding Process.

1.2.4 Clarification on Tender Document

If required, bidders may seek clarification on aspects in Tender which are not clear to them or are missing through email addressed to <u>purchase@manuu.ac.in</u> Such clarifications, should however reach <u>at-least 7-</u> <u>days before the Tender submission date</u>. The responses to such queries will be provided through email. No communication from bidders will be entertained during last 7-days.

1.2.5 Amendment in Tender Document

- At any time up to one day prior to the last date of receipt of Bids, the University may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Tender Document by an amendment.
- The amendment will be uploaded to the University's website only.
- In order to afford prospective Bidders reasonable time to take the amendment into account in preparing their Bids, the University may, at its discretion, extend the last date for the receipt of Bids.

1.2.6 Nature of Bid Currency

The Prices in the bid document shall be denominated in INDIAN NATIONAL RUPEES only. All applicable taxes should be clearly mentioned by name and "%"

1.2.7 Validity

Bids shall remain valid for 120 days from the last date of submission of Tender. The Bidder(s) may be required to give consent for the extension of the period of validity of the bid beyond initial 120 days, if so desired by the University in writing or by fax. Refusal to grant such consent would result in rejection of bid. However, any extension of validity of bids will not entitle the Bidder to revise/modify the bid. The decision of the University in this regard will be final, conclusive and binding on the Bidder.

1.2.8 Modification & Withdrawal

The bid submitted may be withdrawn or resubmitted before the expiry of the last date of submission by making a request in writing to the Registrar, MANUU to this effect. No Bidder shall be allowed to withdraw the bid after the deadline for submission of bids.

2.0 Eligibility Criteria for the Bidder:

- 2.1 The Bidder should be a registered company in India under Companies Act 1956 and should have been in operation for a period of at least three years as on date of Tender. Copy of the Certificate of Incorporation should be enclosed.
- 2.2 The Bidder/ Original Equipment Manufacturer (OEM) should have Service and Support offices for the maintenance of the Items quoted by them in Hyderabad. Copies of the land-line telephone bills or rent agreement should be enclosed.
- 2.3 The Bidder should not have been blacklisted/ debarred by the Government of India or its undertakings, any State Governments or their undertakings previously. In such cases the bid will be summarily rejected and no correspondence in this matter shall be replied by the University. Undertakings from the Bidder or the OEM in this regard should be enclosed.
- 2.4 The Bidder should be either OEM or an Authorised partner having a direct purchase and support agreement with the OEM.
- 2.5 In case of consortium, a copy of Agreement is to be provided. All the eligibility clauses shall be met by any combination of the consortium partners. However, OEM authorization must be in the name of the primary bidder who will be responsible for complete project execution including warranty obligations, administrative, technical & legal communications and implications.
- 2.6 The OEM as well as the Bidder should be ISO 9000 certified or of equivalent Standard having current validity. ISO 9000 or equivalent certificates of both the Bidder as well as OEM should be enclosed.
- 2.7 The Bidder(s) must have valid VAT/ LST/ CST, Service Tax Registration and PAN number allotted by the respective authorities. Copies of all the relevant certificates should be enclosed.
- i) Minimum average annual turnover for the last three years (2013-14, 2014-15 & 2015-16) should be more than Rs. 6.00 lakh per annum on execution of similar works.
 ii) In addition to the above condition, any one of the following minimum criteria should have been
 - complied with. a) Executed three similar works total worth Rs. 8.00 lakh during the last 7 year (or)
 - b) Executed two similar works total worth Rs. 10.00 lakh during the last 7 years (or)
 - c) Executed one similar work worth Rs. 16.00 lakh during the last 7 years.

2.9 The Bidder as well as the OEM should not be involved in any Bankruptcy filing or for protection from it.

Undertakings from the Bidder as well as the OEM in this regard should be enclosed. Otherwise, if they are so involved they must furnish a bank guarantee valid for three years of an amount equal to the total value of their bid along with their Commercial Bid and should mention that they have done so in their Technical Bid.

- 2.10 Passive Equipment and accessories OEM should have members participating in International Standard Bodies for passive equipment and accessories such as EIA/TIA. Copy of documentary evidence to be enclosed.
- 2.11 OEM should be listed in at least one of the last two years' Gartner's Leaders quadrant for wired LAN Access Infrastructure. Copy of documentary evidence to be enclosed.

3.0 General Conditions

- 3.1 Minimum validity of the Proposal must be 120 days from the date of its opening.
- 3.2 The University reserves the right to carry out the capability assessment of the Bidder(s) and pre dispatch inspections at the cost of the Bidder. This right inter alia includes seeking technical demonstrations, presentations and live site visits.
- 3.3 The University reserves its right to seek any clarifications from the respective Bidder(s).
- 3.4 The University will neither provide nor shall pay any charges for boarding, lodging and transportation facilities for the Bidder(s) or their representative.
- 3.5 The products/ services offered should strictly conform to the specifications given in the product literature. The models proposed/ marked for withdrawal from the market or models under quality testing should not be offered.
- 3.6 Equipment offered should be capable of being fully integrated with the existing network of the University immediately on installation and configuration.
- 3.7 The Bidder(s) are required not to impose their own terms and conditions to the bid and if submitted, it will not be considered as forming part of their bids. The decision of the University to accept or reject such conditions shall be final, conclusive and binding on the Bidder(s).
- 3.8 It is implicit that the Bidder has guaranteed that all the equipment supplied are original & new including all its components and as per the technical specifications. All the material to be supplied should be legally obtained in the name of the University.
- 3.9 University's Right
 - The University reserves the right to accept or reject any bid partially or fully or annul the bidding process and reject all bids at any time prior to award of contract without assigning any reason, thereby incurring no liability to the affected Bidder(s). The University is under no obligation to inform the affected Bidder(s) of the ground for its action.
 - The University reserves the right to accept or reject any technology/solution proposed by the Bidder(s).
 - The University reserves the right to re-issue the Tender or any part thereof without assigning any reason whatsoever, at the sole discretion of the University.
 - The University reserves the right to issue Purchase Order in phases or to alter the quantities specified in the offer. The University also reserves the right to delete one or more items from the list of items specified in offer.
 - Any decision of the University in this regard shall be final, conclusive and binding on the Bidder(s).

3.10 Bids Rejection

The bid(s) may be rejected in case of any one or more of the following conditions:

- Bids not submitted in compliance with the procedure mentioned in this Tender Document or not substantively responsive.
- Failure on part of the Bidder to provide appropriate information within permissible prescribed time as required in the bid proposal or any additional information as requested by the University, including any supporting document.
- Incomplete or conditional bids or bids that do not fulfill all or any of the conditions as specified in this document.

- Bids without requisite and valid Earnest Money Deposit.
- The submission of more than one bid under different names by one Bidder. If the same is found at any stage, all the bids by that bidder will be rejected.
- Material inconsistencies in the information submitted.
- Misrepresentations in the bid proposal or any supporting documentation.
- Bid proposal received after the last date and time specified in this document.
- Bids found in unsealed cover.
- Unsigned Bids.
- Bids containing erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be authenticated by the person(s) signing the bid.

3.11 Bid Evaluation Process

- The Bidder and wherever required, OEM/Manufacturer of items(s) must meet all the eligibility criteria mentioned in Section 2.0
- The Technical Bids of all the Bidders who meet the eligibility criteria shall be evaluated further for compliance of specifications and other such parameters as may be needed.
- The decision of the University in this matter shall be final conclusive and binding. The Commercial Bids of all the technically qualified Bidders shall be subjected to financial comparison.

3.12 Responsibility of the Bidder

- The Bidder(s) shall supply, the equipment as FOR destination i.e., MANUU, Hyderabad and the rates must include all applicable charges including packing, forwarding, insurance, freight, commissioning, demonstration etc if any. Packing list must be put in all the packages.
- All necessary tools and accessories required for effectively completing the required work are to be arranged by the successful bidder at its own cost.
- They shall be required to install the fibre cables & other equipment and shall furnish necessary documents.

3.13 Responsibilities of the University

• The University shall provide space to install the network, equipment and components etc. on day to day basis and also extend necessary guidance/coordination for services which may be required from different sections of the University.

3.14 Schedule

- The equipment should be delivered and Installed within the schedule proposed by the bidder but not beyond three (03) months from the date of placing the supply/ work order and the University's decision in this regard will be final and binding. The work shall actually be deemed to have been complete on the actual date of installation/ implementation and successful demonstration. The detailed schedule will be specified by the University at the time of placing supply / work orders after due consultation with the successful Bidder(s).
- If the Bidder delays the supply and installation of the equipment deliberately and unnecessarily, their Purchase/ Work order will be cancelled, Firm will be black listed and Earnest Money shall be forfeited. In such a case decision of the University will be final and binding.

3.15 Penalties

- In case the equipment/accessories are not supplied within specified delivery period, or the installation and commissioning is delayed beyond the specified time, a penalty @0.5% of the Purchase Order value per day will be levied, subject to a maximum of 10% of the order value.
- In such an eventuality, the order may be cancelled. The decision of the University in this regard shall be final, conclusive and binding.

3.16 Rates

• The rates quoted shall remain firm throughout the period of contract and up to the date of completion of the job and shall not be subject to any upward modification whatsoever.

3.17 Warranty

- All the goods and services quoted in response to this Request for Proposal shall have an onsite comprehensive standard warranty for at least 1-year from the date of commissioning.
- For Active equipment, the bidder must have obtained warranty service packs from the OEM. Documentary evidence is to be provided with the Bill/Challan.

3.18 Taxes and Duties

• The Bidder shall be solely responsible for the payment of all applicable taxes including VAT, duties, license fees, octroi etc. incurred until completion of the project. No claim on account of payment / reimbursement of such taxes to any authority shall be accepted.

3.19 Performance Guarantee

- The successful Bidder(s) shall furnish a security in the form of Bank Guarantee @10% of the total value of the order (excluding services) to the University with the letter of acceptance. Any acceptance not accompanying and referring to such PBG will not be considered.
- Performance Security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.
- University may exercise its reserved right of making suitable deductions from or forfeit entire amount as guaranteed in PBG in case of delay/performance degradation and/or other events that impacts the project/supplies/services covered under this tender. However, before executing such step, University may issue notice to the bidder for making amends in timely manner.

Service Level & Performance Guarantee

The bidder should quote standard SLA and maintain logs of services rendered during warranty period for performance evaluation.

3.20 Insurance

• The University will not pay for any insurance charges against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery etc. The insurance shall be purchased by the Bidder, naming the University as the beneficiary, in an amount equal to the exact value of the goods up to the installation at site on all risks basis, including war Risks and strike clauses etc.

3.21 Indemnity

• The Bidder(s) shall, at their own expense, defend and indemnify the University against all third party claims or infringement intellectual Property Right, including Patent, trademark, copyright, trade secret or industrial design rights arising from use of the products or any part thereof in India or abroad.

3.22 Confidentiality

 The Bidder shall not, and without the University's prior written consent, make use of any document produced during execution of this project, disclose the contract or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the University in connection therewith to any person other than a person employed by the Bidder in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

3.23 Schedule of Payment

- No payment will be made in advance for any supplies under this invitation for bid.
- 90% payment will be done after successful supply, installation and testing of the equipment and the balance amount after furnishing the Performance Security of amount equal to 10%.

3.24 Force Majeure During the Pendency

 During the pendency of the contract if the performance in whole or part thereof by either party is prevented/ delayed by causes arising due to any war, hostilities, civil commotion, act of public enemy, sabotage, fire, floods, explosion, epidemics, non-availability of raw material, and other consumables, or any other causes including breakdown of equipment beyond their reasonable control neither of the two parties shall be made liable for loss or damage due to delay or failure to perform the contract during the pendency of forced conditions provided that the happenings are notified in writing within 7 days from the date of occurrence. The work shall be resumed under the contract as soon as possible after the restoration of normalcy.

3.25 Applicable Laws

• In all matters and disputes arising hereunder, shall be governed in accordance with the Laws of India for the time being enforced and will be subject to the exclusive jurisdiction of Courts in Hyderabad.

3.26 Resolution of Disputes

It will be the university endeavor to resolve amicably any disputes or differences between the University and the Bidder emerging out of misconstruing the meaning and operation of the Tender and the breach that may result. In case of Dispute or difference arising between the University and a Supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The Arbitrator(s) shall be chosen by mutual discussion between the University and the Supplier OR in case of disagreement the arbitrator appointed by the Vice Chancellor of the University shall be final. The decision of the arbitrator shall be final and binding on both the parties. The Bidder shall continue work under the Contract during the arbitration proceedings unless otherwise directed in writing by the University or unless the matter is such that the work cannot possibly be continued until the decision of the Arbitrator, as the case may be. Arbitration proceedings shall be held at Hyderabad, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English. Not withstanding anything contained above, in case of dispute, claim & legal action arising out of the contract, the parties shall be subject to the jurisdiction of civil courts in Hyderabad, India only.

3.27 Bidder's Right to Represent to the University

Bidder shall have the right to represent in case it requires clarifications or feels that proper
procurement process is not being followed and/or its tender has been rejected wrongly.
The bidder may send its representation in writing, which will be examined by the
University. But, such representation has to be sent well within time and not later than one
week before the last date of submission of Tender (Before Submission of Tender) or the
date of placement of order (Before Submission of Tender). The complaint/ representation
will be examined by MANUU on merit and corrective action will be taken, if required and
deemed fit. The decision of the University shall be final.

Place: Hyderabad Date: 03.02.2017 Registrar Maulana Azad National Urdu University Hyderabad

Technical Specifications, Deliverables and Compliance

4.1 GENERAL

- The given specifications are minimum requirements. Bidders may quote higher version and should enclose technical specification brochures/documents to enable to verify the specification by the University.
- The quantities mentioned herein are indicative and shall be used to arrive at L1 Bidder. However, they may vary and shall be paid for by the University as per actual. In case of variations in quantities the rates mentioned by the Bidder in the relevant rate schedule shall apply.

PLEASE INDICATE YOUR COMPLIANCE TO THE TECHNICAL SPECIFICATION, QUANTITIES AND ALSO PROVIDE INFORMATION ON MAKE, MODEL & WARRANTY

ACTIVE EQUIPMENT

S.No.	Item Name	Compliance (Ye	s/No)		
1.	Layer 2 Switch 8 port with 8-10/100 /1000 Base-T ports + 2x1G Combo Ports	08 Numbers			
			•		
	Proposed Make:				
	Drenesed Medal/Dart Na				
	Proposed Model/Part No				
	Comprehensive Warranty Duration (In Years)				
	The Switch should have at least 8 10/100/1000 downlink ports				
	The Switch should have 2 x 1G Combo Uplink Ports.				
	The Switch should have switching capacity of 20 Gbps				
	The Switch should haveforwarding performance (64-byte packet size) of 14Mpps of	r higher.			
	The Switch should have MAC Address Table Size of 16 K.	· ·			
	The Switch should support 4000 active VLANs.				
	The Switch support 9KB Jumbo Frames.				
	The Switch support Static Ipv4 routing.				
	The Switch should support Remote Monitoring Protocol like SNMP 1, RMON 1, RM	ON 2, RMON 3,			
	RMON 9, Telnet, SNMP 3, SNMP 2c, HTTP, HTTPS, SSH, CLI				
	The Switch should support Secure Shell (SSH), RADIUS, TACACS+ authentication me				
	The Switch should support Layer 3 switching, Layer 2 switching, DHCP support, VLA				
	snooping, syslog support, DoS attack prevention, port mirroring, DiffServ support, weighted round- robin (WRR) queuing, broadcast storm control, Ipv6 support, multicast storm control, unicast storm				
	control, firmware upgradable, Spanning Tree Protocol (STP) support, Rapid Spannir				
	(RSTP) support, Multiple Spanning Tree Protocol (MSTP) support, Trivial File Transfer Protocol (TFTP)				
	support, access control list (ACL) support, quality of service (QoS), jumbo frames support, MLD				
	snooping.				
	The Switch should have compliant standards of UL 60950, FCC Part 15 A, CSA 22.2				
2.	24-Port 10/100/1000 Managed L2 Switch with 2x1 G SFP Ports	10 Numbers			
	Draw and Males				
	Proposed Make:				
	Proposed Model/Part No				
	Comprehensive Warranty Duration (In Years)				
	General Features				
	The switch should support a minimum of 24 nos. 10/100/1000 Ethernet Ports				
	The switch should support a minimum of 2 SFP Uplinks				
	The switch should support 2x1G SFP modules				
	The switch should support a total of 26 Ports				

Minimum Performance and Scalability
The switch should support Forwarding bandwidth of 50 Gbps or more.
The switch should support Full-duplex Switching bandwidth of 100 Gbps or more.
The switch should support 64-Byte Packet Forwarding Rate of 68 Mpps or higher
The switch should support 128 MB of Flash memory or more.
The switch should support 512 MB of DRAM
The switch should support 1023 VLANs
The switch should support 4096 VLAN IDs
The switch should support Jumbo frames of 9216 bytes
The switch should support Maximum transmission unit (MTU) of 9198 bytes
The switch should support 16000 Unicast MAC addresses
Dimension
The Switch should be 1RU
The switch should support Operating temperature up to 5000 ft (1500 m) -5° to 45°C
The switch should support Operating relative humidity 10% to 95% noncondensing
Stacking
The switch should support Stacking
Stacking should enable all switches to function as a single unit
The switch should support an optional Stacking Port
Stacking module should be Hot-swappable
Stacking should support 80 Gbps of throughput
Stacking should support single IP address management for the group of switches
Stacking should support single configuration
Stacking should support simplified switch upgrade
Stacking should support automatic upgrade when the master switch receives a new software
version
Stacking should support stacking cable length of 3m
Stacking should support QoS to be configured across the entire stack
Power Supply
The switch should support an auto-ranging power supply with input voltages in [100 & 240V AC]
Standards
The switch should support IEEE 802.1D Spanning Tree Protocol
The switch should support IEEE 802.1p
The switch should support IEEE 802.1Q Trunking
The switch should support IEEE 802.1s Multiple Spanning Tree (MSTP)
The switch should support IEEE 802.1w Rapid Spanning Tree (RSTP)
The switch should support IEEE 802.1x
The switch should support IEEE 802.1ab (LLDP)
The switch should support IEEE 802.3ad Link Aggregation Control Protocol (LACP)
The switch should support IEEE 802.3ah (100BASE-X single/multimode fiber only)
The switch should support IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports
The switch should support IEEE 802.3 10BASE-T specification
The switch should support IEEE 802.3u 100BASE-TX specification
The switch should support IEEE 802.3ab 1000BASE-T specification
The switch should support IEEE 802.3z 1000BASE-X specification
The switch should support RMON I and II standards
The switch should support SNMP v1, v2c, and v3
RFC compliance
The switch should support RFC 768 - UDP
The switch should support RFC 783 - TFTP
The switch should support RFC 783 - TFTP The switch should support RFC 791 - IP
The switch should support RFC 783 - TFTP The switch should support RFC 791 - IP The switch should support RFC 792 - ICMP
The switch should support RFC 783 - TFTP The switch should support RFC 791 - IP

1 THE SWITCH SHOULD SHOULD REV 701 - DOUISHAD FLUIDCULDOUTF	b
The switch should support RFC 951 - Bootstrap Protocol (BOOTP The switch should support RFC 959 - FTP	·)
The switch should support RFC 1112 - IP Multicast and IGMP	
The switch should support RFC 1157 - SNMP v1	
The switch should support RFC 1166 - IP Addresses	
The switch should support RFC 1256 - ICMP Router Discovery	
The switch should support RFC 1305 - NTP for accurate and cons	sistent timestamp
The switch should support RFC 1492 - TACACS+	
The switch should support RFC 1493 - Bridge MIB	
The switch should support RFC 1542 - BOOTP extensions	
The switch should support RFC 1643 - Ethernet Interface MIB	
The switch should support RFC 1757 - RMON (history, statistics,	alarms, and events)
The switch should support RFC 1901 - SNMP v2C	
The switch should support RFC 1902-1907 - SNMP v2	
The switch should support RFC 1981 - MTU Path Discovery IPv6	
The switch should support FRC 2068 - HTTP	
The switch should support RFC 2131 - DHCP	
The switch should support RFC 2138 - RADIUS	
••	
The switch should support RFC 2233 - IF MIB v3	
The switch should support RFC 2373 - IPv6 Aggregatable Addrs	
The switch should support RFC 2460 - IPv6	
The switch should support RFC 2461 - IPv6 Neighbor Discovery	
The switch should support RFC 2462 - IPv6 Autoconfiguration	
The switch should support RFC 2463 - ICMP IPv6	
The switch should support RFC 2474 - Differentiated Services (D	iffServ) Precedence
The switch should support RFC 2597 - Assured Forwarding	
The switch should support RFC 2598 - Expedited Forwarding	
The switch should support RFC 2571 - SNMP Management	
The switch should support RFC 3046 - DHCP Relay Agent Inform	ation Option
The switch should support RFC 3376 - IGMP v3	
The switch should support RFC 3580 - 802.1X RADIUS	
Layer-2 Features	
The switch should support Automatic Negotiation of Trunking Pr	rotocol, to help minimize the
configuration & errors	
The switch should support IEEE 802.1Q VLAN encapsulation	
The switch should support Centralized VLAN Management. VLAI	Ns created on the Core Switches
should be propagated automatically	
The switch should support Spanning-tree PortFast and PortFast	guard for fast convergence
The switch should support Uplink Fast & Backbone Fast technology	v i i i i i i i i i i i i i i i i i i i
The switch should support Uplink Fast & Backbone Fast technolo recovery, enhancing overall network stability and reliability	
recovery, enhancing overall network stability and reliability	other edge switches becoming the
	other edge switches becoming the
recovery, enhancing overall network stability and reliability The switch should support Spanning-tree root guard to prevent root bridge.	other edge switches becoming the
recovery, enhancing overall network stability and reliability The switch should support Spanning-tree root guard to prevent	
recovery, enhancing overall network stability and reliability The switch should support Spanning-tree root guard to prevent root bridge. The switch should support IGMP filtering	of the same vendor giving the
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	ljusts transmit and receive pairs if an incorrect cable type (crossover or straight-through) is stalled.	
	ne switch should support Unidirectional Link Detection Protocol (UDLD) and Aggressive UDLD to	
	low for unidirectional links caused by incorrect fiber-optic wiring or port faults to be detected and	
	sabled on fiber-optic interfaces.	
	ne switch should support Local Proxy Address Resolution Protocol (ARP) working in conjunction	
	ith Private VLAN Edge to minimize broadcasts and maximize available bandwidth.	-
	ne switch should support IGMP v1, v2 Snooping	
	ne switch should support IGMP v3 Snooping	_
	ne switch should support IGMP v1, v2 Filtering	_
	ne switch should support IGMP Snooping Timer	
Th	ne switch should support IGMP Throttling	
Th	ne switch should support IGMP Querier	
Th	ne switch should support Configurable IGMP Leave Timer	
Th	ne switch should support MVR (Multicast VLAN Registration)	
L3	3 Features	
Th	ne switch should support Inter-VLAN routing	
Th	ne switch should support IPv4 unicast Static Routing	
	ne switch should support 16 IPv4 Static routes	
	nart Operations	
	ne switch should support configuration of the Software image and switch configuration without	
	ser intervention	
Th	ne switch should support automatic configuration as devices connect to the switch port	
	ne switch should support diagnostic commands to debug issues	
	he switch should support system health checks within the switch	
	uality of Service (QoS) & Control	
	ne switch should support 4 egress queues per port to enable differentiated management	
	he switch should support scheduling techniques for Qos	
	he switch should support Weighted tail drop (WTD) to provide congestion avoidance	
	ne switch should support Standard 802.1p CoS field classification	+
	ne switch should support Differentiated services code point (DSCP) field classification	╋
	ne switch should support Control- and Data-plane QoS ACLs	+
	ne switch should support Strict priority queuing mechanisms	+
	ne switch should support Rate Limitting function to guarantee bandwidth	
	ne switch should support rate limiting based on source and destination IP address	\vdash
	ne switch should support rate limiting based on source and destination MAC address	4_
	ne switch should support rate limiting based on Layer 4 TCP and UDP information	\perp
	ne switch should support availability of up to 256 aggregate or individual polices per port.	
	anagement	
	ne switch should support Command Line Interface (CLI) support for configuration &	
	oubleshooting purposes.	+
	ne switch should support four RMON groups (history, statistics, alarms, and events) for enhanced	
	affic management, monitoring, and analysis	+
	ne switch should support Layer 2 trace route to ease troubleshooting by identifying the physical ath that a packet takes from source to destination.	
	he switch should support Trivial File Transfer Protocol (TFTP) to reduce the cost of administering	-
	oftware upgrades by downloading from a centralized location.	
	ne switch should support SNMP v1, v2c, and v3 of-band management.	-
	he switch should support Telnet interface support for comprehensive in-band management of-	+
	and management.	
	he switch should support CLI-based management console to provide detailed out-of-band	
	anagement.	
	ne switch should support Serial Console Port	1
	ne switch should support USB Console Port	1
	ne switch should support SNMPv1, SNMPv2c, and SNMPv3	
	liscellaneous	+
	ne switch should support greener practices	

The evidence of the second sec	
The switch should support solutions that monitor	
The switch should support reduction of greenhou	
The switch should support an increase in energy of	
The switch should support sustainable business be	
The switch should support Efficient switch operat	ion
The switch should support Intelligent power mana	agement
The switch should support measuring of energy b	etween itself and endpoints
The switch should support control of energy betw	veen itself and endpoints
The switch should support discovery of manageat	ble devices for Energy measurement
The switch should support monitoring of power c	onsumption of endpoints
The switch should support taking of action based	
Network security features	
The switch should support IEEE 802.1x to allow dy	namic port-based security providing user
authentication.	fiame, por coused secondy, providing aser
The switch should support Port-based ACLs for La	ver 2 interfaces to allow application of security
policies on individual switch ports.	,
The switch should support SSHv2 and SNMPv3 to	provide network security by encrypting
administrator traffic during Telnet and SNMP sess	sions.
The switch should support TACACS+ and RADIUS a	
switch and restrict unauthorized users from alteri	ng the configuration.
The switch should support MAC address notificati	ion to allow administrators to be notified of users
added to or removed from the network.	
The switch should support Port security to secure	the access to an access or trunk port based on
MAC address.	
	console access to prevent unauthorized users from
altering the switch configuration.	
The switch should support Private VLAN	
DHCP Features	
The switch should support DHCP snooping to allow IP to MAC addresses DHCP binding database, and enters a switch port.	w administrators to ensure consistent mapping of to rate-limit the amount of DHCP traffic that
	r (Option 82) feature to augment a host IP address
request with the switch port ID.	(-p),
The switch should support DHCP Option 82 data I	nsertion
The switch should support DHCP Option 82 Pass T	
The switch should support DHCP Option 82 - Conf	5
The switch should support DHCP Snooping Statist	
IPv6 Features	
The switch should be on the approved list of IPv6	Poady Logo phase II Host
1000 Base LX transceiver with LC connector SM (
	The ruggable, Low Power Dissipation 02 No
Proposed Make:	
Proposed Model/Part No	
Comprehensive Warranty Duration (In Years)	

PASSIVE EQUIPMENT/ACCESSORIES

S.No.	Item Name	Approx. Qty	Compliance (Yes/No)
1.	Fiber Optic outdoor armoured cable , loose tube Single mode (SM) 10 G Ethernet up to 550 m (12 Core)	800 meters	
	Proposed Make:		

	Proposed Model/Part No		
	Std. Warranty Duration (In Years)		
	Single mode optical fiber cable , 9.2/125 micron graded index, anti rodent , required for outdoor applications for direct burial, fiber should be protected inside jelly filled loose tubes , armoring with acrylic coated good quality steel tape , with FRP strength member, water proof tape, double layer of HDPE jacket , should confirm or exceed the support 10 G Ethernet up to 550 m ,should confirm or exceed the ISO/IEC 11801:2002; IEC 60794-1-2 E1; IEC 60794-1-2 E3; IEC 60794-1-2 F1; IEC60794- 1and ITU Recommendation G.652.D standard standards for Fiber and cable performance specifications.		
2.	Optical Fiber pigtails SC type, 1 meter length	6 Nos	
	Proposed Make:		
	Proposed Model/Part No		
	Std. Warranty Duration (In Years)		
	Pigtail with semi-tight buffer PA/PBT, Ø 0.9 mm, yellow, single mode G652.D 9/125 μ m (OS1, OS2), length 1 m. Fitted with one SC connector in acc. with IEC 61754-20. Zirconia (ceramic) ferrule with a PC polished end face geometry, connectors tuned in accordance with IEC 61755-3-1 and qualified in acc. with IEC 61753-1 for category U (uncontrolled environment). material PEI / UL 94 V-0, strain relief and white plastic dust cover Mechanical specifications: Mating cycles: delta IL < 0.2 dB after 500 mating cycles Pull-out force fiber pigtail: \geq 5 N required for terminating 9.2/125 micron SM fiber		
3.	Optical Fiber pigtails LC type, 1 meter length	6 Nos	
	Proposed Make:	•	
	Proposed Model/Part No		
	Std. Warranty Duration (In Years)		
	Pigtail with semi-tight buffer PA/PBT, Ø 0.9 mm, turquoise, Single mode G652.D 9/125 µm (OS1, OS2), length 1 m. Fitted with one LC connector in acc. with IEC 61754-20. Zirconia (ceramic) ferrule with a PC polished end face geometry, connector qualified in acc. with IEC 61753-1 for category U (uncontrolled environment). material PEI / UL 94 V-0, black strain relief and plastic dust cover. required for terminating 9.2/125 micron SM fiber		
4.	Optical Fiber Patch Cord , SM , SC-SC/SC-LC/LC-LC	12 No	
	Proposed Make:		
	Proposed Model/Part No		
	Std. Warranty Duration (In Years)	•	
	Patch cord with LSZH jacket, F8 2.7x5.5 mm, yellow, single mode G652.D 9/125 μ m (OS1, OS2). Mounted on both sides with SC Duplex connectors in acc. with IEC 61754-4. Zirconia (ceramic) ferrule with a PC polished end face geometry, connectors tuned in accordance with IEC 61755-3-1 and qualified in acc. with IEC 61753-1 for category U (uncontrolled environment). Blue connector housing (single mode), material PBT / UL 94 V-0, black duplex clip, 1 x blue and 1 x red strain relief, material TPE / UL 94 V-0 and plastic dust cover. Optical specifications (random mated): Performance: Insertion Ioss (IL) Grade C for 97% of the tested specimen: \leq 0.50 dB / typical \leq 0.25 dB Return Ioss (RL) Grade 2: \geq 45 dB (typical \geq 55 dB) Length – 3 m Length – 10 m Length20 m Length – 30 m		

5.	UTP CAT 6 Components		
	Proposed Make:		
	Proposed Model/Part No		
	Std. Warranty Duration (In Years)		
5 a.	All specifications for components & cabling to be tested up to minimum 250 Mhz, UL /ETL listed & verified , should be registered for follow up program , UL/ETL marking should be embossed and printed on the passive product and their packing UTP cable Roll of 305 meters	10 Roll	
J d.	Proposed Make:		
	Proposed Model/Part No		
	Std. Warranty Duration (In Years)		
	4 pair, should confirm or exceed the EIA/TIA 568 C.2-1 (CAT 6) standards for physical & electrical specifications, UL/ETL listed & verified , Should be certified by independent test lab for 1G Gigabit Ethernet Performance up to 100 mrts. 23 AWG solid bare copper		
5 b.	24-Port Jack Panel	10 Nos	
	Proposed Make:		
	Proposed Model/Part No		
	Std. Warranty Duration (In Years)		
-	19 inch 1U Patch Panel for 24 x RJ45 45 connection module, zig- zag/straight/angular IO placement for better alien cross talk The information Outlet should establishing of transmission channels of class E with up to 4 plugged connections, Allow for a minimum of 750 plug mating cycles. Have port identification numbers on the front and rear of the panel. Should have self-adhesive, clear label holders (transparent plastic window type) and white designation labels with the panel, with optional color labels / icons. Each port / jack on the patch panel should be individually removable on field from the panel. Should comply with Category 6 requirements of the standards ISO/IEC 11801 ed. 2.2, June 2011, EN 50173-1, May 2011 (DIN EN 50173-1) as well as TIA 568-C, Metallic high strength & 1U height UL /ETL listed		
5 c.	Surface Mount Box with RJ 45 Connection Module & Gang box		
	Proposed Make:		
	Proposed Model/Part No		
	Std. Warranty Duration (In Years)		
	All Category 6 outlets shall meet or exceed Category 6 requirements of the standards ISO/IEC 11801 ed. 2.2, June 2011, EN 50173-1, May 2011 (DIN EN 50173-1) as well as TIA 568-C. Should qualify de-embedded tested in acc. with IEC 60603-7-4. Parallel pair termination without crossover in acc. with TIA 568-A/B, gold-plated bronze contacts for \geq 750 mating cycles dielectric strength >1000 Veff. PoE and PoE+ compatible according to IEC 60512-99- 001. PCB and tool less termination Information outlet Cat. 6, unshielded, with dust cover, snap-in frame (gray), cable tie and installation instructions. UL/ETL		
	listed,		

	Single (1-port)	25 Nos
	Dual (2-port)	50 Nos
5 d.	CAT 6 Patch Chords	
	Proposed Make:	
	Proposed Model/Part No	
	Std. Warranty Duration (In Years)	
	Should confirm or exceed the EIA/TIA 568 C.2-1 standards for CAT 6, Factory molded boots on RJ 45 plugs at both ends, UL/ETL listed & verified , Option for colour – Grey, Blue, Red & Green & cross over cable	
	3 feet	225 Nos
6.	6 feet 19" Rack , Wall Mount , 530 mm depth, 12 U height, Front glass door (lockable, toughened 4mm),	225 Nos 6 Nos.
	Proposed Make:	
	Proposed Model/Part No	
	Std. Warranty Duration (In Years)	
_	Should confirm DIN 41494 & IEC 297 standard, Load bearing capacity of 50 Kgs , Have following accessories: 19 " mountable ,1U , Universal power socket design to fit both round & flat socket with built in surge protection & over load circuit breaker , 5 AMP AC power distribution channel made of high flame retardant & insulating material , CE approved with 6 nos sockets (1 nos) , with wall mounting hardware , Copper earthing kit (19" copper bar) & equipment mounting screws/hardware packets (2 nos), Fan tray with two fans (low noise, good quality, ball bearing type ,90 CFM). Surface Finish: EC Dip Coat Primed and Powder Coated to 80- 100 micrones with RAL 7035 Light Grey	
7.	19" Rack , Wall mount 530 mm depth, 9 U height, Front glass door (lockable, toughened 4mm)	4 Nos.
	Proposed Make:	
	Proposed Model/Part No	
	Std. Warranty Duration (In Years)	
	Should confirm DIN 41494 & IEC 297 standard, Load bearing capacity of 50 Kgs , Have following accessories: 19 " mountable ,1U , Universal power socket design to fit both round & flat socket with built in surge protection & over load circuit breaker , 5 AMP AC power distribution channel made of high flame retardant & insulating material , CE approved with 6 nos sockets (1 nos) , with wall mounting hardware , Copper earthing kit (19" copper bar) & equipment mounting screws/hardware packets (2 nos), Fan tray with two fans (low noise, good quality, ball bearing type ,90 CFM). Surface Finish: EC Dip Coat Primed and Powder Coated to 80- 100 micrones with RAL 7035 Light Grey	
8.	LIU, 12-fiber, 1-U Drawer style 19", Rack mount enclosure	
	Proposed Make:	
	Proposed Model/Part No	
	Std. Warranty Duration (In Years)	
		I

	Loaded with SC / LC couplers & adaptor plates for 6/12 fibers 9.2/125 micron SM, 19" rack mountable metallic distribution enclosure slide & tilt drawer type 1 U , should have inbuilt / pre-installed splice tray with all clamps , harnessing rings , ties etc, Material: box, powder-coated sheet steel / front panel	2 Nos.
9.	Horizontal Cable Manager	10 Nos
	Proposed Make:	
	Proposed Model/Part No	
	Std. Warranty Duration (In Years)	
	Cable Manager should be capable of managing cables on the front and rear of any 19" EIA rack. The manager shall consist of a 1-piece plastic construction with pass through holes to incorporate integral bend radius control as well as fingers with rounded edges. The manager shall have rigid end fingers that incorporate integral bend radius control. Hinged covers shall allow access to the cable pathway without having to completely remove the cover from the manager.	
10.	Buffer Tubing Kit	12 Nos.
11.	Route Marker	
	The route /joint indicator made of pre-cast RCC bearing engraved inscription "OFC" and painted in yellow/white color of following dimensions Base - 250 mm x 150 mm, Top - 200 mm x 75 mm, Height - 1250 mm	

SERVICES

Period of completion of the work after supply of material (in Weeks)

S. No.	Detail of Works	Quantity	Compliance (Yes/No)
1.	Trench preparation on soft soil at a depth of 3' and refilling	500 meters	
2.	Trench preparation on hard soil at a depth of 3' and refilling/plastering/ resurfacing	100 meters	
3.	Laying of HDPE duct at a depth of 3'	600 meters	
4.	Laying/pulling of OFC in HDPE Pipe	600 meters	
5.	Clamping of OFC on Electrical poles for aerial path with suitable clamps/ties	200 meters	
6.	Manholes at every (approx.) 300 M. Size Cubical:1 meters X 1 meters X 1.1 meters depth or Cylindrical: 1 meter diameter and 1 meter depth. Precast Concrete Manhole cover and frame, Sealing of both ends of the manholes by hard rubber bush of suitable size to avoid entry of rodents into the HDPE pipes.	4 Nos	
7.	Mounting of LIU in rack and OFC Termination	2 Nos	
8.	Termination of OFC per core	20 cores	
9.	Splicing of OFC per core	20 cores	
10.	OTDR Test Report of OFC per core	8 cores	
11.	Mounting of Rack on Wall	10 Nos.	
12.	Mounting of Jack 24-Port Panel with cable punching	10 Nos.	
13.	Mounting of Cable Manager and cable dressing	10 Nos.	
14.	Route Marker installation in a pit of size 60 cm X 60 cm X 75 cm (Depth)	4 No.	
15.	Fibre optic joint Enclosure (out door, direct burial type) Supply & fixing of fiber optic joint enclosure (reusable) with IP 68 rating. The joint box should be made of ageing resistant plastic, corrosion-	1 No.	

	resistant sheet metal & have a service life of min. 20 yr. It should be compact, dust free, good sealing performance, capable of housing 6 & 12 fiber splice tray, able to manage necessary fiber bend radius ,fitted with necessary plastic loops, sealing rings & 4 holes (for in coming & out going OFC cables),fitted with SC / LC pig tail (SM/MM to be supplied as per requirement of site) Working temp: -30 Degree C to + Degree 60 C	
16	Configuration and integration of 24-Port Switch with MANUU's LAN	10 No
	including mounting in Rack and cabling.	
17	Configuration and integration of 8-Port Switch with MANUU's LAN	08 No
	including mounting in Rack and cabling.	
18	Project Documentation Report (on CD and printed copy)	01 No

SLA During Warranty Services

Proposed Call Logging Process: & Mean Call Logging Time:
Contact Numbers of Service Centre:
Contact EMail Address of Service Centre:
Mean Call Closure Time : Time of Call Closure as recorded through Call Closure Acknowledgment Time at which call was logged as recorded in the Email sent MANUU Non Working hours including holidays [MANUU Working hours: 0900 -1800]
Time (in hours) after which Standby will be provided in case of delay in

correcting the hardware fault or replacing the switch:

(Authorized Signatory)

Date: Place: Business Address: Name: Designation: Seal

Annexure -I

BID PROPOSAL SHEET

(To be submitted on Bidder's Letter Head)

Tenderer's Reference No. & Date:

Tenderer's Name & Address:

Person to be contacted:

Designation:

Telephone No.: E-Mail.:

Fax No.:

The Registrar Maulana Azad National Urdu University Gachibolwli, New Delhi

Subject: Supply & Installation of Active and Passive Networking components at Maulana Azad National Urdu University.

Dear Sir,

Further, we agree to abide by all the terms and conditions as mentioned herein the tender document.

We have also noted that MANUU reserves the right to consider / reject any or all bids without assigning any reason thereof.

We understand that the MANUU is not bound to accept any proposal it receives.

Yours sincerely,

(Authorized Signatory)

Date: Place: Business Address: Name: Designation: Seal

Annexure - II

DEVIATIONS FROM THE CLAUSES, SPECIFICATIONS & SCOPE OF TEH TENDER

Except for the following Deviations and Variations all the clauses, specifications, and scope of work are acceptable to us:

S No	Clause No	Page No	Statement of Deviations and Variations

Date: Place: Business Address: (Authorized Signatory)

Name: Designation: Seal

Annexure - III

PROFORMA FOR BANK GUARANTEE FOR EMD

(To be stamped in accordance with the stamp Act.)

Maulana Azad National Urdu University, Gachibowli, Hyderabad - 500032.

Dear Sirs,

In accordance with your Equiry No. _____ dated _____, M/s. _____ having their registered / Head Office at _____ having their registered / Head Office at _____ (hereinafter called the Bidder) wish participate in the said Bid for the job "______". As an irrevocable Bank Guarantee against Earnest Money Deposit for Rs.______ (Rupees _______) valid upto ______ is required to be submitted by the bidder as a condition precedent for participation in the said Bid, which amount is liable to be forfeited on the happening of any contingencies mentioned in the Bid Documents.

We, (Name of the bank) ______ having our head office at ______ guarantee and undertake to pay immediately on demand by Maulana Azad National Urdu University, Hyderabad (hereinafter called MANUU), the amount of Rs. ______(Rupees ______) without any reservation, protest demure and recourse. Any such demand made by MANUU, Hyderabad shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder.

This bank guarantee shall be irrevocable and shall remain valid up to ______. If any further extension of this guarantee is required, the same shall be extended to such required period on receiving instructions from MANUU, Hyderabad on whose behalf this guarantee is issued. Notwithstanding anything contained herein above, our liability under the guarantee shall remain in force till ______

unless a demand or claim under this guarantee is filed against us within the date of expiry, i.e. ______ all your rights under this guarantee will be forfeited and we shall be relieved and discharged from all liabilities here under.

(Signature of Bank Authorities) NAME: (Designation with Bank stamp)

Note: THIS GUARANTEE SHOULD BE ON STAMP ______ STAMPED IN ACCORDANCE WITH THE STAMP ACT.

Annexure - IV

PERFORMANCE BANK GUARANTEE

- 1. In consideration of Maulana Azad National Urdu University, Hyderabad [hereinafter referred to as MANUU, which expression unless repugnant to the context and meaning thereof shall include its successors and assigns] having agreed to exempt M/s [hereinafter referred to as 'supplier / contractor' which expression unless repugnant to the context and meaning thereof shall include its successors and assigns] from depositing with MANUU a sum _ towards security / performance guarantee in lieu of the said supplier / of Rs. contractor having agreed to furnish a bank guarantee for the said sum of Rs. _____ as required under the Terms & Conditions of contract / work order / purchase order no. [hereinafter referred to as the order] placed by MANUU on the said supplier / dated _ (hereinafter referred to contractor. We, (Name of the Bank) as 'the bank' which expression shall include its successors and assigns] do hereby undertake to pay MANUU an amount not exceeding Rs. _____ (Rupees) on the demand made by MANUU on us due to a breach committed by the said supplier / contractor of the Terms & Conditions of the order.
- 2. We, the Bank do hereby undertake to pay the amount due & payable under this Guarantee without any demur, merely on demand from the MANUU, Hyderabad stating that the amount claimed as due by way of loss or damage caused to or would be caused to or suffered by the MANUU, Hyderabad, by reason of breach by the said Contractor (s) of any Terms & Conditions contained in the said Agreement or by reason of the Contractor (s) failure to perform the said Agreement. Any such demand made on the Bank under this guarantee, the decision of the MANUU, Hyderabad in this count shall be final and binding on the Bank. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ______(Rupees ______).
- 3. We, the Bank undertake to pay to MANUU, Hyderabad, any money so demanded not withstanding any dispute or disputes raised by the Contractor (s) in any suit or proceedings pending before any court or tribunal relating thereto our liability for payment there under and the Contractor (s) shall have no claim against us for making such payment.
- 4. We, the Bank further agree that the Performance Bank Guarantee herein contained shall remain in full force and effective during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the MANUU, Hyderabad under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Registrar of MANUU, Hyderabad certifies that the terms & conditions of the said Agreement have been fully and properly carried out by the said Contractor (s) and accordingly discharge the Guarantee. Unless a demand or claim under the Guarantee is made on the Bank in writing on or before ______, the Bank shall be discharged from all liability under the Guarantee thereafter.
- 5. We, the Bank further agree with the MANUU, Hyderabad, shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the Terms and Conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time to postpone for any time or from time to time any of the powers exercisable by the MANUU, Hyderabad against the said Contractor(s) and to forbear or enforce any of the Terms & Conditions relating to the said Agreement and the Bank shall not be relieved from its liability by reason of any such variation, or extension being granted to the said Contactor(s), or any forbearance, act or omission on the part of MANUU, Hyderabad, or any indulgence by MANUU, Hyderabad to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for the provision have effect of so reliving the Bank.

- 6. This guarantee will not be discharged due to change in the constitution of the Bank or the Contractor(s) supplied.
- 7. We, the Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the MANUU, Hyderabad in writing.
- 8. Notwithstanding anything contained hereinabove the liability of the Bank in respect of this Guarantee is restricted to Rs. ______ (Rupees ______) and it will remain in force till _______. Unless a demand or claim under this guarantee is made on the Bank in writing within three months from ______ we shall be discharged from all liability under this guarantee. This Guarantee is valid ______ to _____ dated the ______ day of ______. For ______.
- Note: THIS GUARANTEE SHOULD BE ON STAMP ______ STAMPED IN ACCORDANCE WITH THE STAMP ACT.

FINANCIAL BID

A. Active Equipments

S.No.	Item Name	Qty	Unit	Cost	Tax Name	Тах	Total Unit Amount	Total Amount	
			(Rs.)			Percentage	inclusive of all taxes(Rs.)	(Rs.)	
	Cost of Active Equipment								
1.	Layer 2 Switch 8 port with 8-10/100 /1000 Base-T ports + 2x1G Combo Ports	08 Nos.							
2.	24-Port 10/100/1000 Managed L2 Switch with 2x1 G SFP Ports	10 Nos							
3.	1000 Base LX transceiver with LC connector SM (Hot Pluggable, Low Power	02 No							
	Dissipation)								
Total Cost of Active Equipment (A) in Rupees									

B. Passive Equipments.

S.No.	Item Name	Qty	Unit	Cost	Tax Name	Тах	Total Unit Amount	Total Amount		
			(Rs.)			Percentage	inclusive of all taxes(Rs.)			
	Cost of Passive Equipment & Accessories									
1.	Fiber Optic outdoor armoured cable , loose tube Single mode (SM) 10 G	800 m								
	Ethernet up to 550 m (12 Core)									
2.	Optical Fiber pigtails SC type, 1 meter length	6 Nos								
3.	Optical Fiber pigtails LC type, 1 meter length	6 Nos								
4.	Optical Fiber Patch Cord , SM , SC-SC/SC-LC/LC-LC	12 No								
5.	UTP CAT 6 Components									
5 a.	UTP cable Roll of 305 meters	10 Roll								
5 b.	24-Port Jack Panel	10 Nos								
5 c.	Surface Mount Box with RJ 45 Connection Module & Gang box									
	Single (1-port)	25 Nos								
	Dual (2-port)	50 Nos								
5 d.	CAT 6 Patch Chords									
	3 feet	225 Nos								
	6 feet	225 Nos								
6.	19" Rack , Wall Mount , 530 mm depth, 12 U height, Front glass door (lockable, toughened 4mm),	6 Nos.								

(Signatures of the Authorized Signatory with Name, Designation & Seal)

S.No.	Item Name	Qty	Unit	Cost	Tax Name	Тах	Total Unit Amount	Total Amount
		-	(Rs.)			Percentage	inclusive of all taxes(Rs.)	
7.	19" Rack , Wall mount 530 mm depth, 9 U height, Front glass door (lockable,	4 Nos.						
	toughened 4mm)							
8.	LIU, 12-fiber, 1-U Drawer style 19", Rack mount enclosure	02 Nos.						
9.	Horizontal Cable Manager	10 Nos.						
10.	Buffer Tubing Kit	12 Nos.						
11.	Route Marker							
Total Cost of Passive Equipment & Accessories (B) in Rupees								

Services

S.No.	Item Name	Qty	Unit	Cost	Tax Name	Тах	Total Unit Amount	Total Amount				
		-	(Rs.)			Percentage	inclusive of all taxes(Rs.)	(Rs.)				
	Cost of Services											
1.	Trench preparation on soft soil at a depth of 3' and refilling	500 m										
2.	Trench preparation on hard soil at a depth of 3' and refilling/plastering/ resurfacing	100 m										
3.	Laying of HDPE duct at a depth of 3'	600 m										
4.	Laying/pulling of OFC in HDPE Pipe	600 m										
5.	Clamping of OFC on Electrical poles for aerial path with suitable clamps/ties	200 m										
6.	Manholes at every (approx.) 300 M. Size Cubical:1 meters X 1 meters X 1.1 meters depth or Cylindrical: 1 meter diameter and 1 meter depth. Precast Concrete Manhole cover and frame, Sealing of both ends of the manholes by hard rubber bush of suitable size to avoid entry of rodents into the HDPE pipes.	4 No										
7.	Mounting of LIU in rack and OFC Termination	2 No										
8.	Termination of OFC per core	20 No										
9.	Splicing of OFC per core	20 No										
10.	OTDR Test Report of OFC per core	8 No										
11.	Mounting of Rack on Wall	10 No										
12.	Mounting of Jack 24-Port Panel with cable punching	10 No										
13.	Mounting of Cable Manager and cable dressing	10 No										

S.No.	Item Name	Qty	Unit	Cost	Tax Name	Tax	Total Unit Amount	Total Amount
			(Rs.)			Percentage	inclusive of all taxes(Rs.)	(Rs.)
14.	Route Marker installation in a pit of size 60 cm X 60 cm X 75 cm (Depth)	4 No						
15.	Fibre optic joint Enclosure (out door , direct burial type) Supply & fixing of fiber optic joint enclosure (reusable) with IP 68 rating . The joint box should be made of ageing resistant plastic, corrosion- resistant sheet metal & have a service life of min. 20 yr. It should be compact , dust free, good sealing performance, capable of housing 6 & 12 fiber splice tray ,able to manage necessary fiber bend radius ,fitted with necessary plastic loops, sealing rings & 4 holes (for incoming & outgoing OFC cables), fitted with SC / LC pig tail (SM/MM to be supplied as per requirement of site) Working temp: -30 Degree C to + Degree 60 C	1 No						
16	Configuration and integration of 24 port switch with MANUU's LAN including mounting in Rack and cabling.	10No						
17	Configuration and integration of 8-Port Switch with MANUU's LAN including mounting in Rack and cabling.	08 No						
18	Project Documentation Report (on CD and printed copy)	01 No						
	·					Total Cost	of Services (C) in Rupees	

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Total Cost inclusive of all applicable taxes etc. = A + B + C (Rs.) :

Total Cost inclusive of all applicable taxes etc. = A + B + C (Words) :

(Authorized Signatory)

Name: Designation: Seal

(Signatures of the Authorized Signatory with Name, Designation & Seal)

Date: Place: Business Address: