OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY
DIBRUGARH :: ASSAM
PIN: 786 004

BID DOCUMENT

FOR

NAME OF THE WORK: Campus Wi-Fi for Dibrugarh University

e-TENDER No: DU/NIT-2022/File-VI/144, dated 20.09.2022

CUT-OUT SLIP

Technical Bid

NAME OF THE WORK: Campus Wi-Fi for Dibrugarh University

e-TENDER No: DU/NIT-2022/File-VI/144 dated 20.09.2022

SUBMISSION DUE DATE & TIME :17.10.2022 up-to 05.30 P.M.

FROM:

NAME& ADDRESS:

TO:

THE REGISTRAR
DIBRUGARH UNIVERSIITY
DIBRUGARH, ASSAM

(To be pasted on the envelope containing hardcopy of "Technical Bid")

OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

No. DU/NIT-2022/File-VI/144 **Date:20.09.2022**

e-Tender Notice

Open tenders are invited through e-tendering process from Manufacturers of nationally / internationally reputed brand or its authorized dealer / distributor for **Campus Wi-Fi for Dibrugarh University.** For details, please visit the website **https:// assamtenders.gov.in**

Detailed specification of the items, terms & conditions *etc.* are given as Annexure at Part-B. Last date of submission of Tender as per annexure at Part-B with all relevant papers **is *17.102022 up-to 05:30 PM*** to be submitted at the office of the Registrar, Dibrugarh University, Dibrugarh, Assam.

Availability of Bid papers	From 20/09/2022	
Last date for receipt of Bid	17/10/2022 upto 5:30 P.M.	
Time & Date of opening of Bid	18/10/2022 at 02:30 P.M.	
Place of opening of Bid	Office of the Registrar, DU	
Cost of Tender Document	Rs. 1000/-(Non-refundable)	To be paid online at assamtenders.gov.in
EMD	Rs. 2,50,000.00	

The tender should be separately submitted in 02 (two) parts, *i.e.*, **Part - I** TECHNICAL BID and **Part – II** FINANCIAL BID. The technical bid shall be opened on the above-mentioned date and time and the financial bid of only those bidders who qualify in technical bid shall be opened on the same date or at a later date which shall be intimated to the tenderer whose technical bids are found to be valid. Dibrugarh University reserves all the rights to reject any or all the tenders without assigning any reason thereof.

The Bidder shall submit both technical and financial bids on-line at assamtenders.gov.in portal. One hard copy of technical bid along with supporting documents and clearly marked as **"HARD COPY of Technical bid"** shall have to be submitted at the office of the Registrar, D.U. **Hard copy of Financial Bid or Cost of Tender Document/EMD as Draft/Cheque etc, will not be sent to Dibrugarh University under any circumstance.** In the event of discrepancy between online & manual technical bid, sending of hard copy of financial bid or sending of Cost of Tender Document/EMD as Draft/Cheque etc the bid will be disqualified.

Sd/-
Registrar i/c
Dibrugarh University

Copy to:

1. The Chairperson, Tender Opening Committee, D.U., for information.
2. The Deputy Registrar (F&A)i/c, D.U. for information.
3. The Programmer, D.U., with a request to upload the NIT at D.U. website.
4. Office File

Sd/-
Registrar i/c
Dibrugarh University

PART A - TERMS AND CONDITIONS

A1. General Information

The tender bids duly complete in all respects, along with the necessary documents should be submitted to the Registrar, Dibrugarh University. The Technical Bids so received shall be opened on ***18.10.2022at 02:30 P.M.***in the Office of the Registrar, Dibrugarh University in the presence of the representatives of the bidders. The Financial bids of the Tenderers shall be opened on the same date or at a later date to be intimated to the tenderers whose Technical Bids are found to be valid. Right to reject any or all Tenders, without assigning any reason thereof is reserved by Dibrugarh University.

A2. Terms and Conditions of Supply:

1. All the manufacturers/ authorized dealers should also give a brief profile about their company and the facilities available with them of the quoted items. Their turnover and important firms/ Government Institutes/ P.S.U.s *etc*. to which they are supplying quoted items, should also be mentioned.
2. The last date and time for the submission of the bids is 17.10.2022 up-to 5:30 P.M and the bids shall be valid for 90 days.
3. Technical specifications of the instruments/equipments are given in **Annexure-I** to these papers (Part B) and the required quantities are listed in **Annexure-II.**
4. Supplier should read carefully and understand all the instructions and terms and conditions, *etc*. before participating in the bid.
5. Suppliers shall mandatorily submit the following documents in their **'Technical Bid'**:

    i) **A Brief Profile of the Company/Firm** along with their addresses and contact details of a responsible representative for any query/correspondence.
    ii) A duly filled and signed **Check-List** as shown in **Annexure-III**
    iii) VAT/TIN/GST Registration Certificate.
    iv) PAN Card
    v) Proof of submission of Tender Fee/EMD at assamtenders.gov.in or Documentary proof justifying its exemption (e.g., MSME/NSIC/SSI/etc.).
    vi) **Detailed Technical Specifications** of each item/service/work offered by the Supplier. The document should be duly superscribed as **"Offered Technical Specifications"** and presented in the format as suggested in **Annexure-IV**
    vii) Technical compliance sheet in a tabular format as shown in **Annexure-V** and duly superscribed as **"Technical Compliance Sheet."**
    viii) **Technical Literature** regarding the offered products including Brochures/Datasheets/ Pictures/Sketch/Diagrams *etc*with a cover page duly superscribed as **"Technical Literature".**
    ix) Valid Authorization from Original Equipment Manufacturer (OEM) or Declaration in case OEM itself is the bidder.
    x) All valid documentary proof of eligibility as per **'Bidders Eligibility Criteria'** mentioned in this Tender Document.

6. ***Please read carefully*** that the Supplier shall submit their **'Financial Bid' <u>ONLINE ONLY</u>** in the BoQ format uploaded to the assamtenders.gov.in portal against this particular tender. They **<u>SHOULD NOT</u>** send hardcopy of price bid to the University under any circumstance. Defying this clause will lead to **DISQUALIFICATION** of their bid. In the Commercial Bid rates should be mentioned as per BoQ. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the unprotected cells with their respective financial quotes, GST as applicable (total GST per item to be inserted in BoQ) and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the file name. If the BoQ file is found to be illicitly modified by the bidder, the bid will be rejected.

7. The Technical Bid shall be opened, on 18.10.2022 at 02:30 P.M. or on the next working day if the offices of the University remain closed due to any reason.
8. Financial bids of bidders who qualify in the Technical Bid evaluation will be open on the same date or at a later date to be intimated to the bidders. Lowest bidder will be selected on basis of total cost of the work and not item-wise comparison.
9. The bidder selected for award of work order shall have to submit a **Performance Bank Guarantee (PBG)** of the value of 5% of the work order value **within 14 days** of issue of work order. **The PBG shall be valid for a period of 3 years.**
10. The delivery and installation should be completed within 3 month or as specified from placing of the order. No extension shall be granted to the contractors/suppliers for the period of delivery, under any circumstances.
11. If the supplier fails to deliver the article as per the delivery schedule, the University shall be free to procure the balance/undelivered supply, at the risk and cost of the supplier, from other such suppliers.
12. The goods, articles, materials supplied by the supplier shall be accepted after inspection by an officer authorized by the competent authority. No articles/materials which do not conform to the specifications laid down in the terms and conditions or damaged in transit shall be accepted.
13. The bills of the suppliers shall be paid by the University after all the materials/articles/equipments have been received and installed, tested and commissioned along with proper documentation.
14. Vendor must provide an undertaking that any service request will be addressed within three working days. Any delay beyond three days must be compensated by extending the warranty period with equivalent number of days.
15. The tendering firm must provide proof of documents for executing similar works earlier.
16. In the event of any breach of the terms and conditions of the supply, the University may terminate the contract placed with the supplier and forfeit the security deposit of the supplier.
17. Authorization from the respective Original Equipment Manufacturer (OEM) for the quoted products to be provided mentioning the tender enquiry no. and date.
18. Copy of product literature and catalogue, testing report, BEE rating, ISO etc. to be provided.
19. The quantity as mentioned at Part-B (Annexure-II) may be increased or decreased at the time of placing Order as per requirement.
20. Tenderers are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender Document or submission of a bid not substantially responsive to the Tender document in every respect will be at the tenderer's risk and may result in the rejection of the bid.
21. This tender document is not transferable.
22. **Participation in the tender process implies that the bidder has read and understood this bid document and that the bidder will abide by the rules and regulations of Dibrugarh University.**

A3. Bidder's Eligibility Criteria:

1) The Bidder should be in IT Business in Assam for the last 10 Years. The firm also must have a permanent Registered or Branch office in Assam for the last 10 years.(Relevant valid Govt. documentary evidence like trade license, GST certificate etc. from respective Govt. agency should be submitted). **Delegation or Representation by any third-party firm other than the bidder itself shall not be considered for fulfilling this criterion.**
2) The Bidder must be Company/Firm incorporated under the Indian Companies act 1956 or Indian Partnership Act 1932
3) Bidders should be registered with Provident Fund and ESIC.
4) Bidders should have net positive worth and a Turnover of min. 5 Crore each year in the last three financial years. Documentary evidence in this regard should be enclosed along with Technical Bid.

5) The Bidder should have valid ISO 9001, ISO 140001, ISO 20001, ISO 27001 Certificate. Certificate must be enclosed along with the technical bid.
6) The Bidder shall submit **Wireless Networking Solution Order Copy** from any Central Govt. Organization / Institutes of National Importance / Universities / State Govt. organization / Educational Institutes recognized by UGC/AICTE/etc or PSUs in last four years. Minimum one order of value minimum 80 Lakhs in the last four years or two order of value minimum 40 Lacs each to be completed in the last four Years.
7) The Bidder & OEM should not have been blacklisted in anywhere in India or abroad. A self – declaration letter by the Bidder (From Director/VP/CEO of the company), on the company's letter head should be submitted along with technical bid
8) The Bidder should have at least two **OEM Certified Service Engineers** under its payroll deputed in Assam. Copy of OEM Certificate shall be submitted along with the Technical Bid.

Note:

a) Tenderers are advised to read carefully the Terms and Conditions of supply before recording the rates in this Schedule.
b) No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
c) The University reserves the right to:

I. Accept/reject any/all tenders without assigning any reason thereof.

II. Revise the quantities at the time of placing the order without change in the rate quoted by the bidder.

III. Add/modify/relax or waive any of the conditions stipulated in the tender document whenever deemed necessary to ensure greater competition.

IV. Award the contract to one or more tenderers for the items covered by the tender.

V. Reject any work done by the supplier if found to be of low quality/not conforming to industry standard practices and norms or any other justifiable reason.

Part –B **ANNEXURE -I**

Detailed Technical Specifications*:

(**each item of this list must be offered by the supplier, otherwise the bid will be considered incomplete)*

1) Windows Server 2022 Standard Edition 16 Core Pack (64 Bit) License

Sr.#	Features/Support
1	Server License, Server with Desktop Experience, Active Directory Certificate Services, Active Directory Domain Services, Active Directory Federation Services, AD Lightweight Directory Services, AD Rights Management Services, Microsoft Management Console, Windows Power Shell, Server Core Installation Option, Server Manager Feature, SMB Direct and SMB over RDMA, Volume Activation Services, Windows Server Update Services, Windows System Resource Manager,.NET Framework 3.5,.NET Framework 4.7,Background Intelligent Service, Bit Locker Drive Encryption, Bit Locker Network Unlock When Installed as Server with Desktop Experience, Group Policy Management, I/O Quality of Service, IIS Hostable Web Core, Internet Printing Client When Installed as Server with Desktop Experience,IPAM Server,iSNS Server Service, Management OData IIS Extension, Media Foundation, Message Queuing, Multipath I/O,Peer Name Resolution Protocol, Quality Windows Audio Video Experience, Remote Assistance, RSAT,RPC over HTTP Proxy, Setup and Boot Event Collection, Simple TCP/ IP Services When Installed as Server with Desktop Experience,SMB 1.0/CISF File Sharing Support, SMB Bandwidth Limits, SMTP Server, SNMP Service, Software Load Balancer, Telnet Client, TFTP Client When installed as Server with Desktop Experience, Windows Bit Defender, Windows Search Service When Installed as Server with Desktop Experience, Windows Server Backup, Windows Server Migration Tools, Windows Standards-Based Storage Management, WINS Server, Wireless LAN Service, XPS Viewer, Device Health Attestation, DHCP Server, DNS Server, Fax Server, Hyper –V, Network Policy and Access Services, Print and Document Services, Remote Access, Remote Desktop Services, Web Services (IIS),Windows Deployment Services

2) Wireless Controller

Sr.#	Technical specification of Wireless Controller
1	Controller should be Hardware based and must be loaded with 400 no. Access points Perpetual licenses from day 1 and expandable up to 500 in future without changing the base hardware.
2	Controller should support up to 15000 clients from day 1
3	Controller should have capability to Control, Configure, Manage and Monitor both Indoor and Outdoor Access Points
4	Shall Support authentication method like SMS authentication
5	Controller shall Manage Multiple Sites with the Centralized Controller in a Single Location
6	Controller shall Intuitive Real Time Monitoring and data usage
7	Controller shall support remote upgrade and access control features
8	Shall support L3 management using standard SNMP / SSH / Telnet Protocols
9	Access Control and Rogue AP Detection protect the network from threats
10	Rate Limit and Load Balance ensure the network stability and efficiency
11	Configure and automatically synchronize unified wireless settings to all Aps in the network
12	Upload floor plans to visualize and optimize network resource deployment
13	View the real-time traffic status of each AP, including the number of clients and volume of data usage
15	Controller shall have 3 years warranty and support.

3) Access Points for Hostels and Guest House Common Areas

Sr.#	Technical Specification of Indoor Access Points
1	Proposed AP should support central controller-based management
2	AP shall have hardened enclosures for indoor deployment and shall have a robust design for durability
3	It shall have dual radios for concurrent dual band (5 GHz / 2.4 GHz) operation
4	It shall have Simultaneous 450Mbps on 2.4GHz and 800 Mbps on 5GHz Wi-Fi speeds
5	Minimum one number of 1 Gbps Ethernet port RJ-45.
6	AP shall support the latest 802.11ac Wave 2 technology with Multi user MIMO
7	The AP shall comply with IEEE 802.11ac at a minimum and be backwards compatible to IEEE 802.11a/b/g/n standards.
8	AP shall operate at least in full 2X2:2 MIMO or more mode without any loss of features or capabilities
9	AP shall Support PoE 802.3af and passive PoE for convenient and affordable installation
10	AP must support 20 MHz, 40 MHz and 80 MHz channels.
11	Each AP must work on Dual band both 2.4GHz and 5GHz radios.
12	The AP shall provide a minimum of 20 dBm EIRP for 2.4 GHz and 23 dBm for 5 GHz frequencies. Field deployment shall be with EIRP as per regulatory guidelines.
13	AP shall support WDS or MESH networking
14	AP shall support QoS and WMM latest technology
15	AP shall support Multiple operating modes including managed AP and standalone AP mode
16	AP shall support Band Steering, Beamforming, Airtime Fairness and Load Balance features
17	AP shall support rogue access point detection
18	AP should support management VLAN
19	AP should support Captive portal and Rate limit feature
20	AP shall support Reboot Schedule, Wireless Schedule and Wireless Statistics based on SSID/AP/Client
21	Intelligent RF control plane for self-healing, and self-optimization
22	AP Shall support Wireless Mac Address Filtering, Wireless Isolation Between Clients and SSID to VLAN Mapping
23	AP shall support 802.1X authentication and external radius server
24	AP shall be able to assign end User the IP address as received from backend core DHCP Server.
25	AP Shall support SDN Technology &ZTP from Day 1
26	Controller shall Manage Multiple Sites with the Centralized Controller in a Single Location
27	Controller shall support Intuitive Real Time Monitoring and data usage
28	Controller shall support remote upgrade and access control features
29	Shall support L3 management, SNMP, Email notification and Telnet feature
30	Warranty and support should be for 3 years

4) Access Point for D.U. Guest House Suite Rooms

Sr.#	Technical Specification of Indoor Access Points
1	Proposed AP should support central controller-based management
2	AP shall have hardened enclosures for indoor deployment and shall have a robust design for durability
3	It shall have dual radios for concurrent dual band (5 GHz / 2.4 GHz) operation
4	It shall have Simultaneous 300 Mbps on 2.4GHz and 800 Mbps on 5GHz Wi-Fi speeds
5	Minimum Two (2) numbers of 1 Gbps Ethernet port RJ-45 for Uplink and Downlink
6	AP shall support Outfitted with the latest 802.11ac Wave 2 technology with Multi user MIMO
7	The AP shall comply with IEEE 802.11ac at a minimum and be backwards compatible to IEEE 802.11a/b/g/n standards.
8	AP shall operate at least in full 2X2:2 MIMO or more mode without any loss of features or

	capabilities
9	AP shall Support PoE 802.3af and passive PoE for convenient and affordable installation
10	AP must support 20 MHz, 40 MHz and 80 MHz channels.
11	Each AP must work on Dual band both 2.4GHz and 5GHz radios).
12	The AP shall provide a minimum of 19 dBm EIRP for 2.4 GHz and 22 dBm for 5 GHz frequencies. Field deployment shall be with EIRP as per regulatory guidelines.
13	AP shall support QoS and WMM latest technology
14	AP shall support Multiple operating modes including managed AP and standalone AP mode
15	AP shall support Band Steering, Beam forming, and Load Balance features
16	AP shall support rogue access point detection
17	AP should support management VLAN
18	AP should support Captive portal and Rate limit feature
19	AP shall support Reboot Schedule, Wireless Schedule and Wireless Statistics based on SSID/AP/Client
20	Intelligent RF control plane for self-healing, and self-optimization
21	AP Shall support Wireless Mac Address Filtering, Wireless Isolation Between Clients and SSID to VLAN Mapping
22	AP shall support 802.1X authentication and external radius server
23	AP shall be able to assign end User the IP address as received from backend core DHCP Server.
24	AP Shall support SDN Technology &ZTP from Day 1
25	Controller shall Manage Multiple Sites with the Centralized Controller in a Single Location
26	Controller shall Intuitive Real Time Monitoring and data usage
27	Controller shall support remote upgrade and access control features
28	Shall support L3 management, SNMP, Email notification and Telnet feature
29	Warranty and support should be for 3 years

5) 24 Port PoE+ Switch

Sr.#	Technical Specification
1	The LAN switch shall be rack mountable with 24 Nos. 10/100/1000 Base-T ports with 4 Nos. 10 Gig SFP+ Ports from day 1. (Each Switch Should be populated with 2 No. Single Mode LX Transceiver LC Type)
2	The LAN switch shall be available with minimum 128 Gbps Switching Fabric.
3	The LAN switch shall have minimum packet forwarding rate of 95 Mpps at 64-byte packet length.
4	The LAN switch shall support minimum 16K MAC addresses.
5	There shall be 1000 IGMP groups.
6	The switch shall be able to work on both Ipv4 and Ipv6 (dual stack) from day one.
7	The LAN Switch must have 24× 802.3at/af-compliant PoE+ ports with a total PoE power supply of 382 Watt.
8	All ports in the switch shall operate at wire-speed / line-rate.
9	The LAN switch shall support IEEE 802.1Q VLAN encapsulation. Maximum 4K VLAN Groups.
10	It shall support for Automatic Negotiation of Trunking Protocol, to help minimize the configuration & errors.
11	It shall support centralized VLAN Management. VLANs created on the Core Switches shall 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 & troubleshooting.
12	It shall support 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1ab, 802. 3ad.
13	It shall support spanning-tree root guard or any other industry standard protocol to prevent other edge switches becoming the root bridge.
14	It shall support IGMP snooping v1, v2, v3 and Link Aggregation Protocol (LACP).

15	It shall Support 802.3ah Ethernet Link OAM for Detection of Unidirectional links and to disable them to avoid problems such as spanning tree loops
16	It shall be able to discover the neighbouring device of the same vendor giving the details about the platform, IP Address, Link connected through etc., thus helping in troubleshooting connectivity problems.
17	It shall support for Switch port auto recovery (Err disable) to automatically re- enable a link that is disabled because of a network error.
18	It shall support Multicast VLAN registration.
19	It shall support LLDP / LLDP-MED including client location information. It shall exchange link and device information in multi-vendor networks.
20	It shall support configuration rollback to replace current configuration with any saved configuration file.
21	It shall support configurable maximum transmission unit (MTU) of up to 9000bytes, with a maximum Ethernet frame size of9018 bytes (Jumbo frames) for bridging on Gigabit Ethernet ports.
22	It shall support auto sensing speed on 10/100/1000 ports, auto negotiating half/full-duplex on all ports and Auto-MDIX.
23	The LAN switch shall have per-port broadcast, multicast, and unicast storm control.
24	It shall have standard 802.1p CoS 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.
25	There shall be eight egress queues per port to enable differentiated management of up to eight traffic types.
26	There shall be Weighted Round Robin (WRR) or any other industry standard protocol to provide congestion avoidance.
27	There shall be strict priority queuing mechanisms.
28	Granular Rate Limiting functions to guarantee bandwidth in increments shall be as low as 64 Kbps.
29	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 (Ipv4 and Ipv6) or MAC ACLs), class maps, and policy maps shall be available. ACL should be based on user defined packet content (Max. 6bytes length user defined).
30	There shall be support for Asynchronous data flows upstream and downstream from the end station or on the uplink using ingress policing and egress shaping.
31	There shall be support for Automatic Quality of Service for easy configuration of QoS features for critical applications.
32	The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security, providing user authentication.
33	The LAN switch shall support for Admission Control features to improve the networks' ability to automatically identify, prevent, and respond to security threats and also to enable the switches to collaborate with third-party solutions for security-policy compliance and enforcement before a host is permitted to access the network.
34	It shall support port-based ACLs (PACLs) for Layer 2 interfaces to allow application of security policies on individual switch ports. It shall also support VLAN based filters.
35	It shall support unicast MAC filtering to prevent the forwarding of any type of packet with a matching MAC address. It shall support Unicast and Multicast MAC addresses and associated VLANs.
36	It shall support unknown unicast and multicast port blocking to allow tight control by filtering packets that the switch has not already learned how to forward.
37	It shall support IGMP filtering which shall provide multicast authentication by filtering out no subscribers and limits the number of concurrent multicast streams available per port.
38	It shall support for SSHv2, SNMPv3 to provide network security by encrypting administrator traffic during Telnet and SNMP sessions.

39	The switch shall support 2 sessions of Port Mirroring based on port basis / VLAN basis to support intrusion prevention system deployment in different VLANs. It shall support bidirectional data on mirror port which allows IDS to take action when an intruder is detected.
40	It shall support RADIUS authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.
41	It shall support MAC address notification to allow administrators to be notified of users added to or removed from the network / It shall support SNMP Trap for new MAC notification.
42	It shall support DHCP snooping to allow administrators to ensure consistent mapping of IP to MAC addresses. This can be used to prevent attacks that attempt to poison the DHCP binding database, and to rate limit the amount of DHCP traffic that enters a switch port.
43	It shall support DHCP Interface Tracker (Option 82) to augment a host IP address request with the switch port ID.
44	It shall support port security to secure the access to an access or trunk port based on MAC address. After a specific timeframe, the aging feature should remove the MAC address from the switch to allow another device to connect to the same port.
45	It shall support multilevel security on console access to prevent unauthorized users from altering the switch configuration.
46	It shall support BPDU Guard feature, to shut down Spanning Tree Protocol Port Fast-enabled interfaces when BPDUs are received to avoid accidental topology loops.
47	It shall support Spanning-Tree Root Guard (STRG) to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.
48	It shall support for up to 512 access control entries (ACEs).
49	The LAN switch shall have CLI support to provide a common user interface and command set with all routers and switches of the same vendor.
50	It shall have Remote Monitoring (RMON v1 and v2) software agent to support for enhanced traffic management, monitoring, and analysis.
51	It shall have support for RMON groups through the use of a mirrored port, which permits traffic monitoring of a single port, a group of ports, or the entire switch from a single network analyser or RMON probe.
52	It shall have layer 2 trace route to ease troubleshooting by identifying the physical path that a packet takes from source to destination or it shall support OAM 802.3ah.
53	It shall support Trivial File Transfer Protocol (TFTP) and File Transfer Protocol (FTP) to reduce the cost of administering software upgrades by downloading from a centralized location.
54	It shall support Simple Network Time Protocol/Network Timing Protocol (SNTP/NTP) to provide an accurate and consistent timestamp to all intranet switches.
55	It shall support RMON v1 and v2 standards.
56	It shall support SNMPv1, SNMPv2, and SNMPv3 and Telnet interface to deliver comprehensive in-band management, and a CLI-based management console to provide detailed out-of-band management.
57	It shall support IPV6 management. ACL and QoS and Ipv6 Neighbour Discovery.
58	It Shall Support SDN Platform and have Provision to be Work Standalone or Controller Based and support Zero-Touch Provisioning (ZTP)
59	Must have 3 years warranty and support

6) 8 Port PoE+ Switch

Sr.#	Technical Specification
1	Device should support IEEE 802.1w, IEEE 802.1q, IEEE 802.1p, IEEE 802.1x, IEEE 802.3ad, IEEE 802.3x, IEEE 802.1d, IEEE 802.1s, IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab Standards and Protocols
2	Device must have at least 8 Gigabit RJ45 PoE+ Ports with 2 SFP Ports with auto negotiation/auto MDI/MDIX
3	Device must support POE 802.3af/at with Minimum 150 W of total PoE Power Budget
4	Device should have Switching Capacity of 20 Gbps and Packet Forwarding Rate 14.8 Mpps or more

5	Device should have MAC address table of 8K or more
6	Device should support jumbo frame of 9KB
7	Device should Support QOS features like Port-based, 802.1p and DSCP priority
8	Device should Support QOS features like 8 priority queues
9	Device should Support QOS features Queue scheduling: SP, WRR, SP+WRR
10	Device should Support QOS features Port/Flow- based Rate Limiting
11	Device should Support Voice VLAN
12	Device should Support Layer 2 features like IGMP Snooping V1/V2/V3
13	Device should Support 802.3ad LACP and Up to 8 aggregation groups containing 8 ports per group
14	Device should Support Spanning Tree features like STP/RSTP/MSTP
15	Device should Support BPDU Filtering/Guard and TC/Root Protech, Loop back detection and 802.3x Flow Control
16	Device should Supports up to 512 VLANs simultaneously of 4K VLAN IDs
17	Device should support ACL features like L2 to L4 package filtering based on source and destination
18	Device should support ACL features like MAC address, IP address, TCP/UDP ports, 802.1p, DSCP, protocol and VLAN ID Time Range Based
19	Device should support security features like SSH v1/v2 and SSL v2/v3/TLSv1
20	Device should support features like Broadcast/Multicast/Unknown unicast Storm Control
21	Device should support security features like 802.1x and Radius Authentication, IP-Mac-Port-VID Binding, ARP Inspection, DHCP Snooping and DoS Defend
22	Device should support AAA and Time Setting like SNTP, TFTP & Web
23	Device should support Web-based GUI and CLI management
24	Device should support SNMP v1/v2c/v3, compatible with public MIBs and RMON (1, 2, 3, 9 groups)
25	Device should support CPU Monitoring and Port Mirroring
26	Device should support System Diagnose, SYSLOG & Public MIBS
27	Device should be certified by FCC, CE and RoHS
28	Should have warranty and support for 3 Years

7) 3 KVA Online UPS

Sr.#	Parameter	Technical Specifications
1	**Configuration**	**3 KVA** IGBT based On-Line UPS with inbuilt Isolation Transformer for Galvanic Isolation.
2	**Capacity**	**3 KVA / 2700 Watts**
3	**AC Input Voltage Range**	160-280 V AC, 1 Phase @100% load
4	**Input Frequency**	50Hz ± 10% (Suitable for Generators)
5	**AC Output Voltage**	230 V AC, 1-phase ± 1% (Sine Wave Output)
6	**Output Frequency**	50 Hz ± 0.05 Hz
7	**Overload Capacity**	110% for 05 minutes, 125% for 01 minute
8	**Harmonic Distortion**	<2% for Linear Loads and <5% for non-linear loads
9	**Crest Factor**	3:1 or better
	Isolation Transformer	UPS output should be fully isolated by double conversion and inbuilt isolation transformer within the UPS cabinet itself. External transformer shall not be considered.
11	**Indications & Audible Alarms**	Mains On, Inverter On, Overload, Load On Mains, Load On Battery, Battery Low
12	**Digital Metering**	LCD display for measurement of AC Voltage, Battery voltage, Battery Current, Load Current, Output frequency.
	Battery Back-up & Other Details	The system must be capable of providing requisite battery back-up time of **60 Minutes** using 12V, VRLA Sealed Maintenance Free Batteries with each UPS. Required VAH: **6200 VAH**
14	**Certification**	BIS Certification

		CE Certification (IEC 62040-1 & IEC 62040-2 Standards)
		ISO 9001, ISO 14001, ISO 45001, ISO 50001 certified.
		RoHS Compliance
		E-Waste certification from Central Pollution Control Board, Govt of India)
15	**After Sales Support & Manufacturer's Credibility**	UPS OEM Should have own registered office in Assam for at least 10 years with service engineers on company's own payroll for ensuring prompt service support. (Documentary evidence to be provided)
		UPS OEM and Bidder should not have any past history of blacklisting from any government/PSU organization.
		UPS OEM must have valid Govt Electrical License
		UPS OEM Should have their own service centers in Dibrugarh/Tinsukia with adequate technical manpower and spares for ensuring 24 x 7 x 365 support
		UPS OEM should have ongoing service & maintenance contracts for at least 500 nos. On-Line UPS Systems to Govt./PSU organizations in Assam as proof of having 24 x 7 service support capabilities and competency along with their client references. Details to be provided
16	**Warranty**	Warranty should be for 2 Years on Both UPS and Battery

8) 1 KVA Online UPS

Sr.#	Parameter	Technical Specifications
1	**Configuration**	**1 KVA** IGBT based On-Line UPS Double conversion architecture. Pure Sinewave Output
2	**Capacity**	**1 KVA / 900 Watts**
3	**AC Input Voltage Range**	160-280 V AC, 1 Phase @100% load
4	**Input Frequency**	50Hz
5	**AC Output Voltage**	220/230/240 V AC, 1-phase ± 1% (Sine Wave Output)
6	**Output Frequency**	50 Hz ± 0.05 Hz
7	**Overload Capacity**	110% for 10 minutes, 130% for 01 minute
8	**Harmonic Distortion**	<2% for Linear Loads and <5% for non-linear loads
9	**Crest Factor**	3:1 or better
10	**Indications & Audible Alarms**	Overload, Load On Mains, Load On Battery, Battery Low
11	**Digital Metering**	LCD display for measurement of AC Voltage, Battery voltage, Battery Current, Load Current, Output frequency.
12	**Battery Back-up & Other Details**	The system must be capable of providing requisite battery back-up time of **60 Minutes** using VRLA Sealed Maintenance Free Batteries with each UPS.
13	**Certification**	BIS Certification
		CE Certification (IEC 62040-1, IEC 62040-2 & IEC 62040-3 Standards)
		ISO 9001, ISO 14001, OHSAS 18001 certified.
		RoHS Compliance
		E-Waste certification from Central Pollution Control Board, Govt of India)
14	**After Sales Support & Manufacturer's Credibility**	UPS OEM Should have own registered office in Assam for at least 10 years with service engineers on company's own payroll for ensuring prompt service support. (documentary evidence to be provided)
		UPS OEM and Bidder should not have any past history of

		blacklisting from any government/PSU organization.
		UPS OEM must have valid Govt Electrical License
		UPS OEM Should have their own service centres in Dibrugarh/Tinsukia with adequate technical manpower and spares for ensuring 24 x 7 x 365 support
		UPS OEM should have ongoing service & maintenance contracts for at least 500 nos. On-Line UPS Systems to Govt./PSU organizations in Assam as proof of having 24 x 7 service support capabilities and competency along with their Client references. Details to be provided
15	**Warranty**	Warranty should be for 2 Years on Both UPS and Battery

9) Cat 6 UTP Cable

Sr.#	Technical Specification
1	The 4 pair Unshielded Twisted Pair cable shall be UL Listed.
2	This cable well exceeds the requirements of ANSI/TIA-568-C.2 and ISO/IEC 11801 Class E
3	Nominal Outer Diameter of Cable should be 5.6 ± 0.2 mm and Conductor Diameter 0.49 ± 0.01 mm (23 AWG)
4	Construction: 4 twisted pairs separated by internal PE Cross Separator. Full separator. Half shall not be accepted. Rip Cord is must.
5	Conductor: Solid bare Copper, Outer jacket sheath: FRPVC with UL approved CM/CMR rated cable. Jacket color: Grey
6	Insulation Material: High Density Polyethylene (HDPE) with Insulation Diameter: 0.89 ± 0.01 mm
7	Dielectric Strength of cable should be 2.5 KVDC for 2 seconds
8	Bending Radius :< 4X Cable Diameter at -20°C ± 1°C Pulling Force: 25.35 lbs
9	Electrical Parameters: Insertion loss (Attenuation), NEXT, PSNEXT, ELFEXT (ACRF), PSELFEXT (PSACRF), Return Loss, ACR and PS ACR.
10	Insertion Loss of 32.8 db/100m at 250 MHz
11	Cable should support operating temperature from -20° to +70°C
12	Cable support Conductor Resistance ≤ 9.38 Ω/100m Max.
13	Mutual Capacitance of cable should be < 5.6 nF/100m Max.
14	Resistance Unbalance of cable should be 5% Max.
15	Capacitance Unbalance of cable should Max. 330 pF/100m
16	Cable support Delay Skew: < 45 ns/100m, Operating Voltage: 72V
17	Nominal Voltage of Propagation (NVP): 69% and Current Rating: 1.5 A Max.
18	Impedance: 100 ± 15 Ω @100 MHz and Propagation Delay @250 MHz: 536 ns/100m
19	ETL Verified 4 connector channel performance upto 250 MHz
20	RoHS Compliant
21	Printed sequential Length Counter of each meter on Outer Jacket
22	Category 6 UTP cables shall Supports Gigabit Ethernet (1000 base-T) standard and operates at bandwidth of 250MHz
23	Passive OEM should be ISO 9001:2015 and ISO 14001:2015

10) 6 U Rack

Sr.#	6 U Rack
1	Rack should be 6 U of height
2	Rack should have a fan and min. 4 Socket PDU
3	Rack should have door with a key

11) 24 Port Cat 6 UTP Patch Panel

Sr.#	Cat 6 UTP Patch Panel
1	24 Port Cat 6 Patch Panel populated with 24 no. RJ 45 Keystone
2	Requisite number of 1 mtr. Patch Chords to be provided as per number of Access Points installed at each location.
3	Marking for Identification should be clearly made on the patch panel

12) 24 Ports LIU Fully Loaded with LC-LC Coupler and adapter

Characteristic	Minimum Required Specification
	24 Ports Adapter Interface available without any adapter plates.
	Consist of Top Cover and Bottom Panel
	Easy to Assemble and Disassemble
	Three Types of Inlet Holes
	Cable Entry Through Waterproof Cable Glands
	Splice Max 24 Fibers per Splice Tray
	Patch Cord with Bend Radius Guides Minimize Macro Bending
	Install 6 Cable Management Rings Inside to Ensure Flexibility
	Comprehensive Accessory Kits for Cable Entry and Fiber Management
	Dimensions (mm) : 430 X 220 X 1U
	Body Material: SPCC Black Powder Coating
LC-LC ADAPTORS	
Features	LC adaptors should be Simplex and duplex type. Telcordia GR-326-Core. RoHS Compliance Low Insertion and Return Loss Adapters should have compact design & high precision
	Telcordia, TIA/EIA, IEC compliance
Insertion Loss	<= 0.20 db for Zirconia Sleeve Durability (1000 Matings): <= 0.2db Main Body Material: PBT/ABS
Sleeve/Ferrule Withdrawal Force	SC / FC Adapter 2.0N ~ 5.9N, LC Adapter-1.0N ~ 2.5N

13) Optical Fiber Pigtails (1 mtr.)

Characteristic	Minimum Required Specification
Features	LSZH Jacket-Reduced Toxic Gasses Emitted During Combustion 100% Factory Tested Low Insertion Loss and Return Loss Available with Corning Fiber Available in PC/APC Type Options High Precision Ceramic Ferrule with Good Concentricity LC options
	Technical Specifications:

	Connector Type: LC Fiber Type: OS2 (9/125 Corning Clear Curve) Tight Buffer Material: LSZH Tight Buffer Diameter (mm) : 0.9 +/- 0.05 Jacket Colour: Yellow for OS1/OS2 Jacket Material: LSZH Minimum Bending: 30 (static) Radius (mm) Attenuation (db/km): <= 1.5 at 1300nm, <= 3.5mm at 850nm Short Term Tensile (n): 160 Crush Resistance (n/100mm): 500 Operation Temperature: Minus 20 ~ Plus 70 (degree)
	Optical Specifications
	Insertion Loss: <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db Return Loss: PC>= 45db, UPC>=50db, APC>=60db
	Mechanical Specifications
	Apex Offset: <50µm Fiber Height: (+/-)100nm End Face Radius of Curvature: 7mm <R<25mm (Excluding MTRJ) Repeatability: <= 0.2db 1000 Times Mating Cycles Working Temperature: (minus 40 Degree ~ Plus 85 Degree) Storage Temperature: (minus 40 Degree ~ Plus 85 Degree)

14) LC-LC Optical Fiber Patch Cord, Single Mode (OS2), LSZH Types, 3 Mtrs

Characteristic	Minimum Required Specification
Features	LSZH Jacket-Reduced Toxic Gasses Emitted During Combustion. Simplex and Duplex Options 100% Factory Tested Low Insertion Loss and Return Loss Available with Corning Fiber Available in PC/APC Type Options High Precision Ceramic Ferrule with Good Concentricity LC options
	Technical Specifications:
	Connector Type: LC Fiber Type: OS2 Tight Buffer Colour: yellow Tight Buffer Material: LSZH Tight Buffer Diameter (mm): 0.9 +/- 0.05 Strength Member: Aramid Yarn Jacket Colour: Yellow Jacket Material: LSZH Jacket Thickness (mm): 0.45 +/- 0.05 Cable Diameter (mm): 1.8(+/-0.1) X 5.9(+/-0.2) Minimum Bending: 30 (static) Radius (mm) Attenuation (db/km): <= 1.5 at 1300nm, <= 3.5mm at 850nm Short Term Tensile (n): 160 Crush Resistance (n/100mm): 500 Operation Temperature: Minus 20 ~ Plus 70 (degree)
	Optical Specifications
	Insertion Loss: <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db Return Loss: PC>= 45db, UPC>=50db, APC>=60db
	Mechanical Specifications

	Connector Ferrule: Ceramic, Apex Offset: <50µm Fiber Height: (+/-)100nm End Face Radius of Curvature: 7mm <R<25mm (Excluding MTRJ) Repeatability: <= 0.2db 1000 Times Mating Cycles

15) 6 Core Optical Fiber Cable Single mode OS2 Fiber

Characteristic	Minimum Required Specification	
GENERAL:	06F Unitube Armoured with water blocking tape. Rodent Proof, UV Protection. Direct Burial. Embedded Strength members as 2 steel wires od 1.0 mm. Polyester based yarns below Armor tape for easy ripping Thermoplastic Material Tube Excellent Waterproof Layer and Moisture Resistance Excellent Crush Resistance Performance Light Weight and Compact Structure The fiber type is a Matched Cladding Single Mode	
	Low water peak fiber G.652D	
	Extremely high bandwidth. Optimized to support transmission at 1310 nm,1550 nm. Virtually unlimited Modal Bandwidth at 1310 nm	
	Should fulfill the requirements of: IEC 60793-1/60794-1.2 ITU-T REC G.652D Telecordia GR-20 Core	
	Testing methods are in accordance with the following standards: ITU-T G.652.D IEC 793-1	
GEOMETRICAL PROPERTIES	Nominal mode field diameter	9.2 µm
	Mode field diameter tolerance	±4 µm
	Cladding diameter	125
	Cladding diameter tolerance	±1 µm
	Mode field concentricity error	< 1 µm
	Cladding non-circularity	(=/<) 1.0
ENVIRONMENTAL CHARACTERISTICS	Change of Temperature Attenuation increase, -60°C to+85°C	</= 0.05 db/km
	Dry Heat Attenuation increase, 30 days at 85°C	</= 0.05 db/km
	Damp Heat Attenuation increase, 30 days at 85°C/ 85%R.H.	</= 0.05 db/km
	Damp Heat Attenuation increase, 30 days at 85°C/ 85%R.H.	</= 0.05 db/km
MATERIALS	CORE	Germanium doped core with no phosphorus i.e. reduced tendency for hydrogen degradation.
	COATING	UV-curable dual layer acryl ate coating, which ensures excellent micro bending and abrasion resistance.
	Coating Strip Force (typical)	
	Min.	1.3 N
	Max.	8.9 N
	Stripping force after ageing in water at 70 ± 5 °C for 168 h.	
	Min.	1.0 N

	Max.	3.5 N
OPTICAL PROPERTIES	Attenuation (of cable with fibers):	
	At 1310 nm	<= 0.35 dB/km
	Atten. At 1383nm (OH-Peak)	<= 0.35dB/km
	At 1550 nm	<= 0.25 dB/km
	Cut-off wavelength □c:	
	High limit	1330 nm
	Low limit	1180 nm
	Cut-off wavelength □cc	
	High limit	1260 nm
	Loss increase at 1550 nm for 100 turns of fiber loosely wound with a 37.5 mm radius:	
	Max.	0.1 dB
	Dispersion:	
	Zero dispersion wavelength	1310 nm
	Tolerance of zero dispersion	
	Wavelength	-10/+12 nm
	Zero-dispersion slope: 1295</=λo</=1300	
	Max.	≤0.092 at λo
	Chromatic dispersion coefficient:	
	In 1285 nm - 1330 nm interval:	
	Max.	3.5ps/km • □nm
	In 1270 nm - 1340 nm interval	
	Max.	6 ps/km □• nm
	At 1550 nm	
	Max.	18 ps/km • □nm
	Polarisation Mode Dispersion (PMD):	
	Max.	<=0.2 ps/km
	In homogeneity of OTDR trace for any two 1000 metersfiber lengths	
	Max.	0.1 dB/km
	Proof test level	1 %

16) RJ45 Connector: FCC Compliant

Sr.#	Specifications
1	RJ45 modular plug supports 4 twisted pairs, 8 positions, 8 connectors of 100pcs/Pack Housing: PC, UL94V-2, transparent color Contact Terminal: Copper Alloy Finished: 03MU micro-inch gold plating Operating temperature: -40ºC to 80ºC Use for 24-26 AWG stranded wires, meet wiring scheme T568A/T568B

17) OFC Laying and Trenching:

Sr.#	Specifications
1	Laying of OFC cable from Digital Lounge DU to Amal Prabha DasChatri Nivas (APDCN) as per industry standards Splicing in LIU at both ends. Min. 1.5 feet deep trenching Concrete OFC markers at every 100 meters

18) 1.5-inch PVC Casing-Capping: All UTP Laying or Electrical Wiring drawn shall be neatly covered by industry standard 1.5-inch ISI Marked PVC Casing-Capping.

19) Quality and Conditions of Supply, Installation, Testing, Commissioning, Documentation and Training.

Particulars	Conditions
Supply	1. All items will be delivered on working days during office hours in the presence of a representative of the supplier. The University shall under no circumstance receive any item on non-working days or beyond office hours. 2. All freight and labour charges will be borne by the supplier. 3. Supplier shall be responsible for safety and security of the supplied items before handing-over the project. 4. The University reserves the right to reject any sub-standard or faulty/damaged item supplied.
Installation and Testing	1. All installation to be carried out by trained professionals of the supplier. The work will be supervised by designated officials of Dibrugarh University from time to time and any instructions issued in compliance with this tender document must be entertained. 2. Quality of installation must be to the satisfaction of Dibrugarh University and all industry standards for quality to be followed. 3. All occupational health and safety norms and regulations mandated by the Govt. of Assam to be strictly followed by all engaged work force. The supplier shall be responsible for any damage to life or property resulting from any accident during installation or any other phase of the work. 4. No property of Dibrugarh University shall be damaged/stained during installation. In the event any such occurrence, the supplier shall be liable to repair the damage at their own cost. 5. All waste/rubbish generated during installation will be cleaned by the supplier at the end of each working day. 6. Food and Lodging of all engaged work force to be arranged by the supplier.
Commissioning, Documentation and Training	1. Detailed documentation containing all IP addresses assigned to any equipment, location of each equipment identified by serial number/MAC Address, login credentials, license information and validity, operation/maintenance procedure, registration details, layout/topology diagrams, contact details for OEM support or any other information requested shall be provided in both paper and digital format to Dibrugarh University **maintaining requisite confidentiality of sensitive information.** 2. For any product/license registration with OEM, the supplier is bound to use e-mail id/contact number/address as provided by the concerned official of Dibrugarh University. Under no circumstance any credentials owned by the supplier shall be used for such purposes. 3. Onsite Training shall be provided to designated officials of Dibrugarh University regarding the operation, maintenance and troubleshooting of the equipments. In case of any doubt or trouble, the supplier shall be liable to assist or repeat any such training onsite/online/telephonically during the warranty period of the equipment. 4. The Dibrugarh University officials supervising the work must be fully satisfied with the work before final handover.

ANNEXURE-II

Quantities Required

1. Consolidated List of Items Required:

Sl. No.	Particulars	Quantity
1	Windows Server 2022 Standard Edition 16 Core Pack (64 Bit) License	1
2	Wireless Controller	1
3	Access Points for Hostels and Guest House Common Areas	309
4	Access Points for Guest House Suite Room	6
5	24 Port PoE+ Switch	49
6	8 Port PoE+ Switch	25
7	3 KVA Online UPS	16
8	1 KVA Online UPS	4
9	Cat 6 UTP Cable (305 m Roll) *	30nos. (approx.)
10	6 U Rack	45
11	24 Port Cat 6 UTP Patch Panel	45
12	24 Ports LIU Fully Loaded with LC-LC Coupler and adapter	1
13	1 mtr. Optical Pigtail	60
14	LC-LC Patch Cord	50
15	6 Core OFC Cable *	1600 m (approx.)
16	OFC Cable Laying Trenching *	1600 m (approx.)
17	RJ45 Connector (Pack of 100 units)	12
18	1.5-inch Casing-Capping (ISI Mark) *	5000 m (approx.)
19	Supply, Installation*(including installation of equipments, casing, capping, crimping, laying, trenching, electrical fixtures, arrangement of temporary structures/ladders/etc. or any other job required to complete the work)*, Testing, Commissioning, Training and Documentation.	1 Job

*** Sl. No. 9, 15, 16 and 18 to be billed as per actual requirement. The supplier shall maintain proper account of utilization of such items.**

2. Site was distribution of Access Points(AP)/Switch/Online UPS etc.

Sr.#	Items	Qty
1	INTERNATIONAL HOSTEL - AP	4
	24 Port PoE+ Switch	1
	1 KVA ONLINE UPS	1
2	PADMANATH GOHAIN BARUAH CHATRA NIVAS - AP	34
	24 Port PoE+ Switch	4
	8 Port PoE+ Switch	7
	1 KVA ONLINE UPS	3
3	MAFFIJUDDIN AHMED HAZARIKA CHATRA NIVAS - AP	18
	24 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
4	MILES BRONSON CHATRA NIVAS - AP	14
	24 Port PoE+ Switch	2
	3 KVA ONLINE UPS	1
5	LEELA GOGOI MEMORIAL GOBESHAK CHATRA NIVAS (M.Phil. & Research Scholar Hostel) - AP	6
	24 Port PoE+ Switch	1
	8 Port PoE+ Switch	1
	3 KVA ONLINE UPS	1
6	DUIET Hostel – I (Guruprasad Das Chatra Nivas) - AP	16
	24 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
7	DUIET Hostel – II (Lummer Dai Chatra Nivas) - AP	16
	24 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
8	MANIRAM DEWAN CHATRA NIWAS - AP	12
	24 Port PoE+ Switch	1
	8 Port PoE+ Switch	2
	3 KVA ONLINE UPS	1
9	JYOMATI CHATRI NIVAS - AP	22
	24 Port PoE+ Switch	2
	8 Port PoE+ Switch	2
	3 KVA ONLINE UPS	1
10	NALINIBALA DEVI CHATRI NIVAS - AP	15
	24 Port PoE+ Switch	3
	8 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
11	AIDEO HANDIQUE CHATRI NIVAS - AP	16
	24 Port PoE+ Switch	2
	8 Port PoE+ Switch	2
	3 KVA ONLINE UPS	1
12	AIDEO HANDIQUE CHATRI NIVAS (New Extended) - AP	12
	24 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
13	PUSHPALATA DAS CHATRI NIVAS - AP	13
	24 Port PoE+ Switch	3

	3 KVA ONLINE UPS	1
14	PADMAKUMARI GOHAIN WOMENS' HOSTEL (PKGH) - AP	18
	24 Port PoE+ Switch	3
	8 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
15	SWARANALATA BARUAH CHATRI NIVASH (SLBCN) - AP	15
	24 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
16	MAMONI RAISOM GOSWAMI CHATRI NIVASH(MRGCN) - AP	15
	24 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
17	AMAL PRABHA DAS CHATRI NIVAS - AP	36
	24 Port PoE+ Switch	3
	3 KVA ONLINE UPS	1
18	DU GUEST HOUSE COMMON AREA - AP	12
	DU GUEST HOUSE SUITE ROOM - AP	6
	24 Port PoE+ Switch	1
	3 KVA ONLINE UPS	1
19	READY STOCK/STANDBY AP	15
	READY STOCK/STANDBY 24 Port PoE+ Switch	5
	READY STOCK/STANDBY 8 Port PoE+ Switch	5

ANNEXURE-III

CHECK-LIST

(For documents to be mandatorily submitted)

Sl. No.	Particulars	SUBMITTED Please respond in YES/NO/Remark(if any)
1	Brief profile of the Company/Firm with contact details.	
2	**Annexure III** (copy of this check-list itself, duly filled-in and signed with company seal)	
3	Copy of PAN Card	
4	Copy of GST Registration Certificate	
5	Proof of submission of Tender Fee/EMD at assamtenders.gov.in or Documentary proof justifying its exemption (e.g., MSME/NSIC/SSI/etc.).	
6	Offered Technical Specifications in tabular format against each item in **Annexure I**	
7	Technical Compliance Sheetas in **Annexure IV**	
8	Technical Literature of each offered items.	
9	OEM Authorization/Declaration etc.	
10	Proof of Incorporation under Indian Companies Act 1956 or Indian Partnership Act 1932	
11	Proof of Permanent Establishment in Assam as an IT Solution Provider for last 10 years.	
12	Proof of Registration with Provident Fund and ESIC	
13	Copy of the audited Profit & Loss Statement & Balance Sheet of the firm and Certificate from the Chartered accountant clearly stating the turnover for last three financial years.	
	The following ISO Certificates: 1) ISO 9001 (Quality Management) 2) ISO 140001 (Environmental Management) 3) ISO 20001 (Information Technology) 4) ISO 27001 (Information Security)	 1) 2) 3) 4)
14	Previous wireless solution order copy (One order of min. Rs. 80 Lakhs / Two Orders of min Rs. 40 Lakhs each) in last four years.	
15	Declaration regarding Non-Blacklist of Bidder/OEM anywhere in India or abroad.	
16	Copy of OEM Certification of two service engineers under payroll of the bidder.	
17	All other Documents to establish eligibility of the Bidder as per **'Bidder Eligibility Criteria'** mentioned in **Part A** of this Tender Document, viz. Provident Fund Registration, ESIC Registration, etc.	

ANNEXURE-IV

Offered Technical Specifications

Sl. No.	Particulars	Detailed Technical Specifications
1	Windows Server 2022 Standard Edition 16 Core Pack (64 Bit)	
2	Wireless Controller	
3	Access Points for Hostels and Guest House Common Areas	
4	Access Points for Guest House Suite Room	
5	24 Port PoE+ Switch	
6	8 Port PoE+ Switch	
7	3 KVA Online UPS	
8	1 KVA Online UPS	
9	Cat 6 UTP Cable (305 m Roll)	
10	6 U Rack	
11	24 Port Cat 6 UTP Patch Panel	
12	24 Ports LIU Fully Loaded with LC-LC Coupler and adapter	
13	1 mtr. Optical Pigtail	
14	LC-LC Patch Cord	
15	6 Core OFC Cable	
16	OFC Cable Laying Trenching	
17	RJ45 Connector (Pack of 100 units)	
18	1.5-inch Casing-Capping	

ANNEXURE-V

Technical Compliance Sheet

Sl. No.	Particulars	Compliance *Please respond in* YES/NO/Remarks (if any)
1	Windows Server 2022 Standard Edition 16 Core Pack (64 Bit) License	
2	Wireless Controller	
3	Access Points for Hostels and Guest House Common Areas	
4	Access Points for Guest House Suite Room	
5	24 Port PoE+ Switch	
6	8 Port PoE+ Switch	
7	3 KVA Online UPS	
8	1 KVA Online UPS	
9	Cat 6 UTP Cable (305 m Roll)	
10	6 U Rack	
11	24 Port Cat 6 UTP Patch Panel	
12	24 Ports LIU Fully Loaded with LC-LC Coupler and adapter	
13	1 mtr. Optical Pigtail	
14	LC-LC Patch Cord	
15	6 Core OFC Cable	
16	OFC Cable Laying Trenching	
17	RJ45 Connector (Pack of 100 units)	
18	1.5 Inch Casing-Capping	
19	Conditions of Supply, Installation, Testing, Commissioning, Training and Documentation.	

All responses regarding Technical Compliance of above-mentioned items are true and hides no underlying condition/information/etc.

Signature & Seal of Bidder