



## **TENDER DOCUMENTS**

### **Estb of Labs and expansion of LAN**

### **NUTECH/SCM/ Estb of Labs and LAN -2019/TD-064**

**NATIONAL UNIVERSITY OF TECHNOLOGY**

## **TENDER NOTICE**

**National University of Technology (NUTECH)**

**NUTECH/SCM/ Estb of Labs and LAN -2019/TD-064**

NUTECH/SCM/Estb of Labs and LAN-2019/TD-047 stands cancelled.

Sealed bids are invited from Government / FBR Registered Firms for the Establishment of NUTECH Labs and expansion of LAN.

1. Tender documents containing terms & conditions and detailed specifications of items can be downloaded from NUTECH website "<https://nutech.edu.pk/d-p.php>" w.e f **30 April 2019**.
2. Quotations shall be submitted as per requirement of the tender documents.
3. Bidders will be required to submit bank draft/PO equal to 5% of quoted value as Bid Bond in favor of National University of Technology (NUTECH).
4. Sealed bids with detailed specification should reach on the following address latest by **1130 hours on 17 May 2019**. Late submission will not be entertained.
5. Bids will be opened at **1200 hours on 17 May 2019 at SCM Office**.
6. Project is to be completed in 60 days from the date of award of contract.
7. Submit Rs 1500/- as Tender fee in favour of NUTECH HBL account: **NUTECH Tendering and contracts, 5037- 7000210755**. Please attach bank receipt with technical offer. Offers will not be entertained without payment of processing fee.

**Deputy Director (Supply Chain Management Office)**  
**NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH) UPROAD,SECI-12,**  
**ISLAMABAD**  
**Tel: 0092-51-5476768, Ext: 178**



## NATIONAL UNIVERSITY OF TECHNOLOGY

### SUPPLY CHAIN MANAGEMENT OFFICE

#### INVITATION TO TENDER

**Submission Date/Time** 17 May 2019 at 1130 hours

1. NUTECH desires to procure the list of item(s)/Store(s) as per **Annexure-A**. Interested bidders are requested to send their bids through courier or deliver at NUTECH under two separate sealed envelopes (placed together in third envelope), marked clearly, "**Technical Offer**" and "**Commercial Offer**", respectively to the undersigned, latest by or before above mentioned due date. If due to any unforeseen circumstances, NUTECH establishment remains closed, then the last date of submission will be extended to next working day.
2. Please also note that Technical Offer should contain only Annexes-A & B duly filled in (supported with relevant technical literature /details/ catalogues etc) and receipt of tender processing fee. Commercial Offer will contain Annexure-C and bid bond (Dully mentioned and placed in separate envelop). Please ensure no space is left blank in the annexes.
3. Following must be noted for this IT (Invitation to Tender):-
  - a. 4 x copies of technical offer are to be provided.
  - b. Annexes A, B and C must be signed and stamped. Attach only relevant documents.
  - c. Please complete all document as per given format. Do not use your format or letter head. Offer may be rejected if given format is not followed.
  - d. Validity of offer will be 90 days.
  - e. Delivery period will be 60 days from the date of award of contract.
  - f. The firm should provide point to point acceptance of each clause of IT and special instructions attached with IT.
  - g. Quote firm will render a certificate with technical offer that firm is neither defaulter nor blacklisted by any Government / semi Government organization directly or indirectly.
  - h. Tender(s) must be accompanied with a Bid Bond in agreement of faithful compliance of the conditions of Contract/Purchase Order. This amount will be equivalent to 5% of the total quoted value. In case of non-acceptance of any offer, the Bid Bond will be returned to the bidder by fastest possible means. The Bid Bond amount submitted by the successful bidder

will however be refunded on effective termination of Contract/ Purchase Order. (The Bid Bond will be forfeited in case of default by the bidder from his commitments made through his offer). Submission of Bid Bond is mandatory; otherwise your offer will be rejected.

- i. 1 year warranty will be required from the successful bidders from the date of commissioning against performance bond bank guarantee.
- j. Rates should be quoted on Free Delivery basis at NUTECH Islamabad.

4. We reserve the rights to accept or reject any or all tenders as a whole or in part without assigning any reason whatsoever. The decision in this regard will be firm, final and binding on all bidders.

DD (Supply Chain Management)



**NATIONAL UNIVERSITY OF TECHNOLOGY**  
**SUPPLY CHAIN MANAGEMENT OFFICE**  
**TECHNICAL OFFER**

**Annex A**

User Reference No **NUTECH/SCM/ Estb of Labs and LAN -2019/TD-064**      Date: **30-04-2019**

**Technical Specification**

| <b><u>LOT A</u></b> |                          |   |     |                   |     |                   |              |                                  |          |
|---------------------|--------------------------|---|-----|-------------------|-----|-------------------|--------------|----------------------------------|----------|
| Ser                 | Items                    | Description   | A/U | Country of Origin | Qty | Bidder Compliance |              | Tech Scrutiny to be done by user |          |
|                     |                          |   |     |                   |     | Yes               | No/alternate | Accepted                         | Rejected |
|                     |                          |   |     |                   |     |                   |              | Reason of Rejection              |          |
| 1.                  | <b>Fortinet Firewall</b> | Fortinet_600E (FG-600E-BDL-950-36), Hardware plus 24x7 FortiCare and FortiGuard Unified (UTM) Protection with 3 years license, dual power supply, SFPs (short range) for all optical Interfaces, with all accessories | No. | European / USA    | 1   |                   |              |                                  |          |
| 2.                  | <b>Forti Analyzer</b>    | FortiAnalyzer 200F (FAZ-200F), Centralized log & analysis appliance, 2 x GE RJ45, 4TB storage, up to 100GB/Day of logs, 24x7 FortiCare Contract with 3 years license, will all accessories.                           | No. | European / USA    | 1   |                   |              |                                  |          |

|                     |   |  |     |               |   |  |  |  |
|---------------------|---|--|-----|---------------|---|--|--|--|
| 3.                  | <b>Juniper Firewall</b>                         | SRX4100 Services Gateway includes hardware (8x10GE, two AC PSU, four FAN Trays, cables and RMK) and Junos Software Base (Firewall, NAT, IPSec, Routing, MPLS, Dual power supply)<br>8x SRX-SFP-10GE-SR<br>2x SRX-SFP-10GE-LR<br>1x PAR-ND-SRX4100JB<br>1x SRX4100-CS-BUN-3 | No. | European /USA | 1 |  |  |  |
| 4.                  | <b>JUNOS Space Director</b>                     | 1x JA2500-A-BSE<br>1x JS-PLT-SING<br>1x JS-SECDIR-5<br>1x JS-LOGDIRECTOR-500<br>1x PAR-ND-JA2500BSE<br>1x PAR-SWA-JS-LD-500<br>1x PAR-SWA-JS-PLT-SIN<br>1x PAR-SWA-JS-SD-05  | No. | European /USA | 1 |  |  |  |
| 5.                  | <b>Sophos XG210 Firewall Enterprise Protect</b> | Sophos XG 210 appliance and enterprise guard subscription for 3 years, 10 GbE SFP+ Flexi Port Module (With 10G short range SFPs), with all accessories   | No. | European /USA | 1 |  |  |  |
| <b><u>LOT B</u></b> |   |  |     |               |   |  |  |  |
| 1.                  | <b>Distribution Switch</b>                      | Model: WS-C3850-24S-S<br>2x CON-SSSNT-WSC3854S,<br>2x S3850UK9-166,<br>2x C3850-NM-2-10G,<br>2x PWR-C1-350WAC/2,<br>4x CAB-TA-UK,<br>2x STACK-T1-50CM,<br>2x CAB-SPWR-30CM,<br>2x C3850-24-L-S,<br>2x PWR-C1-350WAC,   | No. | European /USA | 2 |  |  |  |

|    |                            |   |     |                   |    |  |  |  |
|----|----------------------------|---|-----|-------------------|----|--|--|--|
|    |                            | 10x SFP-10G-LR-S=<br>15x GLC-LH-SMD=<br>with all accessories<br>including 5x usb to serial<br>cables  |     |                   |    |  |  |  |
| 2. | <b>Data Centre Switch</b>  | WS-C3850-24XS-S<br>2x CON-SSSNT-WSCX3852<br>2x S3850UK9-166<br>4x CAB-TA-EU<br>2x STACK-T1-50CM<br>2x CAB-SPWR-30CM<br>2x PWR-C1-715WAC<br>2x C3850-NM-BLANK<br>2x PWR-C1-715WAC/2<br>36x SFP-10G-SR=   | No. | European<br>/USA  | 2  |  |  |  |
| 3. | <b>Access Switch 48P</b>   | Model: WS-C2960L-48PS-LL<br>5x CON-SNT-WSC296PL,<br>5x CAB-ACU<br>15x GLC-LH-SMD=<br>with all accessories   | No. | European /<br>USA | 5  |  |  |  |
| 4. | <b>Access Switch 24P</b>   | Model: WS-C2960L-24PS-LL<br>10x CON-SNT-WSC2964P<br>10x CAB-ACU<br>with all accessories   | No. | European /<br>USA | 10 |  |  |  |
| 5. | <b>Wireless Controller</b> | Model: AIR-CT5520-K9<br>1x CON-SSSNT-AIRT5520,<br>2x CAB-9K10A-UK,<br>1x AIR-CT5520-SW-8.2,<br>1x AIR-BZL-C220M4,<br>4x AIR-MR-1X081RV-A,<br>1x AIR-SD-32G-S,<br>1x AIR-TPM2-001,<br>2x AIR-PSU1-770W,<br>1x AIR-CPU-E52609D,<br>1x AIR-CT6870-NIC-K9,<br>1x AIR-SD240GBKS4-EV,<br>1x AIR-PSU-BLKP1U, | No. | European /<br>USA | 1  |  |  |  |

|     |  |  |     |                   |     |  |  |  |
|-----|--|--|-----|-------------------|-----|--|--|--|
|     |  | 1x LIC-CT5520-UPG,<br>1x CON-ECMU-LICGT552,<br><br>30x LIC-CT5520-1A,<br>30x CON-ECMU-LICT5520,<br>30x LIC-CT5520-DTLS-K9<br>4x SFP-10G-SR-S=<br>with all accessories,         |     |                   |     |  |  |  |
| 6.  | <b>Wireless Access Points</b>              | Model: AIR-AP1832I-C-K9<br>40x CON-SNT-AIR32ICK,<br>40x SW1830-CAPWAP-K9,<br>40x AIR-AP-BRACKET-1,<br>40x AIR-AP-T-RAIL-R,<br>with all accessories<br>including power adaptors | No. | European /<br>USA | 40  |  |  |  |
| 7.  | <b>Optical Fiber Patch Cords SC-LC SMF</b> | SC-LC single mode 5<br>meter long fiber patch<br>cords, duplex, 1 to 10G<br>supported  | No. | European /<br>USA | 20  |  |  |  |
| 8.  | <b>Optical Fiber Patch Cords LC-LC SMF</b> | LC-LC single mode 5 meter<br>long fiber patch cords,<br>duplex, 1 to 10G<br>supported  | No. | European /<br>USA | 20  |  |  |  |
| 9.  | <b>Optical Fiber Patch Cords LC-LC MMF</b> | LC-LC multimode 5 meter<br>long fiber patch cords,<br>duplex, 1 to 10G<br>supported  | No. | European /<br>USA | 20  |  |  |  |
| 10. | <b>Optical Fiber Patch Cords LC-LC MMF</b> | LC-LC multimode 10 meter<br>long fiber patch cords,<br>duplex, 10G supported   | No. | European /<br>USA | 40  |  |  |  |
| 11. | <b>UTP CAT6 Patch Cords</b>                | UTP CAT6 patch cords, 1<br>meter long  | No. | European /<br>USA | 300 |  |  |  |
| 12. | <b>Network Cabinet 9U</b>                  | Network Cabinet 9U   | No. | European /<br>USA | 5   |  |  |  |
| 13. | <b>Spares</b>                              | PWR-C1-350WAC=   | No. | European /<br>USA | 2   |  |  |  |
|     |  | C9K-PWR-650WAC-R=  | No. | European /<br>USA | 2   |  |  |  |



|              |   |   |     |                    |     |  |  |  |
|--------------|---|---|-----|--------------------|-----|--|--|--|
|              |   | AIR-PWR-C=  | No. | European / USA     | 25  |  |  |  |
| 14.          | <b>Network Nodes</b>  | Cable laying in ceiling or duct and termination of network nodes with required CAT6 UTP cable, patch panels, cable managers, face plates, RJ45 connectors and ducts. (45x Hostel, 21x DC, 42x Library, 5x VERYSYS, 16x PMO, 16x Admin, 15x Software Hall, 33x Academic Block level 4 & 5, 107x Backup Surveillance (110x surveillance, 36x NSDD, 20x Digital Signage) | No. | European / USA     | 300 |  |  |  |
| 15.          | <b>Testing</b>  | Installation of network equipment on site, testing & commissioning of complete System.  | Job |                    | 1   |  |  |  |
| <b>LOT C</b> |   |   |     |                    |     |  |  |  |
| 1            | Fiber Optics Media Converter Single Mode with SC Connector    | <b>Fiber Type:</b> Multimode and Single mode<br><b>Maximum Transfer Distance :</b> 2km<br><b>Wavelength:</b> 1310nm<br><b>Connector A:</b> SC and ST Female<br><b>Connector B:</b> RJ-45 Female<br><b>Max Data Transfer Rate:</b> 10/100 Megabit per second   | No. | USA                | 2   |  |  |  |
|              | Fiber Optics Media Converter Single Mode with ST Connector    |   |     |                    | 2   |  |  |  |
|              | Fiber Optics Media Converter Multimode Mode with SC Connector |   |     |                    | 2   |  |  |  |
|              | Fiber Optics Media Converter Multimode Mode with ST Connector |   |     |                    | 2   |  |  |  |
| 2            | Fiber optic pigtail patch Cords                               | <b>Single mode</b> 50 SC Simplex 900um Pigtail (5   | No. | <b>Any Country</b> | 50  |  |  |  |

|   |                                 |  |     |                    |    |  |  |  |
|---|---------------------------------|--|-----|--------------------|----|--|--|--|
|   |                                 | Meter)   |     |                    |    |  |  |  |
| 3 | Fiber optic pigtail patch cords | <b>Single mode</b> 50 ST Simplex 900um Pigtail (5 Meter)   | No. | <b>Any Country</b> | 50 |  |  |  |
| 4 | Fiber optic pigtail patch cords | <b>Multimode</b> 50 SC Simplex 900um Pigtail (5 Meter)   | No. | <b>Any Country</b> | 50 |  |  |  |
| 5 | Fiber optic pigtail patch cords | <b>Multimode</b> 50 ST Simplex 900um Pigtail (5 Meter)   | No  | <b>Any Country</b> | 50 |  |  |  |
| 6 | Router                          | Compatible /HSPA+/HSUPA/UMTS/EVD USB modems. (8 Ports)   | No  | <b>USA / EU</b>    | 5  |  |  |  |
| 7 | Firewall                        | Two 10/100/1000 Ethernet and 6 10/100 Ethernet LAN ports, 1 Mini-PIM slot, and 2 USB ports (support for 3G USB)•<br>Factory option of 4 dynamic Power over Ethernet (PoE) ports 802.3af •<br>Support for T1/E1, serial, ADSL/2/2+, VDSL, G.SHDSL, and Ethernet small form-factor pluggable transceiver (SFP)•<br>Content Security Accelerator hardware for faster performance of IPS and ExpressAV (with high memory version)•<br>Full UTM1; antivirus1, antispam1, enhanced Web filtering1, and content filtering•<br>Intrusion prevention system1, User role-based | No  | <b>USA / EU</b>    | 4  |  |  |  |

|    |  |   |    |                |             |  |  |  |
|----|--|---|----|----------------|-------------|--|--|--|
|    |  | firewall, and AppSecure1•<br>2 GB DRAM, 2 GB flash<br>default   |    |                |             |  |  |  |
| 8  | Ubiquiti Network Nano<br>Stations        | Atheros SOC, MIPS 4KC,<br>180 MHz Processor, 16MB<br>SDRAM, 4MB Flash<br>Memory, 1x 10/100 BASE-<br>TX Ethernet Interface 13dB<br>Antenna   |    | USA            | 10          |  |  |  |
| 9  | Cable Tester                             | <b>Cable type:</b> Coaxial, RJ11,<br>RJ45<br><b>Test Type:</b> Ethernet Port<br>Test, Length, POE<br>Detection<br><b>Max Cable length:</b> 1500Ft<br><b>Tone:</b> Yes<br><b>Display Type:</b> LCD<br><b>Power Source:</b> Battery<br><b>Battery Type:</b> AA<br><b>Battery Life:</b> 20h<br><b>Dimensions:</b> 163 x 76 x<br>36mm<br><b>Length:</b> 163mm<br><b>Height:</b> 36mm<br><b>Max Op Temp:</b> +45 degree<br>C<br><b>Min Op Temp:</b> 0 degree C<br><b>Width:</b> 76mm | No | USA            | 1           |  |  |  |
| 10 | Fiber Optics Splicing Machine            | Size: 20.5x14x11.5cm,<br>Optical Fiber Fusion. 5<br>Inches Display; TFT color<br>LCD display  | No | USA            | 2           |  |  |  |
| 11 | Layer 1,2 Connectivity<br>Ethernet Cable | Three sets<br>3 meter<br>10 meter<br>15 meter   | No | Any<br>Country | 24 each set |  |  |  |

|    |                                  |  |    |             |  |  |  |  |
|----|----------------------------------|--|----|-------------|--|--|--|--|
| 12 | Layer 2 switches (8,16,24 ports) | Should include WS-C2960G-8TC-L<br>C2960L-16TS-LL<br>C2960L-24TS-LL | No | USA         | 5x 8 ports<br>2x 16 ports<br>1x 24 ports |  |  |  |
| 13 | Crimping Tool/ Punching Tool     | Standard EU  | No | Any Country | 5  |  |  |  |
| 14 | RJ 45 Connectors                 | Black copper Rj-45 Connector Cat-6, Cat-6 RJ45 plug with Load Bar  | No | Any Country | 500                                      |  |  |  |

| General Conditions |   |  |        |    |                 |                                  |          |                     |
|--------------------|---|--|--------|----|-----------------|----------------------------------|----------|---------------------|
| Description        |   |  | Bidder |    |                 | Tech Scrutiny to be done by User |          |                     |
|                    |   |  | Yes    | No | Alternate Offer | Accepted                         | Rejected | Reason of Rejection |
| 1.                 | <b>LOT</b>                                  | a. Each LOT is packaged deal except LOT A (LOT A is open for all)<br>b. Any firm participating must provide all items mentioned in LOT B or C, However a firm can participate in all or any.   |        |    |                 |                                  |          |                     |
| 2.                 | <b>Operations Training</b>                  | a. Trainings & Certifications of NUTECH IT Support Staff   |        |    |                 |                                  |          |                     |
| 3.                 | <b>Installation and Commissioning</b>       | a. Commissioning of the equipment (Software & Hardware) will be carried out by OEM rep at his own cost and risk at designated place at NUTECH.<br>b. Special requirements must be specified in offer by supplier.  |        |    |                 |                                  |          |                     |
| 4.                 | <b>Support Services</b>                     | a. 24x7x365 Support Services including public holidays<br>b. Suppliers to have in-country spares/Technical support & ensure spares & technical support/Assistance for 3 years.<br>c. Software upgrade support must be provided free of cost for 3 years with renewed license at every upgrade. |        |    |                 |                                  |          |                     |
| 5.                 | <b>Standard &amp; Compliance</b>            | Bidder must submit specification compliance in their bids. Non-compliance (if any) against the product specification and general terms & conditions of the tender will lead to the disqualification of the bidder.   |        |    |                 |                                  |          |                     |
| 6                  | <b>Evaluation Criteria (For Lot B only)</b> | <b>Technical Criteria:</b><br><br>a. Presence of OEMs in Pakistan <b>(15 marks)</b><br>b. Offices of supplier in 3 major cities of Pakistan  |        |    |                 |                                  |          |                     |

|   |  |   |  |  |  |  |  |  |  |  |  |
|---|--|---|--|--|--|--|--|--|--|--|--|
|   |  | <p><b>(5 marks)</b></p> <p>c. Offices of primary OEM in 3 major cities of Pakistan <b>(7 marks)</b></p> <p>d. Stock holding for warranty claims for NUTECH at primary OEM’s depot, [written declaration required by OEM]. <b>(13 marks)</b></p> <p>e. Relevant experience of supplier in deployments of same scale in education sector:</p> <p>    i. 1 deployment <b>(5 marks)</b></p> <p>    ii. 2 deployments <b>(10 marks)</b></p> <p>    iii. 4 deployments <b>(20 marks)</b></p> <p>f. HR strength of supplier:</p> <p>    i. 1 PMP, 1 CCIE (Networks), 1 ITIL Master <b>(10 marks)</b></p> <p>    ii. 1 PMP, 1 CCIE (Networks), 1 CCIE (Security), 1 ITIL Expert, 1 ITIL Intermediate <b>(20 marks)</b></p> <p>    iii. 1 PMP, 2 CCIE (Networks), 2 CCIE (Security), 1 ITIL Expert, 1 ITIL Intermediate <b>(30 marks)</b></p> <p>    iv. 2 PMP, 2 CCIE (Networks), 2 CCIE (Security), 1 ITIL Expert, 2 ITIL Intermediate <b>(40 marks)</b></p> <p><b>Financial Criteria:</b></p> <p>15% weightage will be given to lowest prices quoted.</p> |  |  |  |  |  |  |  |  |  |
| 7 | <p><b>Marking Methodology</b><br/>(For Lot B only)</p> | <ul style="list-style-type: none"> <li>• Marking of the firms shall be based on information provided in Technical &amp; Financial Evaluation Criteria.</li> <li>• Proposals will be marked on the basis of 85 – 15 i.e. 85% of the proposal strength will be measured in Technical marking and 15% of the proposal strength will be measured in Financial marking.</li> <li>• Score strength of the technical proposal will be evaluated/calculated through the below mentioned formula:</li> </ul> <p style="text-align: center;"><i>Bidder A technical score</i></p> <p style="text-align: center;">----- X 85%</p> <p style="text-align: center;">100</p>  |  |  |  |  |  |  |  |  |  |

|     |  |   |  |  |  |  |  |  |
|-----|--|---|--|--|--|--|--|--|
|     |  | <ul style="list-style-type: none"> <li>• Minimum score of 60 specified in “TECHNICAL EVALUATION CRITERIA” will be required to qualify for Financial Score Evaluation.</li> <li>• Bidders acquiring less than 60 marks in the technical evaluation will not be considered for participation/ calculation towards accumulative marking of the bid.</li> <li>• Score strength of the financial proposal will be evaluated/calculated through the below mentioned formula:<br/><br/> <math display="block">\frac{\text{Price of lowest bidder}}{\text{Bidder A price}} \times 15\%</math> </li> <li>• Marks obtained in both technical and financial evaluation will be added to arrive at the combined evaluated score.<br/><br/> Bidder acquiring overall highest marks in the combined evaluation will be considered the lowest evaluated bidder.</li> </ul> |  |  |  |  |  |  |
| 8.  | <b>Warranty Period</b>                 | a. 1 Years Comprehensive warranty of all items from the date of commissioning.<br><br>A Warranty sticker is to be pasted on each item by the supplier/ OEM highlighting name of Firm, Contract No and Date, Description of Store and warranty validity.   |  |  |  |  |  |  |
| 9.  | <b>Physical Inspection Criteria</b>    | 100% Physical inspection of store will be carried out before commissioning of the equipment for following details<br>a. For physical damage, scratches and deformity.<br>b. Accessories/ Components as per contractual Specifications Brand name and country origin.  |  |  |  |  |  |  |
| 10. | <b>Improvement and Safety Measures</b> | Any improvement and safety measures suggested by NUTECH during commissioning are to be resolved by the supplier manufacturer at no extra cost.  |  |  |  |  |  |  |
| 11. | <b>Liability of Supplier</b>           | a. Supplier is to provide original OEM certificate of subject equipment bought directly from the manufacturer and being an authorized dealer.<br><br>In Case the equipment supplied is not compatible with specifications, the supplier will be obliged to call his representatives at his own cost for consultation and  |  |  |  |  |  |  |

|            |                      |  |  |  |  |  |  |  |
|------------|----------------------|--|--|--|--|--|--|--|
|            |                      | corrective action  |  |  |  |  |  |  |
| <b>12.</b> | <b>Special Notes</b> | <p>a. Additional requirements for the maintenance of equipment (if any) must be intimated by the supplier in technical offer.</p> <p>b. Supplier must provide the list of organizations using same equipment in Pakistan (if any).</p> <p>c. Equipment must be a standard product of OEM available at web address of OEM.</p> <p>d. In case of premature failure of the equipment, OEM has to replace / rectify the item free of cost. Required transportation charges would be borne by the supplier.</p> <p>e. Interested parties can carry out site survey for LAN installation and active network design and deployment considerations.</p> <p><b><u>Manufacturer Authorization Form (MAF) in the name of NUTECH University by the Principal / OEM must be provided (Mandatory).</u></b></p> |  |  |  |  |  |  |

|   |              |                |                                    |            |  |           |  |
|---|--------------|----------------|------------------------------------|------------|--|-----------|--|
| Instl/Assy/Commissioning Req  | <b>Yes</b>   | No             | Contract with OEM/ <b>Supplier</b> | <b>Yes</b> |  | No        |  |
| Performance Bond Req  | <b>Yes</b>   | No             | Offer Req for Package Deal         | <b>Yes</b> |  | <b>No</b> |  |
| <b>Note:</b> (If any)   |              |                | Warranty req and Duration          | <b>Yes</b> |  | No        |  |
| List of "Additional Req may be" sent to procurement office, immediately |              |                |                                    |            |  |           |  |
| Maint Spare Req   | <b>Yes</b>   | No             | Essentially Running spare req      | <b>Yes</b> |  | No        |  |
| Pub/Lit Req   | <b>Yes</b>   | No             | Req of Cert for test data results  | <b>Yes</b> |  | No        |  |
| Trg Req   | <b>Local</b> | <b>Foreign</b> | Req of Calibration                 | <b>Yes</b> |  | No        |  |
| <b>Note:</b> Tick relevant box  |              |                |                                    |            |  |           |  |

|                  |
|------------------|
| Firm Name_____   |
| Signature_____   |
| Name_____        |
| Designation_____ |



**NATIONAL UNIVERSITY OF TECHNOLOGY**  
**SUPPLY CHAIN MANAGEMENT OFFICE**

**TECHNICAL OFFER**

**Annex B**

User Reference No **NUTECH/SCM/ Estb of Labs and LAN -2019/TD-064** Date: **30-04-2019**

**Please fill in the following essential parameters:**

1. Validity of Offer: \_\_\_\_\_ Days (Should not be less than 90 days)
2. Delivery Period: \_\_\_\_\_ Days (After Placement of order)
3. Country of Origin: \_\_\_\_\_
4. Warranty/Guarantee: \_\_\_\_\_ Months from the date of final acceptance of the stores.

**General**

GST No: \_\_\_\_\_ (Please enclose copy)

NTN/CNIC: \_\_\_\_\_ (if exempted, please provide valid exemption certificate)

**Payment Terms:**

1. 50 % advance payment (Against valid bank Guarantee)
2. 50% Payment after delivery, installation /commissioning, user satisfaction certificate

**Details of Payment Recipient**

(1) Name/Title: \_\_\_\_\_

(2) Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Official Seal: \_\_\_\_\_

Name: \_\_\_\_\_

Designation: \_\_\_\_\_





**NATIONAL UNIVERSITY OF TECHNOLOGY**  
**SUPPLY CHAIN MANAGEMENT OFFICE**

**FINANCIAL OFFER**

**Annex C**

User Reference No **NUTECH/SCM/ Estb of Labs and LAN -2019/TD-064**      Date: **30-04-2019**

| Ser                 | Items                    | Description   | A/U | Qty Req | Unit Price (Rs) (excluding taxes) | All taxes (If applicable) | Gross Unit Price incl all taxes(Rs) | Total amount for total qty (Rs) (Including all taxes) |
|---------------------|--------------------------|---|-----|---------|-----------------------------------|---------------------------|-------------------------------------|---|
| <b><u>LOT A</u></b> |                          |   |     |         |                                   |                           |                                     |   |
| 1.                  | <b>Fortinet Firewall</b> | Fortinet_600E (FG-600E-BDL-950-36), Hardware plus 24x7 FortiCare and FortiGuard Unified (UTM) Protection with 3 years license, dual power supply, SFPs (short range) for all optical Interfaces, with all accessories | No. | 1       |                                   |                           |                                     |   |
| 2.                  | <b>Forti Analyzer</b>    | FortiAnalyzer 200F (FAZ-200F), Centralized log & analysis appliance, 2 x GE RJ45, 4TB storage, up to 100GB/Day of logs, 24x7 FortiCare Contract with 3 years license, will all accessories.                           | No. | 1       |                                   |                           |                                     |   |
| 3.                  | <b>Juniper Firewall</b>  | SRX4100 Services Gateway includes hardware (8x10GE, two AC PSU, four FAN Trays, cables and RMK) and Junos Software Base (Firewall, NAT, IPSec, Routing, MPLS, Dual power supply)                                      | No. | 1       |                                   |                           |                                     |   |

|                     |   |  |     |   |  |  |  |  |
|---------------------|---|--|-----|---|--|--|--|--|
|                     |   | 8x SRX-SFP-10GE-SR<br>2x SRX-SFP-10GE-LR<br>1x PAR-ND-SRX4100JB<br>1x SRX4100-CS-BUN-3   |     |   |  |  |  |  |
| 4.                  | <b>JUNOS Space Director</b>                     | 1x JA2500-A-BSE<br>1x JS-PLT-SING<br>1x JS-SECDIR-5<br>1x JS-LOGDIRECTOR-500<br>1x PAR-ND-JA2500BSE<br>1x PAR-SWA-JS-LD-500<br>1x PAR-SWA-JS-PLT-SIN<br>1x PAR-SWA-JS-SD-05  | No. | 1 |  |  |  |  |
| 5.                  | <b>Sophos XG210 Firewall Enterprise Protect</b> | Sophos XG 210 appliance and enterprise guard subscription for 3 years, 10 GbE SFP+ Flexi Port Module (With 10G short range SFPs), with all accessories   | No. | 1 |  |  |  |  |
| <b><u>LOT B</u></b> |   |  |     |   |  |  |  |  |
| 1.                  | <b>Distribution Switch</b>                      | Model: WS-C3850-24S-S<br>2x CON-SSSNT-WSC3854S,<br>2x S3850UK9-166,<br>2x C3850-NM-2-10G,<br>2x PWR-C1-350WAC/2,<br>4x CAB-TA-UK,<br>2x STACK-T1-50CM,<br>2x CAB-SPWR-30CM,<br>2x C3850-24-L-S,<br>2x PWR-C1-350WAC,<br>10x SFP-10G-LR-S=<br>15x GLC-LH-SMD=<br>with all accessories including 5x usb to serial cables | No. | 2 |  |  |  |  |
| 2.                  | <b>Data Centre Switch</b>                       | WS-C3850-24XS-S<br>2x CON-SSSNT-WSCX3852<br>2x S3850UK9-166<br>4x CAB-TA-EU  | No. | 2 |  |  |  |  |

|    |                                   |   |     |    |  |  |  |  |
|----|-----------------------------------|---|-----|----|--|--|--|--|
|    |                                   | 2x STACK-T1-50CM<br>2x CAB-SPWR-30CM<br>2x PWR-C1-715WAC<br>2x C3850-NM-BLANK<br>2x PWR-C1-715WAC/2<br>36x SFP-10G-SR=  |     |    |  |  |  |  |
| 3. | <b>Access Switch<br/>48P</b>      | Model: WS-C2960L-48PS-LL<br>5x CON-SNT-WSC296PL,<br>5x CAB-ACU<br>15x GLC-LH-SMD=<br>with all accessories   | No. | 5  |  |  |  |  |
| 4. | <b>Access Switch<br/>24P</b>      | Model: WS-C2960L-24PS-LL<br>10x CON-SNT-WSC2964P<br>10x CAB-ACU<br>with all accessories   | No. | 10 |  |  |  |  |
| 5. | <b>Wireless<br/>Controller</b>    | Model: AIR-CT5520-K9<br>1x CON-SSSNT-AIRT5520,<br>2x CAB-9K10A-UK,<br>1x AIR-CT5520-SW-8.2,<br>1x AIR-BZL-C220M4,<br>4x AIR-MR-1X081RV-A,<br>1x AIR-SD-32G-S,<br>1x AIR-TPM2-001,<br>2x AIR-PSU1-770W,<br>1x AIR-CPU-E52609D,<br>1x AIR-CT6870-NIC-K9,<br>1x AIR-SD240GBKS4-EV,<br>1x AIR-PSU-BLKP1U,<br>1x LIC-CT5520-UPG,<br>1x CON-ECMU-LICGT552,<br>30x LIC-CT5520-1A,<br>30x CON-ECMU-LICT5520,<br>30x LIC-CT5520-DTLS-K9<br>4x SFP-10G-SR-S=<br>with all accessories, | No. | 1  |  |  |  |  |
| 6. | <b>Wireless Access<br/>Points</b> | Model: AIR-AP1832I-C-K9<br>40x CON-SNT-AIR32ICK,  | No. | 40 |  |  |  |  |

|     |  |   |     |     |  |  |  |  |
|-----|--|---|-----|-----|--|--|--|--|
|     |  | 40x SW1830-CAPWAP-K9,<br>40x AIR-AP-BRACKET-1,<br>40x AIR-AP-T-RAIL-R,<br>with all accessories including power<br>adaptors  |     |     |  |  |  |  |
| 7.  | <b>Optical Fiber Patch Cords SC-LC SMF</b> | SC-LC single mode 5 meter long fiber patch cords, duplex, 1 to 10G supported  | No. | 20  |  |  |  |  |
| 8.  | <b>Optical Fiber Patch Cords LC-LC SMF</b> | LC-LC single mode 5 meter long fiber patch cords, duplex, 1 to 10G supported  | No. | 20  |  |  |  |  |
| 9.  | <b>Optical Fiber Patch Cords LC-LC MMF</b> | LC-LC multimode 5 meter long fiber patch cords, duplex, 1 to 10G supported  | No. | 20  |  |  |  |  |
| 10. | <b>Optical Fiber Patch Cords LC-LC MMF</b> | LC-LC multimode 10 meter long fiber patch cords, duplex, 10G supported  | No. | 40  |  |  |  |  |
| 11. | <b>UTP CAT6 Patch Cords</b>                | UTP CAT6 patch cords, 1 meter long  | No. | 300 |  |  |  |  |
| 12. | <b>Network Cabinet 9U</b>                  | Network Cabinet 9U  | No. | 5   |  |  |  |  |
| 13. | <b>Spares</b>                              | PWR-C1-350WAC=  | No. | 2   |  |  |  |  |
|     |  | C9K-PWR-650WAC-R=   | No. | 2   |  |  |  |  |
|     |  | AIR-PWR-C=  | No. | 25  |  |  |  |  |
| 14. | <b>Network Nodes</b>                       | Cable laying in ceiling or duct and termination of network nodes with required CAT6 UTP cable, patch panels, cable managers, face plates, RJ45 connectors and ducts. (45x Hostel, 21x DC, 42x Library, 5x VERYSYS, 16x PMO, 16x Admin, 15x Software Hall, 33x Academic Block level 4 & 5, 107x Backup Surveillance (110x surveillance, 36x NSDD, 20x Digital Signage) | No. | 300 |  |  |  |  |
| 15. | <b>Testing</b>                             | Installation of network equipment on site, testing & commissioning of complete System.  | Job | 1   |  |  |  |  |

**LOT C**

|   |   |   |     |    |  |  |  |  |
|---|---|---|-----|----|--|--|--|--|
| 1 | Fiber Optics Media Converter Single Mode with SC Connector    | <b>Fiber Type:</b> Multimode and Single mode<br><b>Maximum Transfer Distance :</b> 2km<br><b>Wavelength:</b> 1310nm<br><b>Connector A:</b> SC and ST Female<br><b>Connector B:</b> RJ-45 Female<br><b>Max Data Transfer Rate:</b> 10/100 Megabit per second | No. | 2  |  |  |  |  |
|   | Fiber Optics Media Converter Single Mode with ST Connector    |   |     | 2  |  |  |  |  |
|   | Fiber Optics Media Converter Multimode Mode with SC Connector |   |     | 2  |  |  |  |  |
|   | Fiber Optics Media Converter Multimode Mode with ST Connector |   |     | 2  |  |  |  |  |
| 2 | Fiber optic pigtail patch Cords                               | <b>Single mode</b> 50 SC Simplex 900um Pigtail (5 Meter)  | No. | 50 |  |  |  |  |
| 3 | Fiber optic pigtail patch cords                               | <b>Single mode</b> 50 ST Simplex 900um Pigtail (5 Meter)  | No. | 50 |  |  |  |  |
| 4 | Fiber optic pigtail patch cords                               | <b>Multimode</b> 50 SC Simplex 900um Pigtail (5 Meter)  | No. | 50 |  |  |  |  |
| 5 | Fiber optic pigtail patch cords                               | <b>Multimode</b> 50 ST Simplex 900um Pigtail (5 Meter)  |     | 50 |  |  |  |  |
| 6 | Router  | Compatible /HSPA+/HSUPA/UMTS/EVD USB modems. (8 Ports)  |     | 5  |  |  |  |  |
|   |   | Two 10/100/1000 Ethernet and 6 10/100 Ethernet LAN ports, 1 Mini-PIM slot, and 2 USB ports (support for 3G USB)•  |     |    |  |  |  |  |

|   |                                |  |  |    |  |  |  |  |
|---|--------------------------------|--|--|----|--|--|--|--|
| 7 | Firewall                       | <p>Factory option of 4 dynamic Power over Ethernet (PoE) ports 802.3af •</p> <p>Support for T1/E1, serial, ADSL/2/2+, VDSL, G.SHDSL, and Ethernet small form-factor pluggable transceiver (SFP)•</p> <p>Content Security Accelerator hardware for faster performance of IPS and ExpressAV (with high memory version)•</p> <p>Full UTM1; antivirus1, antispam1, enhanced Web filtering1, and content filtering•</p> <p>Intrusion prevention system1, User role-based firewall, and AppSecure1•</p> <p>2 GB DRAM, 2 GB flash default</p> |  | 4  |  |  |  |  |
| 8 | Ubiquiti Network Nano Stations | <p>Atheros SOC, MIPS 4KC, 180 MHz Processor, 16MB SDRAM, 4MB Flash Memory, 1x 10/100 BASE-TX Ethernet Interface</p> <p>13dB Antenna</p>  |  | 10 |  |  |  |  |
| 9 | Cable Tester                   | <p><b>Cable type:</b> Coaxial, RJ11, RJ45</p> <p><b>Test Type:</b> Ethernet Port Test, Length, POE Detection</p> <p><b>Max Cable length:</b> 1500Ft</p> <p><b>Tone:</b> Yes</p> <p><b>Display Type:</b> LCD</p> <p><b>Power Source:</b> Battery</p> <p><b>Battery Type:</b> AA</p> <p><b>Battery Life:</b> 20h</p> <p><b>Dimensions:</b> 163 x 76 x 36mm</p> <p><b>Length:</b> 163mm</p> <p><b>Height:</b> 36mm</p> <p><b>Max Op Temp:</b> +45 degree C</p>  |  | 1  |  |  |  |  |

|              |                                       |   |  |  |  |  |  |  |
|--------------|---------------------------------------|---|--|--|--|--|--|--|
|              |                                       | <b>Min Op Temp:</b> 0 degree C<br><b>Width:</b> 76mm                                |  |  |  |  |  |  |
| 10           | Fiber Optics Splicing Machine         | Size: 20.5x14x11.5cm, Optical Fiber Fusion. 5 Inches Display; TFT color LCD display |  | 2  |  |  |  |  |
| 11           | Layer 1,2 Connectivity Ethernet Cable | Three sets<br>3 meter<br>10 meter<br>15 meter                                       |  | 24 each set                              |  |  |  |  |
| 12           | Layer 2 switches (8,16,24 ports)      | Should include WS-C2960G-8TC-L<br>C2960L-16TS-LL<br>C2960L-24TS-LL                  |  | 5x 8 ports<br>2x 16 ports<br>1x 24 ports |  |  |  |  |
| 13           | Crimping Tool/<br>Punching Tool       | Standard EU   |  | 5  |  |  |  |  |
| 14           | RJ 45 Connectors                      | Black copper Rj-45 Connector Cat-6, Cat-6 RJ45 plug with Load Bar                   |  | 500                                      |  |  |  |  |
| <b>Total</b> |                                       |   |  |  |  |  |  |  |

Bid Bond Ref \_\_\_\_\_ GST \_\_\_\_\_

Total Gross Value \_\_\_\_\_

\*Bid Bond to be attached with Annex C. Copy of Bid Bond be attached with

Technical offer without showing its value. Exposure of bid bond may result in rejection of offer.

|                   |
|-------------------|
| Firm Name _____   |
| Signature _____   |
| Name _____        |
| Designation _____ |