DOC - 4

# NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

POST-SRINIVASNAGAR, MANGALURU – 575 025 (D K) CENTRAL COMPUTER CENTRE

Phone: (0824) 2474000. E- mail: pic\_ccc@nitk.edu.in



Fax:(0824) 2474033 Website: http://www.nitk.ac.in

# **TENDER DOCUMENT**

Tender Notification No: NITK/CCC-FM/202	24-25/DOC4 Date:22-11-2024		
Name of Goods/Service	Facility Management		
The estimated amount put to Tender	₹43,20,000/-(Including GST) (Refer Section 1B,37)		
EMD Amount (2% of estimated amount)	₹86,400/-		
Time for Takeover	Immediately after the issue of Work Order		
Date, Time & Venue of Pre-Bid Meeting	27-11-2024 3:30 PM at CCC/CCMT NITK (Refer Section 1 B, Clause No. 32)		
Bid Document Download Start Date	22-11-2024 05:00 PM		
Clarification Start Date	22-11-2024 05:00 PM		
Clarification End Date	26-11-2024 3:00 PM		
Online Bid Submission Start Date	22-11-2024 05:00 PM		
Online Bid Submission End Date	06-12-2024 3:00 PM		
Address for Submission of Tender	https://eprocure.gov.in/		
Date of opening technical bid	09-12-2024 3:00 PM		
Contact Details of Buyer	Professor-In-Charge, C.C.C., N.I.T.K. Surathkal Srinivasnagar-575 025. Ph: 0824-2473083		
Purchase officer Name and Contact (Related to purchase inquiry)	Superintendent (purchase) Phone: +91-824-2473014,3114 Email: <u>supdt-purchase@nitk.edu.in</u>		

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# NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

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Tender Notification No: NITK/CCC-FM/2024-25/DOC4

### Date:22-11-2024

### NOTICE INVITING e-TENDER (e-NIT)

The National Institute of Technology Karnataka, Surathkal (in short – NITK, Surathkal) is an Institute of National Importance under Ministry of Education, Govt of India imparting Technical Education and engaged in Research Activities.

Online Tenders (<u>https://eprocure.gov.in/</u>) are invited for the following items/services in <u>two cover systems</u> (i.e., Technical bid and financial bid) subject to the following terms and conditions, from the reputed bidders / manufacturers or its authorized dealers so as to reach this office on or before scheduled date and time. The tender (Technical bid) will be opened online on the due date as mentioned. Bidders can verify their bid status through the online portal <u>https://eprocure.gov.in/</u>. The financial bid of only such bidders whose technical bid is accepted shall be opened on the same day or later pre-informed date.

Name of Goods/Service	Facility Management		
Estimated Cost	₹43,20,000/- (Including GST) (Refer Section 1B,37)		
EMD Amount (2% of estimated amount)	₹86,400/-		
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Address for Submission of Tender	https://eprocure.gov.in/		
Date of opening technical bid	09-12-2024 3:00 PM		
Contact Details of Buyer	Professor-In-Charge, C.C.C., N.I.T.K. Surathkal Post Srinivasnagar-575 025. Ph: 0824-2473083		

### Sd/-HOD Seal & Signature

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### **SECTION 1 A: Instructions for Online Bid Submission**

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submit their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <u>https://eprocure.gov.in/eprocure/app</u>.

### **REGISTRATION**

1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.

2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

3) Bidders are advised to register their valid email addresses and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra, etc.), with their profile.

5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

6) Bidder then logs in to the site through the secured log-in by entering their user ID/password and the password of the DSC / e-Token.

### SEARCHING FOR TENDER DOCUMENTS

1) There is various search options built-in in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords, etc. to search for a tender published on the CPP Portal.

2) Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.

3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

### PREPARATION OF BIDS

1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.

2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the documents that need to be submitted. Any deviations from these may lead to the rejection of the bid.

3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with the black and white option which helps in reducing the size of the scanned document.

4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates, etc.) has been provided to the bidders. Bidders can use the "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for the bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in the My Documents space, this does not automatically ensure these Documents being part of the Technical Bid.

### SUBMISSION OF BIDS

1. Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

3. Bidder has to select the payment option as "online" to pay the tender fee / EMD as applicable and enter details of the instrument.

4. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all

the bidders. Bidders are required to download the BoQ file, open it and complete the whitecoloured (unprotected) cells with their respective financial quotes and other details (such as the 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 filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, the opening of bids, etc. The bidders should follow this time during bid submission.

6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system-generated symmetric key. Further, this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

8. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

9. The bid summary has to be printed and kept as an acknowledgment of the submission of the bid. This acknowledgment may be used as an entry pass for any bid opening meetings.

10. The off-line tender shall not be accepted and no request in this regard shall be entertained whatsoever.

11. All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.

12. Any order resulting from this e-tender shall be governed by the terms and conditions mentioned therein.

13. No deviation from the technical and commercial terms & conditions are allowed.

14. The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of the bid(s).

### **ASSISTANCE TO BIDDERS**

1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2) Any queries relating to the process of online bid submission or queries relating to CPP Portal, in general, may be directed to the 24x7 CPP Portal Helpdesk.

### SECTION 1B: INSTRUCTION TO BIDDER (ITB)

- 1. The bid should be submitted in two covers System-Technical Bid and Financial Bid through <a href="https://eprocure.gov.in/">https://eprocure.gov.in/</a>
- 2. <u>Technical Bid</u>: Documents related to the Technical Bid should be submitted in PDF format through the E-Tendering portal https://eprocure.gov.in/.
- 3. The Technical Bid should contain the following documents:
  - a) Compliance statement of specifications as per Annexure 'A'.
  - **b)** License certificate for manufacture / supply of the item & Factory license
  - c) Agreements/Purchase Orders/Completion certificates if any, for similar items from other Universities, Institutes, and Government Department/Undertakings/Public sectors the details of such supplies for the preceding three years should be given together with the prices eventually or finally paid with contact details of persons as per **Annexure 'B'**.
  - d) List of Owner/partners of the firm and their contact numbers (Bidder Information)
  - e) Declaration of abandoned or suspended any awarded service & Blacklist Certificate. Annexure 'C'
  - f) Integrity Pact (for procurements above Rs1.0 Crore (Rs10.0 Million). Annexure 'D'
  - g) Copy of GST certificate & PAN No.
  - h) Undertaking that the successful BIDDER agrees to give a Performance Security amounting to 3% of the purchase order value in favor of "The Director, NITK Surathkal".
  - i) Bidder has to be a profit making organization in each of the last 3 years. The bidder's sales turn over in terms of earning from Design, Supply, Integration, Operation & Maintenance or Consultancy in IT Systems, Networking Solutions & related Services within India should be at least Rs.1 Crore or above in each of the last three financial years. Extract of the audited balance sheet for the last three years is required to submitted with the technical bid with the relevant information highlighted.
  - **j)** Duly filled in the checklist should be submitted along with the Technical Bid.

- **k)** The contract form given in Section 5 needs to be submitted.
- I) EMD must be in the form of Bank Guarantee Annexure-J (Fixed Deposit Receipt/Insurance surety bonds/DD/e-Payment mode (through Credit/Debit cards / Net Banking). It will be valid for 180 days from the date of opening of the tender. In case of EMD payment made through E-Payment, UTR Number with details should be uploaded. The firm registered with MSME/NSIC as per MSME procurement policy order 2012 will be exempted from submission of EMD. Intended parties will have to give proof of registration along with their tender. EMD of the unsuccessful bidders shall be refunded without any interest at the earliest after finalization of the purchase of the concerned item.

i) The EMD will be returned to the BIDDERs(s) whose offer is not accepted by NITK within one

month from the date of the placing of the purchase order(s) on the selected BIDDER(s). In the case of the BIDDER(s) whose offer is accepted the EMD will be returned on submission of Performance Security in the form of Bank Guarantee (BG). However, if the return of EMD is delayed for any reason, no interest/penalty shall be payable to the Bidders.

ii) The successful BIDDER, on the award of contract/order, must send the contract/order acceptance in writing, within 15 days of award of contract/order failing which the EMD will be forfeited.

iii) The EMD shall be forfeited in case a successful BIDDER fails to furnish the Performance Security.

iv) Bidder should prepare the EMD as per the instructions specified in the tender document. The original EMD should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission as specified in the tender documents. The details of the BG/DD/FD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise, the uploaded bid will be rejected.

- **m**) The bidder needs to comply with restrictions under rule No 144 (xi) of GFR (General Financial Rules) 2017 and the clause pertaining to Public Procurement Division Order (Public Procurement no 1,2 & amp; 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 and 24.07.2020 of Dept of Expenditure (DOE), Ministry of Finance). In this Connection Bidder has to submit Self Certification (as per Annexure G or H), depending on the status of the bidder.
- **n**) Unpriced copy of the financial bid with terms and conditions.

- o) Declaration that all items specified in the bid for the Rate for Bill of Materials (RFBOM) and AMC are included and the specifications are matching. Please note that any violation to this will result in bid-rejection.
- **p)** Declaration that the bidder agrees to the scope of service mentioned in this tender.
- **q)** Proof that the bidder has 5 years experience
- r) Proof that the bidder is certified ISO 9001
- s) Proof for 3 works not less than Rs 15 lakhs within the last two years
- t) Licence certificate for supplying the goods.
- u) List of Owner/partners of the firm and their contact numbers
- v) List of customers with contact details: Reference Letter / Phone Number / Contact address of three places or more where you have carried out similar work (Networking projects only).
- 4. <u>Financial bid:</u> The bidders should submit their financial bid as per the format given in Section 4 (A standard BoQ format has been provided with the tender document in the form of an Excel sheet) of the Notice Inviting Tender in the online bid through the e-Tendering portal <u>https://eprocure.gov.in/</u>.After evaluation of technical bid, the technically successful bidder shall be intimated to witness the opening of their financial bid along with the date, time and venue through e-mail. The financial bid of only those bidders will be opened who are declared "Technically Successful or Technically Responsive".

### 5. <u>Bid Evaluation</u>:

On the due date, the Technical bids will be opened and referred to the Purchase Committee which is duly constituted by the Director, NITK. The committee will go through the technical aspects of the tender and recommend shortlisted firms. The recommendation of the committee is final and binding on all the parties. The committee may visit the manufacturing site to assess the capabilities to manufacture the tendered items as per the specifications. In case of any remarks/default noted, the Company will be debarred from competing for bids in our esteemed Institute for a period of one year from the date of occurrence of such breach.

### 6. <u>Quoting of Price(s)</u>:

a. The Indian bidder should quote firm prices in the Indian rupee only unless otherwise specified elsewhere in this tender. Prices quoted in any other currency shall not be considered.

**7.** The Bid will be accepted only from the actual firm bidding. Bids not complying with this condition are liable to be rejected and EMD forfeited.

- 8. For any item liable to be supplied under the Rate for Bill of Materials (RFBOM), the Institute reserves the right to visit the factory before or after the issue of supply order to satisfy itself regarding the quality of production. In case of any remarks /default noted, the Company will be debarred from competing for bids in our esteemed Institute for a period of one year from the date of occurrence of such breach.
- **9**. For any item liable to be supplied under the Rate for Bill of Materials (RFBOM), the item to be used must be strictly according to the specification and subject to test by the Institute/concerned authorities. It must be delivered and installed in good working condition.
- **10.** The incomplete or conditional tender will be rejected. A bidder must bid for all items specified in the schedule. Partial bidding will be treated as incomplete and will be rejected.
- 11. The Institute reserves the right to cancel at any time after acceptance of the tender with a notice. The Supplier shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which might have derived from the execution of the supply.
- 12. <u>Performance Security</u>: The successful bidder shall deposit performance security of 3% of the quoted price in the form of Bank Guarantee (<u>ANNEXURE -F</u>) / Demand Draft / Fixed Deposit Receipt of any scheduled bank drawn in favour of The Director, NITK Surathkal, Mangaluru payable at Mangaluru. In case the bidder fails to deposit the said Performance Security within the stipulated period, including the extended period if any, the Earnest Money Deposited by the bidder shall be forfeited automatically without any notice. Please note the following points:
  - a) Successful bidder should submit performance Security as prescribed above to the purchase Section, NITK Surathkal, on or before 30 days from the date of issue of order acknowledgment.
  - b) Performance Security shall be for the due and faithful performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time

as may be made, given, conceded, or agreed to between the successful bidder and the purchaser under the terms and conditions of acceptance to tender.

- c) The successful bidder is entirely responsible for the due performance of the contract in all respects according to the terms and conditions of the tender.
- d) The validity of the Performance Security must cover the tenure of the Service Level Agreement plus two months
- **13.** <u>**The validity of bids</u></u>: The rate quoted should be valid for the tenure of the Service Level Agreement. No claim for escalation of the rate will be considered after opening the Tender. The bid validity date will start from the last date of bid submission (Including date corrigendum)</u>**
- 14. <u>Warranty/Guarantee & On-site skill support</u>: For the items liable to be supplied under the Rate for Bill of Materials (RFBOM), on-site comprehensive warranty will be effective from the date of successful installation and commissioning. The OEMs/Authorized Distributors and Dealers must attach a certificate of sales and service facilities, escalation support for on-call service or station engineer, etc.
- 15. <u>Clarification of Tender Document</u>: Through pre-bid Conference (Under Section 1, clause No. 35).
- **16**. <u>Amendment of Tender document</u>: At any time before the last date for receipt of bids, Institute may for any reason, whether at its initiative or in response to a clarification requested by a prospective bidder, modify the Tender document by an amendment. Further, Institute may at its discretion extend the last date for the receipt of bids.
- **17.** The bids shall be written in the English language and any information printed in another language shall be accompanied by an English translation, in which case for the purpose of the interpretation of the bid, the English translation shall govern.
- **18.** The Institute reserves the right of accepting any bid other than the lowest or even rejecting all the bids. The decision of the Purchase Committee is final in all matters of tender and purchase.
- **19.** <u>**Cancellation of Tender:**</u> Notwithstanding anything specified in this tender document, NITK Surathkal in its sole discretion, unconditionally and without having to assign any reasons, reserves the rights:
  - a) To accept OR reject the lowest tender or any other tender or all the tenders.
  - b) To accept any tender in full or in part.

- c) To reject the tender offer not conforming to the terms of the tender.
- d) To give purchase preference to Public Sector undertakings when applicable as per Govt. Policy/ Guidelines.

#### 20. Terms of Payment:

- a. The Facility Management Payment will be quarterly in arrears subject to good performance feedback.
- b. Payment shall be made by Cheque or such other mode/electronic fund transfer offered by the Bank. NITK, Surathkal will not pay advance payment to the party. Any request for Advance payment will be rejected summarily. In case if it is necessary, the advance payment will be paid strictly against Bank Guarantee only.
- c. Payment will be made by Standard Payment terms and conditions of NITK, Surathkal as per tender document only. Any request for a change in payment terms and conditions will not be accepted.
- d. If the above conditions are not acceptable then tender will be rejected.
- **21.** If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the bidder.
- **22**. The rate quoted by the bidder **shall be firm throughout the contract** period and there shall be no revision of the rates for any reasons whatsoever. It should be clearly understood that any claim for changes will not be entertained in any case once the bids are opened.
- **23**. <u>One bid per bidder</u>: Each bidder shall submit only one bid either by himself or by representing a firm.
- 24. <u>Cost of bid</u>: The bidder shall bear all costs associated with the preparation and submission of his bid. The Institute in no case shall be responsible or liable for those costs.
- **25.** The bidder shall not make or cause any alteration, erasure, or obliteration to the text of the tender document.
- **26**. The Institute will declare a bidder ineligible, either indefinitely or for a specified period of time, at the sole discretion of the Institute, for the award of contract/ participating in any other tender, if at any time the Institute determines that he has furnished false information/ engaged in corrupt or fraudulent practices.

- **27.** If any overpayment is detected as a result of the post-payment audit, it shall be recovered by the Institute from the Supplier out of his Performance Security.
- **28**. <u>Determination of successful bidder</u>: The technically qualified bidder whose offer is evaluated as the **lowest total bid** shall be the successful bidder subject to its meeting the statutory requirements.
- **29**. <u>**Price variation:**</u> The rate quoted by the bidder shall be firm throughout the contract period. No price variation clause applies to this contract.

### 30. <u>CANVASSING</u>:

- a) Canvassing in connection with tenders is strictly prohibited and the Tenders submitted by the Tenderers who resort to canvassing shall be liable to rejection.
- b) Subject to the provisions concerning clarification of Bids, no Bidder shall contact the purchase committee on any matter relating to its bid from the time of the bid opening up to the time that the contract is awarded.
- c) Any effort by the Bidder or Bidder's representative however described to influence the purchase committee in any way concerning scrutiny, consideration, evaluation of the Bid(s) or decision concerning award of contract shall entail rejection of Bid and action against the bidder as deemed fit.
- d) The purchase committee will deal with the Bidder on a Principal basis, without involvement in any manner in India or abroad of any agent or consultant or associate or another person howsoever described.
- **31.** <u>Legal Matter</u>: All Domestic and International disputes are subject to Mangaluru Jurisdiction only.

### 32. Pre-Bid Conference:

- a) All prospective bidders are requested to kindly submit their queries through Email (specifying the tender number and date) to <u>pic\_ccc@nitk.edu.in</u> with cc to vairava@nitk.edu.in so as to reach on or before 3.00 p.m. on 26-11-2024.
- b) Any Statement made at the pre-bid conference shall not modify the terms of the bidding documents unless such statement is made part of clarification in the proceeding of the Pre-Bid Conference
- c) Queries formally submitted in advance, will be answered in the pre-bid conference and will become part of the Corrigendum/Amendment.
- **33**. Estimated price put up in tender is inclusive of all.

# 34. Abnormally quoted low bid will be liable for rejection as per the OM No.F.12/17/2019-PPD of Department of Expenditure, Ministry of Finance dated 6<sup>th</sup> February 2020.

**\*\*Disclaimer\*\*** Bidders are advised to exercise caution and not respond to any unknown calls, emails, or embedded links requesting payment for participating in the tender or for any other purpose. Please note that NITK Surathkal never asks for any tender fee for participation in tenders or bids.

### SECTION 1 C: eReverse (Forward) Auction Instructions for Bidders

- 1.0 Tender Cum Auction is a combination of Tender Followed by Auction (Reverse / Forward Auction). It is also called as eRA.
- 2.0 In eRA, Tendering process will be followed as per the instructions given in NIT/Tender Documents. Subsequently, Reverse (or Forward) Auction as the case may be, will be conducted amongst techno- commercially qualified / approved bidders after Opening of Financial/Price Bids' online. The Reverse (or Forward) Auction will be normally initiated after Opening of Price Bids. There will be no participation fees for Auction.
- 3.0 Only such bidders who have been found techno-commercially qualified as per requirements of the tender will be permitted to participate in the Reverse (Forward) Auction.
- 4.0 After opening of the price (financial) bids and System displays L1 (or H1) price based on either over all basis or item wise/lot basis automatically. Using this system provided price, which would be auction start price (can be changed, if required), procuring entity will create Reverse (Forward) Auction and publish the same.
- 5.0 The Techno-commercially qualified bidders will receive Auction information through SMS & email. The participating bidders get an opportunity to revise their prices (reduce in case of Reverse Auction and increase in case of Forward Auction). It allows bidders multiple opportunities to offer a price.
- 6.0 Procedure in submission of bids by the bidders during Reverse/Forward auction online.
- 6.1 Bidders shall login using their login ID & Password and then using DSC.
- 6.2 Click on My Auctions button given in left side of page, to view Action details for which Techno- Commercially qualified.
- 6.3 For participating in Live Auction,
  - Click on Live Auction Button.
  - Click on View button to participate in interested Auction.
  - There is List of qualified Lots in which Bidder can participate against selected Auction. Click on Hammer Icon to participate in the respective lot.
  - •On clicking Hammer Icon, system will show Start price, Decremental (or incremental) price and Current price against lot. Current Price is appears as Blank in case no bidder has offered price.
  - Enter your Price in 'My Auction Price' in multiples of decremental (incremental) value up to above (below) Max Seal % value, and then sign it digitally by clicking on Sign Icon and Click on submit button.
  - System will show your Latest Value / Price Quoted and system will also show Least Amount/ Rate which any Bidder would have quoted.
- 7.0 Terms and conditions for Reverse (Forward)Auction are as follows:
- 7.1 Reverse (Forward) Auction will be initiated after opening of price bids. The schedule of Reverse (Forward) Auction shall be intimated to the bidders by the system through their registered email and SMS to mobile number.
- 7.2 Only those bidders whose price bid has been opened by the Tender Inviting Authority shall be eligible to participate in Reverse (Forward) process. However, in case of in Reverse Auction process, the H1 bidder whose quote is highest during tender will not be allowed to participate

as per H1 elimination policy. Similarly, in case of in Forward Auction process, the L1 bidder whose quote is lowest during tender will not be allowed to participate as per elimination policy.

- 7.3 Bidders are advised to read the 'Reverse (Forward) Auction terms and conditions' details of Reverse (Forward) Auction event carefully, before auction event.
- 7.4 Reverse (Forward) Auction can be held in two ways as indicated in the tender either on the Total overall cost of items/works or on Item wise/ Lot wise.
- 7.5 The 'Starting price' i.e. Start price and bid decrement (increment) price for Reverse (Forward) Auction will be decided by the Tender Inviting Authority.
- 7.6 Bidders shall be able to view the following on their screen along with the necessary fields during Online Reverse Auction:
- 7.6.1 Current Bid Price in the Auction.

7.6.2 Start Price.

7.6.3 Decrement (or Increment) value.

7.7 The bidding direction in case of Reverse Auction is downward and for Forward Auction is upward.

- 7.8 In case of Reverse Auction, in order to displace a standing lowest bid and to become "L1", a bidder can offer a minimum bid decrement or in multiples of decremental value up to above Max Seal %. For ex: Current price:- Rs. 49,000 Decrement value:- Rs. 1000 System Defined Maximum Seal %:- 50, in this case a bidder can quote minimum decrement amount as Rs 49,000-1000= Rs. 48,000 and maximum decrement amount is 49000-24500- 1000=23500=24000\*. In case of Forward Auction, in order to displace a standing highest bid and to become "H1", a bidder can offer a minimum bid increment or in multiples of incremental value up to or below Max Seal %. For ex: Current price:- Rs. 49,000 Incremental value:- Rs. 1000 System Defined Maximum Seal %:- 50, in this case a bidder can quote minimum increment amount as Rs 49,000+1000= Rs. 50,000 and maximum increment amount as 49000+24500+1000=74500=74000\*. This continues as an iterative process.
- 7.9 The system will not disclose the name of the L1 (H1) bidder, number of bids and names of the bidders on the portal to anybody prior to the completion of Reverse/Forward auction process.
- 7.10 There shall be no communication between the Tender inviting Authority and bidders and among bidders.
- 7.11 Bidders only see the lowest (highest) bid during Reverse (Forward) auction. At no point of time will any bidder see the name of other bidders or the prices of bidders other than the lowest bid.
- 7.12 After the completion of the online reverse(forward) auction, all bidders who have participated in Reverse (Forward) will see the L1(H1) price in Auction and further processing will be done by Tender Inviting Authority.
- 7.13 In case of no participation by techno-commercially qualified bidders in Reverse (Forward) Auction, the Tender price bids received during tender will be processed.
- 7.14 In case of auction on total value of items/works, the successful bidder may be required to submit a letter for price confirmation and rates of individual items/works within stipulated number of days after completion of Reverse (Forward) Auction event, besides sending the same by registered post / courier to the tender inviting authority.
- 7.15 Any variation between the final bid value during RA and that in the confirmatory letter forwarded will be advised to re-work and submit.

7.16 Server time shall be the basis of Start Time and Closing time for bidding and shall be binding for all.

- 7.17 All electronic bids submitted during the reverse(forward) auction process shall be legally binding on the bidder.
- 7.18 The chronologically last bid submitted by the bidder till the end of the auction will be considered as the valid price bid offered by the bidder and acceptance of the same by Tender Inviting Authority will form a binding contract between Tender Inviting Authority and the bidder for entering into a contract.
- 7.19 The last successful bid price quoted by bidder will be considered as valid price at any point of time during Auction.
- 7.20 If a bidder does not submit bid in the Reverse/forward Auction, the price quoted by them in the price bid shall be considered as the valid price of that bidder. The status of the bidder (L1, L2 etc) shall be evaluated considering either the bid price submitted in Reverse/Forward Auction or the price quoted in the price bid, whichever is lower.
- 7.21 In case of disruption of service at the service provider's end while the Reverse (Forward)Auction is live due to any technical snag or otherwise attributable to the system failure at the server end, Tender Inviting Authority in consultation with Application Administrator may decide to extend auction if required as per system malfunction procedure displayed in the home page of the website. In this case, the status quo of Auction will be maintained prior to failure and process would continue from that point onwards.
- 8.0 Post auction procedure: The Tender Inviting Authority will proceed with the Lowest (Highest) Bid in the Reverse (Forward) Auction for further processing.
- 9.0 Schedule for Reverse Auction: The Reverse (Forward) Auction schedule will be intimated later on through e-mail and SMS after opening the price bid.
- 10.0 Auction extension time: If a bidder places a bid in the last {5} minutes of closing of the Reverse Auction and if that bid gets accepted, then the auction's duration shall get extended automatically for another {10} minutes, for the entire auction from the time that bid comes in. Please note that the auto-extension will take place only if a bid comes in those last {5} minutes and if that bid gets accepted as the lowest bid. If the bid does not get accepted as the lowest bid, the auto-extension will not take place even if that bid might have come in the last {5} minutes. In case, there is no bid in the last {5} minutes of closing of Reverse Auction, the auction shall get closed automatically without any extension. However, bidders are advised not to wait till the last minute or last few seconds to enter their bid during the auto-extension period to avoid complications related with internet connectivity, network problems, system crash down, power failure, etc. The above process will continue till 10 times extension is given during Reverse Auction. All bidders, regardless of the impervious position, can submit their bid during the extension period also.
- 11.0 Bidding currency and unit of measurement: Bidding will be conducted in Indian Rupees as indicated in the tender.
- 12.0 Validity of bids: Price shall be valid for a period of defined number of months from the date of reverse auction. These shall not be subjected to any change whatsoever.
- 13.0 Bidders' bid will be taken as an offer to execute the work (or to award supply of the item) as per enquiry no. {......} dt. {......}. Bids once made by the bidder, cannot be cancelled/ withdrawn and bidder shall be bound to execute as mentioned above at bidder's final bid price.

Should bidder back out and not execute the contract as per the rates quoted, action shall be initiated as per the tender terms and conditions.

- 14.0 The Tender Inviting Authority decision on award of contract shall be final and binding on all the Bidders.
- 15.0 The Tender Inviting Authority reserves the right to extend, reschedule or cancel the Reverse Auction process at any time, before ordering, without assigning any reason, with intimation to bidders.
- 16.0 The Tender Inviting Authority reserves the right to suspend or pause the reverse auction, if required. In such cases, as per discretion of Tender Inviting Authority, auction may be reopened.
- 17.0 The Tender Inviting Authority shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause. In such cases, the decision of Tender Inviting Authority shall be binding on the bidders.
- 18.0 Failure of power or loss of connectivity at the premises of bidders during the Reverse (Forward) auction cannot be the cause for not participating in the reverse (forward) auction. On account of this, the time for the auction cannot be extended and the organisation is not responsible for such eventualities.
- 19.0 Other terms and conditions shall be as per tender.
- 20.0 Bidder shall not divulge Bids or any other exclusive details of the organisation to any other party. If the Bidder or any of its representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action will be taken against such bidders as per banning procedure of the organisation.

21.0 Tender price bid (s) means the price bid (s) received during tendering for the items/work/services.

22.0 Auction closing price bid means the lowest (highest) online price bid received after the completion of Reverse (Forward) Auction.

23.0 All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.

24.0 Any order resulting from this e-tender shall be governed by the terms and conditions mentioned therein.

25.0 No deviation to the technical and commercial terms & conditions are allowed.

26.0 The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of the

bid(s)

### SECTION 2: CONDITIONS OF CONTRACT.

- 1. The supplier should quote the rate for Door Delivery (FOR).
- 2. The Rate should be quoted in INR only.
- 3. Rate for Bill of Materials (RFBOM) items should be landed at NITK Surathkal and this responsibility is with the bidder.
- 4. No custom duty exemption certificate will be provided from the institute.
- 5. With regard to items to be purchased on Rate for Bill of Materials (RFBOM), the rate quoted should be on a per-unit basis. Taxes and other charges should be quoted separately, considering exemptions, if any.
- 6. The rate quoted should be inclusive of Testing, Commissioning and Installation of Equipment and Training. (for items covered under Rate for Bill of Materials (RFBOM))
- 7. **Payment:** No advance payment will be made. The Facility Management Payment will be made quarterly in arrears subject to good performance feedback.
- 8. Guarantee and Warranty period should be specified for complete period conforming to Section 3 of this tender document.
- 9. The period required for the supply and installation of Equipment should be specified conforming to Section 3 of this tender document.
- 10. In case of dispute, the matter will be subject to Mangalore Jurisdiction only.

### **Bidder Eligibility Criteria**

To be eligible, a bidder has to meet the following criteria.

- 1. The bidder shall have experience of at least 5 years in the field of Information Technology. This shall include specific experience in any or all of Design, Engineering, Integration, Operations, Maintenance & Consultancy in IT Networking independently, or as part of a large IT Infrastructure Project.
- 2. The bidder shall have adopted appropriate quality systems (ISO 9001) and adhere to standards and best practices. The bidder / employees of the bidder should have appropriate expertise in design, engineering, integration, operations and management of IT Information Systems / Networking Infrastructure
- 3.The bidder shall have executed at least 3 similar works, each costing not less than Rs.30 lakhs each, during the last 2 years, in the Maintenance of Campus Wide-Area-Networks and Network Operating Centers as part of a IT Infrastructure Project belonging to Government or large Public Sector/Private Sector Organizations. In addition to these, the bidder's experience in executing similar works costing about 30 lakhs may be given as a list with details.

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- 4. Bidder has to be a profit making organization in each of the last 3 years. The bidder's sales turn over in terms of earning from Design, Supply, Integration, Operation & Maintenance or Consultancy in IT Systems, Networking Solutions & related Services within India should be at least Rs.1 Crore or above in each of the last three financial years. Extract of the audited balance sheet for the last three years is required to submitted with the technical bid with the relevant information highlighted.
- 5. The bidder should be capable of executing projects involving Networking, Network troubleshooting and Network expansion.
- 6. A certificate is to be submitted by the bidder that they have not been black listed by any Govt./Semi Govt. organization or department.

### Certificate

(To be provided by the bidder in the business letter head and/or with business seal)

This is to certify that we are not blacklisted by any of the Central Government Department and any State Department / PSU / Banks & Financial institutions on account of corrupt or fraudulent practices. Further, we understand that such blacklisting if any discovered in the future shall be a disqualification and shall result in the tender being rejected irrespective of the processing status of the tenders.

Signature of the Bidder: Name and Designation: Business Address: Seal of the Bidder's Firm Place: Date :

- 7. The bidder will have to submit GST details along with the technical bid.
- 8. For the items being supplied in the Rate for Bill of Materials (RFBOM) and AMC replacements (if any) the bidder should be an authorized partner of the manufacturer of networking products and should have adequate facilities, manpower and staff for installation, testing, commissioning and after sales service.
- 9. The bidder will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- 10. The bidder should supply a list of customers where they have carried out networking projects of this nature. Documentary proof in this regard should be submitted

## **General Conditions:**

- 1. The Tenderer shall upload the valid certificate copies of documents as mentioned in Annexure "A" failing which the tender will be rejected. If necessary, the bidder shall produce all the original documents for verification.
- 2. Blacklisted contractors in State / Central Govt. Departments, Central / State PSUs, Autonomous Organizations/ Boards etc., are not eligible to quote, if found such tenders will be rejected.

- 3. The successful Bidder shall execute an SLA within 15 days from the date of Receipt of intimation. The Tender Document and SLA will form part and parcel of the agreement, failing which the tender will deem to be get cancelled.
- 4. The rates quoted should be as per the financial bid only. The NITK reserves the right to accept / reject any or all the tenders without assigning any reasons.
- 5. Conditional tenders will not be accepted and are liable for rejection.
- 6. Bidders who meet the specified minimum qualifying criteria shall be eligible.
- Even though the Bidders meet the above criteria, they are subject to be disqualified if they have:

   Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or

b. Record of poor performance such as abandoning the works, not properly completed the contract, inordinate delays in completion, litigation history, or financial failures etc.

- 8. The Tender document can be downloaded from Institute web site: https://www.nitk.ac.in/ or e-procurement website: https://eprocure.gov.in/. It may be noted that all subsequent notifications, changes and amendments/corrigendums on the project/document would be posted only on the same website.
- 9. The bidders should go through the Tender Document and submit online response through eprocurement portal only.
- 10. Tenders shall remain valid for a period not less than 180 days after the deadline date for tender submission.
- 11. The successful Bidder, after placement of order, is required to enter into a Service Level Agreement with NITK
- 12. The decision of NITK regarding evaluation of technical bids and the evaluation of financial bids will be final and binding. Any representation from bidders in this regard will not be entertained.
- 13. Bids of each bidder should comply with all terms and conditions, all documents called for in technical bid should be furnished with the quote. In case of any shortfall in documents the bids will be rejected without any further correspondence in that regard.
- 14. A copy of this tender document must be attached with the technical bid confirming that all the contents and terms & conditions of this tender document are acceptable to the bidder. In the absence of uploading a duly signed copy of the tender document, the technical bid will be treated as non responsive and liable for rejection
- 15. Any kind of amendment to this tender will be part of this tender. Amendments, if any, will be published on the website of NITK (www.nitk.ac.in) only
- 16. Jurisdiction: All matters pertaining to this shall be subject to the jurisdiction of the courts in Mangalore only

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Item(s) Name to be Procured	Facility Management	
Туре	Service	
Brief Specifications of the Item(s)	Please see the details listed below	
Quantity	As specified in the details listed below	
Any other details/requirement	As specified in the details listed below	
Period required	Yearwise One year with extension upto five years	
	subject to good performance and / or changes in the	
	inventory of the significant items in the Rate for Bill of	
	Materials (RFBOM)	
Delivery Schedule expected	Immediately after the issue of work order	
after release of Purchase/Work		
order (in Weeks)		
EMD (in Rupees)	2% of Estimated cost (Rs 86,400/ $-$ )	
Performance Security to be	3% of the Total contract value in the	
given by Successful Bidder after	Purchase Order	
release of		
Purchase Order (in Rupees)		

### 4. Schedule of Requirements, Specifications and Allied Details

### 1.1 Terms of service

The company has to enter into a Service Level Agreement (SLA) with NITK on a stamp paper (for value as decided by the Institute) for the maintenance of NITK Campus Network. This will be at the yearly charges, inclusive of taxes and governmental levies applicable or becomes applicable later due to or under any law.

### 1.2 Scope of Service - SLA

### Service Level Agreement Format

(Subject to approval of competent authorities)

**Preamble** The company has to enter into a Service Level Agreement (SLA) with NITK on a stamp paper (for value as decided by the Institute) for the maintenance of NITK Campus Network. This will be on the yearly charges, inclusive of taxes and governmental levies applicable or becomes applicable later due to or under any law.

**Header** Service Level Agreement of IT Infrastructural Facilities Management between National Institute of Technology Karnataka, Surathkal (Srinivasnagar PO, Mangalore, Karnataka, 575025) and M/s XYZ for the period [DATE] to [DATE] References: Purchase Order No: Financial Bid No:

Amount : Rs (including GST) based on the annexed list of equipments and scope mentioned elsewhere.

Additions / deletions into / from FM list can change the total amount as agreed. Signed on this DD day of MM, YYYY

Authorised Signatory National Institute	Authorised Signatory of M/s XYZ
of Technology Karnataka, Surathkal	
(Professor-in-charge,	
Central Computer Centre)	

**Agreement** This agreement is made between National Institute of Technology Karnataka, Surathkal (Srinivasnagar PO, Mangalore, Karnataka, 575025) (hereinafter referred to as the Customer) and M/s XYZ (hereinafter referred to as the Facility Manager)

Whereas the customer is desirous of entering into a Facility Management agreement for its infrastructural facility and services described elsewhere in this document, with the Facility Manager.

The Facility Manager is desirous of entering into this Service Level Agreement providing such services under the terms and conditions as per this agreement.

The Facility Manager agrees to maintain the infrastructural facility listed herein as comprehensive on-site maintenance and perform such other services related to the facility management in accordance with the provisions laid out herein.

This will be on the yearly charges plus the taxes and the governmental levies applicable or becomes applicable later due to or under any law.

The maintenance charges are payable quarterly in arrears by the customer upon submission of all the related documents and the bill by the Facility Manager.

Additions or deletions of infrastructural facility are to be made on pro-rata basis, based on the individual costs annexed and provisions mentioned. This shall include the vendor management for Warranty period maintenance for newly acquired devices (L2–L7) as well.

### SCOPE OF WORK / TERMS OF SERVICE

**Terms of Service** The Facility Manager must provide the following services and enter into a Service Level Agreement with the Customer under the following terms and conditions.

- 1. Ensure the smooth operation of the Campus Network on 24x7 basis by acting as the single technical point of contact.
- 2. Accept the Layer2–Layer7 devices of our network (as per the enclosed list) under AMC and provide technical and configuration support wherever necessary.

- 3. Test the network periodically so that non–functional areas, if any, are detected and functioning is restored without any inordinate delay.
- 4. Coordinate troubleshooting of the wired network, wireless network, broadband connections to the Campus and the Internet connections of Customer's Campus Network with National Knowledge Network and any other service provider.
- 5. The Facility Manager must liaise with the following personnel:
  - a) Student network coordinators of each hostel
  - b) UPS maintainers for the UPS systems
  - c) Switch maintainers for any switches that are under warranty or AMC already.
  - d) Central Computer Centre for any access related problems, IP allocations and Network Management and alterations if any.
- 6. Coordinate the warranty period maintenance (vendor management services for the active devices, passive network (copper and fiber) wherever these are under warranty. *Please note that for the devices under warranty, the first level of service is to be provided by the Facility Manager alongwith the intimation to the appropriate vendor / warranty maintaining agency. Subsequently, the calls may be routed to the appropriate vendor / warranty maintaining agency. This data must be collected by the Facility Manager while taking over the Facility Management.*
- 7. The devices that are coming out of warranty are to be automatically taken into AMC unless overruled by the Customer. Hence the Facility Manager is bound by the rate of AMC for such devices as well, with appropriate back-to-back arrangement with the vendor. At the time of taking over the infrastructural facilities for Facility Management, the updated list of equipments for vendor management and comprehensive on-site maintenance shall be prepared by the Facility Manager and this shall be used as the basis of Facility Management after proper approval by the Customer's Facility Management Coordinator.
- 8. The Facility Manager must have an appropriate maintenance arrangement with the respective service providers or vendors of the equipments under AMC.
- 9. The Facility Manager must also do the following.
  - a) Take care of the operation and maintenance of the LANs of the Hostel & the Main Building, where there are no unique administrative in-charges. The H–O–D/H–O– S will be the administrative decision maker for LANs of the Departments and the other centres.
  - b) For any repairs for the copper / optical fiber cabling within the campus network including the supply of active devices and passive materials (copper and fiber) and providing labour thereof, the Rate for Bill of Materials (RFBOM) as per the purchase order shall apply. Further, for the items not in the RFBOM, if any, shall be

coordinated for procurement by the Customer, as per the procedure in practice by the Customer. The recommendation such activities to bills that are not exceeding the purchase by a limit which shall be identified / enhanced by the Competent Authorities of the Customer. Network expansions and repairs, if necessary, can also be covered under this Rate for Bill of Materials (RFBOM) subject to the above conditions.

- 10. If any equipment becomes unserviceable or unavailable in the market, the service provider shall obtain the information about the equivalent equipment from the original manufacturer with due certification and rates applicable for the new product must be competitive in comparison with other similar products. The Professor-in-charge, CCC shall take the final decision based on the verification of the new rates prepared by the service provider.
- 11. The Facility Manager will be provided with a room space in CCC as their Office-in-Campus during the tenure of their contract.
- 12. The Facility Manager must give comprehensive on-site maintenance for the active devices and passive network (copper and fiber) wherever these are not under warranty. Sufficient spares are to be kept by the Facility Manager for this purpose. At least 5 nos of 48 port switches, 5 Nos of 24 port switches and 3 Nos of PoE switches must be available as spares / standby at all times. These must be available for inspection by the Customer any time.
- 13. The Facility Manager must constitute a Help Desk to act as a nodal point to receive Telephone Calls / E-Mails / SMS / electronic logging from the users and co-ordinate all activities of the Facility Management. There should be at least three active mobile numbers, which will be published in the Customer's website for the service calls.
- 14. The Facility Manager must create an electronic complaint logging service and follow up. This should be a web site to log the call by anyone in NITK (intranet only). The logged call will have a severity level which should be assigned by CCC personnel (in consultation with the logger and FM). Depending upon the severity (in the range 1-10, 10 being most severe), there will be deadline by which the problem has to be fixed failing which will attract a penalty as decided by the Customer.
- 15. Preventive maintenance shall be done on **at least** monthly basis or as often as needed.
- 16. One Telephone will be provided at CCC; but telephone charges for calls outside of the campus shall be at the firm's expense.
- 17. Unscheduled, on-demand corrective / remedial maintenance shall include parts replacement wherever necessary and applicable. Replaced parts shall be of equal or better quality and specifications and to the department/section's satisfaction. Repair / replacement shall be decided by the Facility Manager. When replaced, the removed

parts shall remain the property of the Customer. Such incidents shall be duly recorded in triplicate (H-O-D/H-O-S, CCC and The Facility Manager) and the due action for disposing off such parts shall be the responsibility of the respective H-O-D/H-O-S.

- 18. Providing Site facilities, proper electrical connections (stabilized sources wherever necessary) and other environmental conditions is the responsibility of the Customer.
- 19. NITK Surathkal shall provide adequate working space and storage facilities for the test equipments and spares at NITK Surathkal's premises; but they will be kept at the Facility Manager's risk. These are to be in compliance with the requirements mentioned in their quote and such other agreements arrived upon while finalizing the contract by the Purchase Finalization Committee.
- 20. Hardware and Configuration alterations shall be duly intimated by NITK Surathkal to the Facility Manager.
- 21. Damages due to fire, thefts, riots and accidents, if any, are generally excluded from this agreement. However, claims for such exceptions must be properly justified and submitted to NITK Surathkal for scrutiny and decision.
- 22. Security of the infrastructural facility and the installed hardware components against theft or pilferage is the NITK Surathkal's responsibility. However, the Facility Manager must take adequate precautions as deemed fit to prevent pilferages. These shall be done under intimation to and approval of the Department or Section Head and the FM Coordinator. Facility Manager shall place identification tags on systems under maintenance.
- 23. Facility Manager shall ensure the uptime of 99%, failing which will attract a penalty to the Facility Manager. This is enforced at the discretion of NITK Surathkal and shall be equivalent to the maintenance amount for the number of days for which the unit remained not repaired or an amount as decided by NITK Surathkal depending on the inconvenience caused.
- 24. The Facility Manager cannot do any upward revision of the agreed rates at any time during the period of the agreement.
- 25. The transportation within the Campus for preventive maintenance and service calls shall be at the company's expense. Personnel should be provided with vehicles or fuel allowance as needed.
- 26. The team must be provided with sufficient troubleshooting tools including laptops. At least two laptops must be available with the team kept in the premises of NITK Surathkal.
- 27. The contract period is for ONE Year, coming into force from the first date indicated in

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the Service Level Agreement. Continuation into the following year shall be subject to good performance in the previous year in the continuous evaluation by the constituent departments and sections and approval of the Competent Authorities of the Institute. Such continuation is, however, limited to a **maximum of FIVE years**. NITK Surathkal shall decide on when to call fresh tender, depending on the significant changes in the overall inventory of the RFBOM (Rate for Bill of Materials) items.

- 28. The contract may be terminated with a minimum period of notice of three months by either party. Any violation by the firm results in a penalty of forfeiture of balance amount due with 12% interest thereupon chargeable on per month basis.
- 29. Payment will be made quarterly in arrears by NITK Surathkal. Advance payments are ruled out as per NITK Surathkal's accounting norms. Payment will be subject to the positive reports from the network users. Pending issues without satisfactory reason can result in payment being withheld.
- 30. The Network servicing engineers shall be highly skilled and shall possess appropriate net- working certificates. Their qualification details shall be made available to NITK Surathkal at the time of taking over and whenever such personnel are changed.
- 31. The Facility Manager must provide sufficient service engineers and Help Desk coordinators for NITK Surathkal who are to be stationed at the premises of NITK Surathkal to cover the services on 24x7 basis throughout the year of contract. At least three service engineers must be available in each shift always. Sufficient personnel are to be deployed to cover the peak demands.
- 32. The service engineers must have the knowledge of troubleshooting of the network and configuration of the devices. Configuration of devices shall be done based on the best practices which will be provided by NITK at the time of taking over the network for maintenance. Kindly note that best practices may change from time to time and the devices may have to be reconfigured accordingly. They are to be stationed at the premises of NITK Surathkal. Accommodation for them if requested, will be at the expense of the firm and subject to availability and discretion of NITK Surathkal.
- 33. The responsibility of handling the provisions of the Labour Act lies with the Facility Manager identified through this bidding process. The Facility Manager must give an undertaking to NITK Surathkal that the provisions of the Labour & Employment Act and Minimum Wages Act of Government of India are taken care of. Further, The Facility Manager shall submit a copy of the wages paid to the personnel on monthly basis during the period of contract.
- 34. The Facility Manager shall station only highly skilled service engineers and skilled help desk coordinators who have proper identity cards in NITK Surathkal's premises. Names, qualifications and changes, if any, of service engineers shall be duly intimated to NITK Surathkal by the Facility Manager.
- 35. The Facility Manager will work in coordination with the Warranty/AMC Maintainer of Computers, if any, and/or the concerned Department/Section to resolve computer or

network issues in a convincing way to the users, avoiding user level inconveniences to the maximum possible extent.

- 36. NITK Surathkal shall make the infrastructural facility available to the Facility Manager on a 24x7 basis in the Customer's premises. Whereabouts of the networks and any interdepartmental transfers (temporary or permanent) of devices will always be intimated to the Facility Manager.
- 37. Proper network troubleshooting tools including at least two laptops and cable testers shall be available with the service engineers.
- 38. Transportation (through vehicles/fuel allowance) within the Customer's premises for their service engineers shall be the responsibility of the Facility Manager. The service engineers have to cover the entire campus network spanning across the academic and residential buildings of the campus.
- 39. Additions and deletions of devices to / from the list of items under AMC are to be made on pro-rata basis and are to be intimated to the Facility Manager and FM Co-ordinator, with justifications.
- 40. For the devices under warranty/AMC, the first level of service is to be provided by the Facility Manager. Subsequently, the calls may be routed to the appropriate vendor / warranty period maintainer/AMC service provider. This data must be collected by the Facility Manager while taking over the Facility Management

### Limitations of Liability

- 1. The following are not covered under the agreement: Any service or circumstance posing as a safety or health hazard.
- 2. If the ownership of the infrastructural facility listed for FM changes from the customer , the obligation of the Facility Manager towards maintenance shall cease. Such infrastructural facility shall be removed on pro-rata basis under due intimation to H-O-D/H-O-S, CCC and the the Facility Manager.

## Format for Technical Bid

(The bidder must submit the bid in the general format shown below)

- a) The cost must include the associated charges by considering the following:
  - i) For the services of service engineers and the helpdesk coordinators.
  - ii) Rate for Bill of Materials (RFBOM) devices as listed below with warranty period as specified therein.

- iii) AMC charges for the devices listed below (*Please indicate the rate individually for the AMC and RFBOM. Please note that pro-rata additions / deletions and RFBOM based purchases are expected.*
- b) GST and Other Charges (*These must be shown explicitly in percentages and/or lump sum in figures*)
- c) Period for Facility Management Contract: Year wise One year with extension up to maximum of five years subject to good performance and / or changes in the inventory of the significant items in the RFBOM.

### DETAILED SPECIFICATIONS

### 1. Items under Facility Managing

Providing Service Engineers and Help Desk Co-ordinators in conforming with the terms and conditions mentioned elsewhere in the tender document and the bidders are expected to quote price bid for this part accordingly.

### 2. Devices to be covered under Rate for Bill of Materials (RFBOM)

Please give the **rate**, **total and tax** for all of the devices listed below in the price bid.

List of networking products for Rate Contract			
Sl.No.	Item	Qty	UoM
1	CAT6A U/FTP 23 AWG solid, LSZH Sheath, 305 Mtr/Roll : Cat6 A UTP Cable 305Mtr (4 Pairs Individually Foiled Twisted Pair (U/FTP) Cable 23 AWG solid copper conductors with a frequency of 500 MHz)	1	Box
2	CAT6 UTP cable, Roll of 305m : Cat6 UTP Cable 305 Mtr (4 Pairs Unshielded Twisted Pair (UTP) Cable Conductor Metal: Solid Bare Copper. 23 AWG copper wires).	1	Box
3	CAT6 UTP RJ 45 Jack box (100 no in a box)	1	Box
4	24-port CAT6 Patch Panel, loaded, 1U	1	No.
5	24-port CAT6 Patch Panel, Unloaded, 1U	1	No.
6	24-port CAT6A Patch panel – Unloaded	1	No.
7	CAT6 I/O	1	No.
8	CAT6A I/O	1	No.
9	Face Plate – Single	1	No.
10	Face Plate – Dual	1	No.
11	Back Box For Single / Dual Face plate	1	No.
12	CAT6 UTP Patch Chord : 1 M	1	No.

Table 2T

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13	CAT6 UTP Patch Chord : 2 M	1	No.
14	CAT6 UTP Patch Chord : 5 M	1	No.
15	CAT6A Patch Chord : 1 M	1	No.
16	CAT6A Patch Chord : 2 M	1	No.
17	CAT6A Patch Chord : 10 M	1	No.
18	Layer 3 Stackable 10GbE Switch 24 x 10GbE SFP+ Ports 2 x 100/40GbE QSFP28 Ports	1	No.
19	Dual AC PSUs loaded8 x 100/1000/2.5GBASE-T PoE ports 2 x 10G SFP+ ports	1	No.
20	L2 Managed Switch 24 x 100M/1G/2.5G/5G/10GBASE-T ports 4 x 10/25G SFP28 ports Stackable Managed Switch	1	No.
21	24 x 10GBASE-T Ports, 4 x 10G/25G SFP28 L2 Managed Switch	1	No.
22	24 Port 10/100/1000 Mbps POE + 4 1G Ports Managed switch	1	No.
23	48 Port 10/100/1000 Mbps POE + 4 1G Ports Managed switch	1	No.
24	24 Port 10/100/1000 Mbps + 4 1G Ports Managed switch	1	No.
25	48 Port 10/100/1000 Mbps + 4 1G Ports Managed switch	1	No.
26	24 Port 10/100/1000 Mbps POE + 4 10G Ports Managed switch	1	No.
27	24 Port 10/100/1000 Mbps + 4 10G Ports Managed switch	1	No.
28	48 Port 10/100/1000 Mbps + 4 10G Ports Managed switch	1	No.
29	Dual-band 802.11abgn/ac/ax Wireless Access Points, 2x2:2 streams (2.4GHz/5GHz) OFDMA, MU-MIMO, BeamFlex+, 802.3af PoE support. Does not include power adapter or PoE injector.	1	No.
30	Dual-band 802.11abgn/ac/ax Wireless Access Point with Multi-Gigabit Ethernet backhaul and onboard BLE/ZIgbee,, 2x2:2 streams (2.4GHz/5GHz) OFDMA, MU-MIMO, BeamFlex+, dual ports, 802.3at PoE support. Does not include power adapter or PoE injector	1	No.
31	Dual-band 802.11abgn/ac/ax Wireless Access Point with Multi-Gigabit Ethernet backhaul, 4x4:4 + 2x2:2 streams, OFDMA, MU-MIMO, BeamFlex+, dual ports,	1	No.

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	PoH/uPoE/802.3at PoE support. Does not include		
	power adapter or PoE injector		
32	Omni, outdoor access point, 802.11ax 2x2:2 internal BeamFlex+, dual band concurrent. One Ethernet port, PoE input20°C to 65°C Operating Temperature. Includes mounting bracket. Does not include PoE injector.	1	No.
33	Advance Replacement for outdoor AP, 1 Yr	1	No.
34	Associate Partner Support for AP Management License	1	No.
35	End user support	1	No.
36	Multipurpose Secure mounting bracket for Indoor Wireless Access Point. ( Supports mounting to hard wall, ceiling, pole or truss, without pad-lock support)	1	No.
37	Multipurpose Secure mounting bracket for Outdoor Wireless Access Point. (Supports mounting to hard wall, ceiling, pole or truss, without pad-lock support)	1	No.
38	Virtual wireless controller license.	1	No.
39	Virtual wireless controller Support license, 1 Yr.	1	No.
40	AP management license for 1 wireless AP access point.	1	No.
41	AP management support license, 1 Yr.	1	No.
42	GPON OLT with 4 PON SFP Ports, fully loaded with modules	1	No.
43	GPON OLT with 8 PON SFP Ports, 4 GIGA Ethernet Ports, 2 GIGA SFP Ports and 2 GIGA SFP+ Ports, Fully loaded with modules	1	No.
44	GPON OLT with 16 PON SFP Ports, fully loaded with modules	1	No.
45	XPON ONU Router with 1 PON and 1 Giga Port	1	No.
46	XPON ONU Router with 1 PON and 1 Giga Port and 1 FXS port	1	No.
47	GEPON/GPON ONU 300Mbps WiFi Router with 1PON, 1GE & 1FE, 1FXS Port	1	No.
48	GEPON/GPON ONU 1200 Mbps WiFi Router with 1PON, 1GE & 1FE	1	No.
49	5MP IR Bullet Camera (2.8mm Lens)	1	No.
50	5MP IR Bullet Camera (4mm Lens)	1	No.
51	8MP IR Bullet Camera (2.8mm Lens)	1	No.
52	8MP IR Bullet Camera (3.6mm Lens)	1	No.
53	4 Channel NVR with 4K Support and 1 HDD Slot	1	No.
54	8 Channel NVR with 4K Support and 1 HDD Slot	1	No.

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55	16 Channel NVR with 4K Support and 1 HDD Slot	1	No.
56	32 Channel NVR with 4K Support and 4 HDD Slots	1	No.
57	5MP IR Dome Camera (2.8mm Lens)	1	No.
58	5MP IR Dome Camera (4mm Lens)	1	No.
59	8MP IR Dome Camera (2.8mm Lens)	1	No.
60	8MP IR Dome Camera (3.6mm Lens)	1	No.
61	4TB HDD	1	No.
62	8TB HDD	1	No.
63	10TB HDD	1	No.
64	6U Wall mount Rack with standard internal size & external size with minimum of width:21" & depth : 23" with accessories (2 fan tray, cable managers-3 nos, 6 socket power strip, front glass with lock, hardware packet)	1	No.
65	9U Wall mount Rack with standard internal size & external size with minimum of width: 21" & depth : 23" with accessories (2 fan tray, cable managers-3 nos, 6 socket power strip, front glass with lock, hardware packet)	1	No.
66	12U Wall mount Rack with standard internal size & external size with minimum of width: 21" & depth : 23" with accessories (2 fan tray, cable managers-3 nos, 6 socket power strip, front glass with lock, hardware packet)	1	No.
67	15U Wall mount Rack with standard internal size & external size with minimum of width:21" & depth : 23" with accessories (2 fan tray, cable managers-3 nos, 6 socket power strip, front glass with lock, hardware packet)	1	No.
68	17U Floor mount rack : 17U Network Enclosure Frame, 600X800 -STEEL, Casters Set of 4, Adjustable Levellers set of 4, Glass Door-600-17U, Metal Door- 600-17U- Vented - Rear, Quantity Side Panels-800-17U-Vented, Horizontal Power Distribution Unit with 6 x 5/15A sockets Round Pin, 230 Volts AC, 32 Amp with Plug, Horz. Cable Manager-1U-Loop, Mounting Hardware- (Pack of 20), Fan-90CFM.	1	No.
69	22U Floor mount rack : 22U Network Enclosure Frame, 600X800 -STEEL, Casters Set of 4, Adjustable Levellers set of 4, Glass Door-600-22U, Metal Door-600-22U- Vented, Side Panels-800-22U-Vented, Mounting Hardware- (Pack of 20), FHU with 2 FAN 180CFM, Horizontal Power Distribution Unit with 6 x 5/15A sockets Round Pin, 230 Volts AC, 32 Amp with Plug.	1	No.

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70	42U Floor Mount Rack: Front Glass and Steel Perforated Door Options, Rear Steel Doors With Perforation, Side Panels With Key Locks and Slam Latch, Heavy Duty Caster Wheels With Front Break Options, Keyboard Tray Sliding and Rotary, 4 Cooling Fan For Heat dissipation, 100mm vertical cable management in all Corner.	1	No.
71	6 Socket PDU, 5 Amps	1	No.
72	Horz. Cable Organiser	1	No.
73	Rack mount 19" 1U 12 Fiber LC type LIU with loaded adapter panel with plates	1	No.
74	Rack mount 19" 1U 12 Fiber SC type LIU with loaded adapter panel with plates	1	No.
75	Rack mount 19" 1U 24 Fiber LC type LIU with loaded adapter panel with plates	1	No.
76	1" Pvc Conduit Pipe & coupler & clamp ( for open conducting )	1	Mtr.
77	1.5 "Pvc Conduit pipe & coupler & clamp ( for open conducting )	1	Mtr.
78	2 " Pvc Conduit Pipe & coupler & clamp ( for open conducting )	1	Mtr.
79	0.5" Pvc Casing - Box type	1	Mtr.
80	1" Pvc Casing – Box type	1	Mtr.
81	1.5" Pvc Casing – Box type	1	Mtr.
82	2" Pvc Casing -Box type	1	Mtr.
83	1" Pvc Flexible Pipe	1	Mtr.
84	1.5" Pvc Flexible Pipe	1	Mtr.
85	2" Pvc Flexible Pipe	1	Mtr.
86	Grey Channel 3" -75/75	1	Mtr.
87	Grey Channel 4" -100/100	1	Mtr.
88	G I PIPE 2"	1	Mtr.
89	Stay Wire ( G I WIRE )	1	roll
90	SC-SC Style Singlemode Duplex patch cord, 3 Mtr.	1	No.
91	SC-LC Style Singlemode Duplex patch cord, 3 Mtr.	1	No.
92	LC-LC Style Singlemode Duplex patch cord, 3 Mtr.	1	No.
93	1Gbps SFP module, LC Connector, SM	1	No.
94	10Gbps SFP+ module, LC Connector, SM	1	No.
95	1Gbps SFP module, RJ-45	1	No.
96	10Gbps SFP+ module, RJ-45	1	No.
97	25GBASE-LR SM SFP+ Transceiver, 10KM	1	No.

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		-	
98	2 core outdoor armoured OFC, SM	1	Mtr.
99	6 core outdoor armoured OFC, SM	1	Mtr.
100	12 core outdoor armoured OFC, SM	1	Mtr.
101	24 core outdoor armoured OFC, SM	1	Mtr.
102	SC pigtails, SM, Simplex, 1 Mtr.	1	No.
103	SC pigtails, SM, Simplex, 1.5 Mtr.	1	No.
104	LC pigtails, SM, Simplex, 1.5 Mtr.	1	No.
105	SC connectors, SM	1	No.
106	1:2 Splitter	1	No.
107	1:4 Splitter	1	No.
108	1:8 Splitter	1	No.
109	1:16 Splitter	1	No.
110	1:32 Splitter	1	No.
111	Fiber Distribution Box - small	1	No.
112	Fiber Distribution Box - medium	1	No.
113	Fiber Distribution Box - large	1	No.
114	Fiber termination box	1	No.
115	32mm HDPE pipe (High grade)	1	Mtr.
116	Outdoor OFC Joint Kit: support min of 24 core fiber, 2 cable entry ports, each with multi cable capability, vertical type of fiber optic splice clousures.Fiber optic splice closure kit usually includes: end plate, splice tray organiser, fiber splice tray, cover, cable grommets, grommet retainer, mounting bracket, closure mounting & misc.hardware.	1	No.
117	Supply of outdoor OFC Joint kit (rectangular)	1	No.
118	Supply of OFC cable route marker	1	No.
119	Cable dressing both end for marking for UTP cable inividual point wise	1	No.
120	6U - Rack dressing	1	No.
121	9U - Rack dressing	1	No.
122	12U - Rack dressing	1	No.
123	15U - Rack dressing	1	No.
124	17U - Rack dressing	1	No.
125	22U - Rack dressing	1	No.
126	42U - Rack dressing	1	No.
127	42U – Open Rack dressing	1	No.
128	45U - Rack dressing	1	No.
129	6U - Rack Re-dressing	1	No.
130	9U - Rack Re-dressing	1	No.
131	12U - Rack Re-dressing	1	No.
132	15U - Rack Re-dressing	1	No.

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134	2211 Pack Padrossing	1	No.
	22U - Rack Re-dressing		
135	42U - Rack Re-dressing	1	No.
136	42U – Open Rack Re-dressing	1	No.
137	45U - Rack Re-dressing	1	No.
138	OFC Cable removing	1	Mtr.
139	Switch removing	1	No.
140	Network rack removing	1	No.
141	Jack / Patch panel removing	1	No.
142	Laying of 4-Pair, CAT6 / CAT6A UTP Cable, roll of 305	1	Box
1.40	Mtr.	1	NT.
143	Termination of CAT6 UTP I/O	1	No.
144	Termination of CAT6A UTP I/O	1	No.
145	Fixing of Face Plate & Back Box	1	Set
146	Termination of CAT6 24-port loaded, Jack / Patch Panel, 1U	1	Panel
147	Termination of CAT6A 24-port loaded, Jack / Patch Panel, 1U	1	Panel
148	Fixing of Ethernet switch	1	No.
149	Configuration of Ethernet switch	1	No.
150	Fixing & configuration of OLT	1	No.
151	Fixing & configuration of ONU	1	No.
152	Fixing & Configuration of Dome camera	1	No.
153	Fixing & Configuration of Bullet camera	1	No.
154	Fixing & Configuration of NVR	1	No.
155	Fixing of indoor wireless access point	1	No.
156	Configuration of indoor wireless access point	1	No.
157	Fixing of outdoor wireless access point	1	No.
158	Configuration of outdoor wireless access point	1	No.
159	Crimping of RJ45 Connector	1	Connector
160	Removing of existing CAT6 cable	1	Mtr.
161	Removing of existing PVC Pipe/Cassing	1	Mtr.
162	Fixing of 6U Rack with Accessories	1	Rack
163	Fixing of 9U Rack with Accessories	1	Rack
164	Fixing of 12U Rack with Accessories	1	Rack
165	Fixing of 15U Rack with Accessories	1	Rack
166	Fixing of 17U Rack with Accessories	1	Rack
167	Fixing of 19U Rack with Accessories	1	Rack
168	Fixing of 22U Rack with Accessories	1	Rack
169	Fixing of 42U Rack with Accessories	1	Rack
170	Label & Test of UTP cable, individual point wise	1	No.
170	Laying of OFC	1	Mtr.
172	Laying of fiber cables in cable trays, Trenches, plant structures & building walls irrespective of the height.	1	Mtr.

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	Optical fibre cable with cores upto 48		
	cores. Supply of cable is not inluded		
173	Laying of HDPE pipe	1	Mtr.
174	Fixing & Mounting of LIU incuding fixing of adapter panel, dressing,	1	LIU
	marking		
175	Laying of Conduit Pipe / Casing / Flexible Pipe on	1	Mtr.
-	trench / false ceiling / tray		
	/ wall		
176	Fixing of distribution box - small	1	No.
177	Fixing of distribution box - Medium	1	No.
178	Fixing of distribution box - Large	1	No.
179	Excavation of soft soil for laying of OFC cable	1	Mtr.
180	Excavation of hard soil for laying of OFC cable	1	Mtr.
181	Excavation of road for laying G I pipe to pass OFC cable	1	Mtr.
	(Road cutting for		
	laying of G I Pipe)		
182	Termination / Splicing of OFC cable per core	1	Core
183	Installation of OFC cable route marker	1	No.
184	OTDR Testing & soft documentation reports of OFC per	1	Core
	core		
185	Laying of 40 mm GI pipe, backfilling & finishing after	1	Mtr.
	laying (supply of pipe		
	is not included)		
186	Laying of G I Wire with necessary accessories	1	Mtr.
187	Marker Tie (Nylon) 20 cm (packet of 100)	1	Packet
188	Marker Tie (Nylon) 10 cm (packet of 100)	1	Packet
189	Cable Tie (Nylon) 15 cm (packet of 100)	1	Packet
190	Ferrules	1	Packet
191	TAG 250 MM	1	Packet
192	Electrical Gum Tape	1	roll
193	Roll Plug 6 mm	1	Packet
194	Screw 1.5"	1	Packet
195	Anchor Bolt 8 mm	1	No.
196	Coupler 1"	1	No.
197	Coupler 1.5"	1	No.
198	Coupler 2"	1	No.
199	Bend 1"	1	No.
200	Bend 1.5"	1	No.
201	Bend 2"	1	No.
202	Saddle 1"	1	Box
203	Saddle 1.5"	1	Box
204	Saddle 2"	1	Box

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205	T 1"	1	No.
206	T 1.5"	1	No.
207	T 2"	1	No.
208	Elbow 1"	1	No.
209	Elbow 1.5"	1	No.
210	Elbow 2" Coach Bolt	1	No.
211	Numbering of OFC cables Dressing of OFC cables	1	No.
212	1" Velcro for dressing	1	No.

# 2.1 Detailed/Essential specifications of some of the items in the aforementioned list.

### 6 Core Single Mode Armoured Fibre Cable:

S/N	Specifications
	Brand & Model Number to be mentioned
1	6 fiber Single Mode, Armored, Unitube, Gel filled cable complying to ISO/IEC 11801, ITU-T G 652.D, Telcordia GR-20
2	Electro Chromium Coated Corrugated Steel Tape (ECCS)
3	Core/Mode-Field Diameter@1310 nm(µm) - 9.2+/- 0.4 um
4	Cladding Diameter - 125 + - 1 um
5	Coating Diameter - 245 + - 10 um
6	Attenuation: 1310 nm: ≤ 0.38 dB/Km, 1550 nm: ≤ 0.25 dB/Km
7	Chromatics Dispersion: Maximum at 1285-1330nm ≤ 3.5 ps/nm.Km Maximum at 1270-1340nm ≤ 5.3 ps/nm.Km Maximum at 1550 nm ≤ 18 ps/nm.Km
8	Cable cut-off wavelength - ≤ 1260 nm
9	Cladding non circularity - ≤ 1.0 %
10	Core/ clad concentricity error - ≤ 0.8 µm
11	Loose tube material - PBTP Loose tube filled
12	Jacket – HDPE Black
13	Tensile Strength - Min 1000N or Better
14	Crush Resistance - 2000N/100 mm or Better
15	Nominal Cable Diameter - 12mm nominal
16	Bending Radius - 20 X Overall diameters
17	Operating Temperature20 Degree C to +70 Degree C
18	Storage Temperature -20 Degree C to +70 Degree C
19	Documentation – Technical Compliance Sheet, Datasheet & MAF from OEM
20	Structured cabling products should be of reputed make & field proven Structured Cabling Solution (Copper & Fiber) should be from one single OEM/Brand to achieve optimum performance. OEM should be member of International Structured Cabling Standards related Organization. Certificates need to be submitted The quoted Brand & OEM should have direct presence in India Market for atleast 10+ Years

### 12 Core Single Mode Armoured Fibre Cable:

S/N	Specifications
	Brand & Model Number to be mentioned
1	12 fiber Single Mode, Armored, Unitube, Gel filled cable complying to ISO/IEC 11801, ITU-T G 652.D, Telcordia GR-20
2	Electro Chromium Coated Corrugated Steel Tape (ECCS)
3	Core/Mode-Field Diameter@1310 nm(µm) - 9.2+/- 0.4 um
4	Cladding Diameter - 125 + - 1 um
5	Coating Diameter - 245 + - 10 um
6	Attenuation: 1310 nm: ≤ 0.38 dB/Km, 1550 nm: ≤ 0.25 dB/Km
7	Chromatics Dispersion: Maximum at 1285-1330nm ≤ 3.5 ps/nm.Km Maximum at 1270-1340nm ≤ 5.3 ps/nm.Km Maximum at 1550 nm ≤ 18 ps/nm.Km
8	Cable cut-off wavelength - ≤ 1260 nm
9	Cladding non circularity - $\leq 1.0$ %
10	Core/ clad concentricity error - $\leq 0.8 \ \mu m$
11	Loose tube material - PBTP Loose tube filled
12	Jacket – HDPE Black
13	Tensile Strength - Min 1000N or Better
14	Crush Resistance - 2000N/100 mm or Better
15	Nominal Cable Diameter - 12mm nominal
16	Bending Radius - 20 X Overall diameters
17	Operating Temperature20 Degree C to +70 Degree C
18	Storage Temperature -20 Degree C to +70 Degree C
19	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM

#### 24 Core Single Mode Armoured Fibre Cable:

S/N	Specifications
	Brand & Model Number to be mentioned
1	24 fiber Single Mode, Armored, Unitube, Gel filled cable complying to ISO/IEC 11801, ITU-T G 652.D, Telcordia GR-20
2	Electro Chromium Coated Corrugated Steel Tape (ECCS)
3	Core/Mode-Field Diameter@1310 nm(µm) - 9.2+/- 0.4 um
4	Cladding Diameter - 125 + - 1 um

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5	Coating Diameter - 245 + - 10 um
6	Attenuation: 1310 nm: ≤ 0.38 dB/Km, 1550 nm: ≤ 0.25 dB/Km
7	Chromatics Dispersion: Maximum at 1285-1330nm ≤ 3.5 ps/nm.Km Maximum at 1270-1340nm ≤ 5.3 ps/nm.Km Maximum at 1550 nm ≤ 18 ps/nm.Km
8	Cable cut-off wavelength - ≤ 1260 nm
9	Cladding non circularity - $\leq$ 1.0 %
10	Core/ clad concentricity error - $\leq 0.8 \ \mu m$
11	Loose tube material - PBTP Loose tube filled
12	Jacket – HDPE Black
13	Tensile Strength – Min 1000N or Better
14	Crush Resistance - 2000N/100 mm or Better
15	Nominal Cable Diameter - 12mm nominal
16	Bending Radius - 20 X Overall diameters
17	Operating Temperature20 Degree C to +70 Degree C
18	Storage Temperature -20 Degree C to +70 Degree C
19	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM

#### 24 Ports LIU:

S/N	Specifications
	Brand & Model Number to be mentioned
1	Standard 19" Rack mountable
2	LIU should be constructed of 16-gauge steel, powder-coated loaded with 12 LC SM Duplex Ports (24P)
3	Should have at least 2 fiber spools
4	Removable front and top covers for better access
5	Mounting & termination accessories to be supplied
6	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM

#### 12 Ports LIU:

S/N	Specifications
	Brand & Model Number to be mentioned
1	Standard 19" Rack mountable
2	LIU should be constructed of 16-gauge steel, powder-coated loaded with 06 LC SM Duplex Ports (12P)
3	Should have at least 2 fiber spools
4	Removable front and top covers for better access
5	Mounting & termination accessories to be supplied
6	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM

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### 06 Ports LIU:

S/N	Specifications
	Brand & Model Number to be mentioned
1	Standard 19" Rack mountable
2	LIU should be constructed of 16-gauge steel, powder-coated loaded with 03 LC SM Duplex Ports (06P)
3	Should have at least 2 fiber spools
4	Removable front and top covers for better access
5	Mounting & termination accessories to be supplied
6	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM

### Pigtail:

S/N	Specifications
	Brand & Model Number to be mentioned
1	Single-Mode Fiber pigtail with LC connectors
2	Should meet all applicable standards
3	Compliant with TIA/EIA-568- C, IEC standards
4	Insertion Loss – Max 0.3dB
5	Return Loss - ≥50 dB
6	Length: 1m
7	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM

#### Fiber Patch Cord:

S/N	Specifications
	Brand & Model Number to be mentioned
1	Single-Mode Fiber Patch cord with LC-to-LC connectors
2	Should meet all applicable standards
3	Compliant with TIA/EIA-568- C, IEC standards
4	Insertion Loss – Max 0.3dB
5	Return Loss - ≥50 dB
6	Length: 3m
7	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM

### Category 6 UTP Cable:

S/N	Specifications
	Brand & Model Number to be mentioned
1	Category 6 Unshielded Twisted Pair 4 pair 305 meters' cable
2	23 AWG Solid Bare Copper Wire UTP Cable
3	Should Support ANSI/TIA-568-C.2 Standard
4	ETL Verified 4-Connector Channel to ANSI/TIA-568-C.2 Category 6 and ISO/IEC 11801 Class E upto 100 Mtrs (Reports / Certificates need to be attached)
5	Separator / Cross Filler

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6	Sheath – Flame Retardant PVC
7	Conductor Resistance: $\leq 9.38 \Omega/100$ m or better
8	Characteristics Impedance: $100\pm15\Omega$ or better
9	Mutual Capacitance: < 5.6nF/100m or better
10	Delay Skew: <45ns/100m or better
11	Operating Temperature: -20°C ~ 70°C or higher
12	UL Listed, ETL Verified, RoHS Compliant
13	Zero-bit error test by Intertek (Reports / Certificates need to be attached)
14	UL and RoHS Compliant
15	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM
	Structured cabling products should be of reputed make & field proven
	Structured Cabling Solution (Copper & Fiber) should be from one single OEM/Brand to achieve optimum
	performance.
16	OEM should be member of International Structured Cabling Standards related Organization. Certificates
	need to be submitted
	The quoted Brand & OEM should have direct presence in India Market for atleast 10+ Years
	OEM should have ISO 9001:2015, ISO 14001:2015

### Category 6 Keystone

S/N	Specifications	
	Brand & Model Number to be mentioned	
1	Category 6 UTP Keystone	
2	Universal labels Color coded for T568A/568B, TIA568 C.2	
3	Should Support ANSI/TIA-568-C.2 Standard	
4	Suitable for 23-26 AWG stranded and solid wire	
5	ETL verified unshielded EIA/TIA connecting hardware (Reports / Certificates need to be attached)	
6	Contact Bracket - PC, UL 94V-2	
7	IDC Housing - PC+ Glass Fiber, UL 94V-2, 50 µinches gold on plug contact area, Phosphor bronze with Nickel plated IDC Contact	
8	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM	

### Faceplate:

S/N	Specifications	
	Brand & Model Number to be mentioned	
1	Singel / Dual / Quad (Square) with shutter	
2	Screws / hole covers to supplied with face plate	
3	Labelling on transparent plastic window,	
4	Face Plate - ABS, UL94-HB	
5	Dust Cover - ABS, UL94-HB	
6	PVC – Backbox	
7	Documentation – Technical Compliance Sheet, Datasheet & MAF from OEM	

### 24 Ports Category 6 Patch Panel

S/N	Specifications		
	Brand & Model Number to be mentioned		
1	Powder coated steel in 24 port configurations		
2	Should support port identification numbers on the panel		

3	Rear Cable Management Bar support		
4	Should be loaded with Category 6 Keystones		
5	Contact Bracket - PC, UL 94V-2		
6	IDC Housing - PC+ Glass Fiber, UL 94V-2, 50 µinches gold on plug contact area, Phosphor bronze with Nickel plated IDC Contact		
7	Documentation – Technical Compliance Sheet, Datasheet Manufacturer Authorization Form (MAF)		

### Category 6 Patch Cord:

S/N	Specifications		
	Brand & Model Number to be mentioned		
1	Cat-6 UTP Patch Cord		
2	24AWG stranded bare copper conductor		
3	Snag less Semi-Transparent Moulded Boot		
4	Phosphor bronze Contact with Nickel Plated		
5	Jacket – Flame Retardant PVC		
6	Insulation Resistance: 150M $\Omega/Km$		
7	Contact Resistance: 20 m $\Omega$ ,		
8	Insertion: 750 Mating Cycles,		
9	ETL Verified 4-Connector Channel to ANSI/TIA-568-C.2 Category 6 and ISO/IEC 11801 Class E upto 100		
9	Mtrs (Reports / Certificates need to be attached)		
10	Length – 1m, 2m, 3m		
11	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM		

#### 42U/27U/22U Floor Mount Rack:

S/N	Specifications		
	Brand & Model Number to be mentioned		
1	42U - 800X1000- Floor Mount Rack		
2	Construction - All Welded construction		
3	Casters Set of 4 Adjustable Levellers set of 4		
4	19" Reduced Channel - Loop Type		
5	Top and Bottom Cover - Welded to Frame, Vented and Field Cable entry exit cut outs		
6	Front Door - Lockable Toughened Glass		
7	Finish - Powder Coated		
8	Vertical Power Distribution Unit with 12 x 5/15 sockets Round Pin, 230 Volts AC 32 Amp with Plug		
9	Horz. Cable Managers -1U-Loop		
10	Grounding and Bonding		
11	Rack Standard - DIN 41494 or better		
12	Accessories - Cable Manager, Fan, Hardware mounting kit		
13	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM		

### 42U/27U/22U Wall Mount Rack:

S/N

Specifications

Brand & Model Number to be mentioned

1	42U - 800X1000- Wall Mount Rack	
2	Construction - All Welded construction	
3	19" Reduced Channel - Loop Type	
4	Top and Bottom Cover - Welded to Frame,	
4	Vented and Field Cable entry exit cut outs	
5	Front Door - Lockable Toughened Glass	
6	Finish - Powder Coated	
7	Vertical Power Distribution Unit	
	with 12 x 5/15 sockets Round Pin, 230 Volts AC 32 Amp with Plug	
8	Horz. Cable Managers -1U-Loop	
9	Grounding and Bonding	
10	Rack Standard - DIN 41494 or better	
11	Accessories - Cable Manager, Fan, Hardware mounting kit	
12	Documentation - Technical Compliance Sheet, Datasheet & MAF from OEM	

#### 9U Wall Mount Rack

S/N	Specifications		
	Brand & Model Number to be mentioned		
1	9U - 550X550- Wall Mount Rack		
2	Construction - All Welded construction		
3	Adjustable 19" equipment mounting verticals provide the better mounting flexibility, and maximizes the usable mounting space		
4	Top and Bottom Cover - Welded to Frame, Vented and Field Cable entry exit cut outs		
5	Front Door - Lockable Toughened Glass		
6	Finish - Powder Coated		
7	Horz. Cable Managers -1U-Loop		
8	Grounding and Bonding		
9	Rack Standard - DIN 41494 or better		
10	Accessories - Cable Manager, Fan, Hardware mounting kit		
11	Documentation – Technical Compliance Sheet, Datasheet & MAF from OEM		

#### 15U Wall Mount Rack

S/N	Specifications		
	Brand & Model Number to be mentioned		
1	15U - 550X550- Wall Mount Rack		
2	Construction - All Welded construction		
3	Adjustable 19" equipment mounting verticals provide the better mounting flexibility, and maximizes the usable mounting space		
4	Top and Bottom Cover - Welded to Frame, Vented and Field Cable entry exit cut outs		
5	Front Door - Lockable Toughened Glass		
6	Finish - Powder Coated		
7	Horz. Cable Managers -1U-Loop		
8	Grounding and Bonding		
9	Rack Standard - DIN 41494 or better		
10	Accessories - Cable Manager, Fan, Hardware mounting kit		
11	Documentation – Technical Compliance Sheet, Datasheet & MAF from OEM		

S/N	Parameter	Specification / Value
1	Switch	Preferred Make : D-Link/Cisco/Aruba
2	Hardware	
	Interfaces	10GbE SFP+ Ports - Min 24 or more 100GbE QSFP28 Ports - Min 4 or more 1 USB 2.0 port 1 RS-232 / RJ45 console port Management port: 1 x RJ-45 ports All Ports & Necessary Licenses to be quoted, supplied / enabled from day one
	Power Supply, Fans	Dual redundant (1+1) & hot-pluggable AC power supplies loaded 110-240 V AC power Fans – Redundant 2 or more
	Dimensions & Rack Installation	19-inch Rack Mount with Rack Installation Kit
	Environmental	Operating temperature: 0° to 50° C or Higher MTBF - > 1,00,000 Hours or Higher
3	Performance	
	Switching Capacity	Packet Switching Capacity - Min 1.28Tbps or higher Layer 2/Layer 3 throughput - Min 950 Mpps or higher
	Packet Buffer	Min 4 MBytes or higher Packet Buffer
4	Software Features	
	Network Operating System	License should include all Advanced software features Switch should have Commercial Enterprise NOS from same OEM as Switch. Open Source based NOS not acceptable.
	L2 Features	MAC addresses per system: Min 32K or Higher Number of VLANs supported: 4K or Higher Range of VLAN IDs: 4K Jumbo frames: 9K or Higher STP-IEEE 802.1D, RSTP-IEEE 802.1w, MSTP-IEEE 802.1s Port Mirroring VLAN - IEEE 802.1Q, Port-based Loopback Detection & Protection (Independent of STP) IEEE 802.3ad: Link Aggregation Control Protocol (LACP) Double VLAN (Q-in-Q), Port based and Selective
	L3 Features	Address Resolution Protocol (ARP) IPv4 & IPv6 DHCP Relay Minimum 1K or more IPv6 SVI / VLAN Interfaces IPv4 & IPv6 Static Routing Static Routing, OSPF v2/v3, BGP, BGP4+

### 24 x 10G SFP + 4 x 100G L3 Managed Switch:

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		PBR, ECMP & VRRP
		VRF Lite
		MAC, IPv4 Access control list (ACL)
		802.1X Radius Authentication - Port & Host based
	Access Security	RADIUS, TACACS+
	IPv4	Port Security, DAI, DHCP Snooping, IPSG
		Storm control
		SSH v1, v2
		IPv6 Access control list (ACL)
	Access Security	SSH (IPv6)
	IPv6	SSL (IPv6)
		Web-UI (IPv6)
		Physical Stacking upto 4 switches with Single IP Management
		Cross-member link aggregation
		IEEE 802.3ad / 802.1AX LACP
	High Availability	Number of link aggregation groups (LAGs) supported: 32
		Maximum number of ports per LAG: 8
		Dual Images and Dual Configurations
		OAM / IP SLA / Equivalent
		IEEE 802.3ah Ethernet Link OAM
	Operations,	IEEE 802.1ag Connectivity Fault Management (CFM)
	Administration and Maintenance	Y.1731 OAM
	and maintenance	Dying Gasp
		Digital Diagnostic Monitoring (DDM)
		Layer 2 QoS, Layer 3 QoS, Hardware queues per port: 8
	Quality of Service	Strict-priority queuing (PQ), Weighted Round Robin / shaped-deficit
	(QoS)	weighted round robin (WRR/WDRR/SDWRR), Rate limiting
	(200)	L2-L4 classification criteria: Interface, MAC address, Ether Type, 802.1p,
		VLAN, IP address, DSCP/IP precedence, TCP/UDP port numbers
		IGMP snooping: v1, v2, and v3, IGMP Filter
	Multicast Features	MLD Snooping
		PIM SM,DM,SSM, IGMP v1/v2/v3
		Multicast VLAN (MVR)
		On-Premise Management
		Role-based Full Featured CLI management
		Web-UI (IPv4 & IPv6)
		SNMP IPv4 & IPv6
	Device	SNMP v1/v2/v3
	Management and	SNMP Traps
	Operations	Remote monitoring (RMON)
		sFlow
		IPv4 & IPv6 DHCP Client & Relay
		Network Time Protocol (NTP) / SNTP
		SSH v2 (IPv4 & v6)
		IEEE 802.1AB: Link Layer Discovery Protocol (LLDP)

		IPv4/v6 Dual Stack
		IPv6 tunnelling
	NMS Monitoring	CPU Utilization Memory Utilization Port Status & Utilization SNMP Traps Syslog Monitoring ARP Table & FDB Table Monitoring
5	Certifications / Compliance	OEM/OS/Switch should have IEC or ISA or equivalent Indian Cyber Security Certification. Certificate to be submitted
6	OEM/Bidder Criteria	Offered Brand should have direct presence in India Offered Brand should have own Tech support center (TAC) in India Offered Brand should have own service/repair/support center in Karnataka for faster support Offered Brand & Models should be reputed & field proven Bidder should have Registered office in Karnataka Bidder should have qualified technical support team locally
7	Country of Origin	Non-MIC
8	Compatibility	All Switches, Modules & Transceivers should be from same Brand
9	PoC/Demo	PoC / Demo needs to be arranged during technical evaluation stage (if required). Bidder should have qualified Manpower to demonstrate
10	Warranty, Services and Support	Min 3 years Warranty On-site Installation, Configuration and troubleshooting support The offered model should be latest. End of Sales (EoS) announced model or model going to be EoS in next 6 months should not be quoted
11	Documentation	Technical Compliance sheet, Datasheet & Cross Reference Manufacturer Authorization Letter
12	Package Contents	24 Ports 10GbE SFP+ Switch + Uplink Ports + Stacking Modules / Cables with required warranty Power Supplies + Fans Necessary Port, Feature & OS License (If applicable) 1U Rack Mount Kit Console Cable AC Power Cord Installation Guide
13		Should be compatible to deploy with Eduroam with Dynamic VLAN. Strom control, Access Control, setup of NITK and should be demonstrated before participating in the tender and MAF from the OEM should be submitted along with bid

# 8-Port Multi-Gigabit Smart Managed Switch :

S/N	Parameter Specification / Value	
1	Switch	Preferred Make : D-Link/Cisco/Aruba

2	Hardware						
	Interfaces	2.5GbE RJ45 PoE+ Ports - Min 8 or more 10GbE SFP+ Uplink Ports - Min 2 or more 1 RS-232 / RJ45 console port All Ports & Necessary Licenses to be quoted, supplied / enabled from day one					
	Power Supply	Power Input: 110-240 V AC power					
	Dimensions & Rack Installation	19-inch Rack Mount with Rack Installation Kit					
	Environmental	Operating temperature: 0° to 50° C or Higher MTBF - > 1,00,000 Hours or Higher					
3	Performance						
	Packet Buffer	Min 1.5 MBytes or higher Packet Buffer					
	Switching Capacity	Packet Switching Capacity - Min 80 Gbps or higher Layer 2/Layer 3 throughput - Min 59 Mpps or higher					
	Power over Ethernet (PoE)	IEEE 802.3af Power over Ethernet (PoE) / 802.3at Power over Ethernet (PoE+) Minimum 240W or higher PoE Power Budget PD Alive to check the status of PD Devices connected to PoE ports Time based PoE to allow power only during working hours & save power					
4	Software Features						
	Network Operating System	License should include all Advanced software features Switch should have Commercial Enterprise NOS from same OEM as Switch. Open Source based NOS not acceptable.					
	Features	MAC addresses per system: Min 16K or Higher Number of VLANs supported: 4K or Higher Range of VLAN IDs: 4K Jumbo frames: 9K or Higher STP-IEEE 802.1D, RSTP-IEEE 802.1w, MSTP-IEEE 802.1s Port Mirroring VLAN - IEEE 802.1Q, Port-based Voice VLAN Loopback Detection & Protection (Independent of STP) IEEE 802.3ad: Link Aggregation Control Protocol (LACP) Address Resolution Protocol (ARP) IPv4 & IPv6 DHCP Relay SVI / VLAN IPv4 & IPv6 Interfaces IPv4 & IPv6 Static Routing					

		MAC, IPv4 Access control list (ACL)		
		802.1X Radius Authentication – Port & Host based		
	Access Security IPv4	RADIUS, TACACS+		
		Port Security, DAI, DHCP Snooping, IPSG		
		Storm control		
		SSH v1, v2		
		IPv6 Access control list (ACL)		
		IPv6 Source Guard, DHCPv6 Snooping, IPv6 RA Guard, DHCPv6 Guard,		
		IPv6 ND Inspection		
	Access Security	SSH (IPv6)		
	IPv6	SSL (IPv6)		
		RADIUS Server (IPv6)		
		Web-UI (IPv6)		
		IEEE 802.3ad / 802.1AX LACP		
		Number of link aggregation groups (LAGs) supported: 8		
	High Availability	Maximum number of ports per LAG: 8		
		Dual Image & Dual Configurations		
	Operations, Administration	Cable Diagnostics		
	and Maintenance	Digital Diagnostic Monitoring (DDM)		
		Layer 2 QoS, Layer 3 QoS, Hardware queues per port: 8		
		Strict-priority queuing (PQ), Weighted Round Robin / shaped-deficit		
	Quality of Service	weighted round robin (WRR/WDRR/SDWRR), Rate limiting		
	(QoS)	L2-L4 classification criteria: Interface, MAC address, Ether Type, 802.1p, VLAN, IP address, DSCP/IP precedence, TCP/UDP port numbers		
		IGMP snooping: v1, v2, and v3, IGMP Filter		
	Multicast Features	MLD Snooping		
		On-Premise Management		
		Role-based Full Featured CLI management		
		Full Featured Web-UI (IPv4 & IPv6)		
		All the features should be configurable via CLI & Web-UI		
		SNMP IPv4 & IPv6		
		SNMP v1/v2/v3		
	Device	SNMP Traps - Link, STP, Loop, PoE, Storm, Power, Fan, New MAC		
	Management and Operations	Remote monitoring (RMON)		
	Operations	IPv4 & IPv6 DHCP Client & Relay		
		Network Time Protocol (NTP) / SNTP		
		SSH v2 (IPv4 & v6)		
		IEEE 802.1AB: Link Layer Discovery Protocol (LLDP)		
		IPv4/v6 Dual Stack		
		Dual Image & Dual Configurations		
5	Certifications / Compliance	OEM/OS/Switch should have IEC or ISA or equivalent Indian Cyber Security Certification. Certificate to be submitted		
	OEM/Bidder	Offered Brand should have direct presence in India		
6	Criteria	rr		

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	1	
		Offered Brand should have own service/repair/support center in Karnataka for faster support
		Offered Brand & Models should be reputed & field proven
		Bidder should have Registered office in Karnataka
		Bidder should have qualified technical support team locally
7	Country of Origin	Non-MIC
		Safety (ICT) – UL / EN 62368-1 or Better
0	EMC/EMI/Cafata	EMC - EN 55032, EN 61000-3-2, EN 61000-3-3, EN 55024
8	EMC/EMI/Safety	RoHS - EN/IEC 63000 or equivalent
		UL, CE & FCC
9	Compatibility	All Switches, Modules & Transceivers should be from same Brand
10	PoC/Demo	PoC / Demo needs to be arranged during technical evaluation stage (if required). Bidder should have qualified Manpower to demonstrate
	Warranty, Services	Min 3 years Warranty
11		On-site Installation, Configuration and troubleshooting support
11	and Support	The offered model should be latest. End of Sales (EoS) announced model or
		model going to be EoS in next 6 months should not be quoted
12	Documentation	Technical Compliance sheet, Datasheet & Cross Reference
12		Manufacturer Authorization Letter
		8 Ports 2.5GbE PoE Switch + Uplink Ports with required warranty
		Power Supply
	Package Contents	Necessary Port, Feature & OS License (If applicable)
13		1U Rack Mount Kit
		Console Cable
		AC Power Cord
		Installation Guide
14		Should be compatible to deploy with Eduroam with Dynamic VLAN. Strom
		control, Access Control, setup of NITK and should be demonstrated before
		participating in the tender and MAF from the OEM should be submitted along with bid

### Layer 3 Stackable Managed Switches :

S/N	Parameter	Specification / Value		
1	L2 Switch	Preferred Make : D-Link/Cisco/Aruba		
2	Hardware			
		1/2.5/5/10GbE Multi-rate RJ45 Ports - Min 24 or more		
		25GbE SFP28 uplink Ports - Min 4 or more		
	Interfaces	1 USB 2.0 port		
		1 RS-232 / RJ45 console port		
		Management port: 1 x RJ-45 ports		
		All Ports & Necessary License activated from day one		
		6KV or Higher surge protection support on RJ45 Ports		
		Power Input: 110-240 V AC power		
	Power Supplies	Redundant Hot Swappable Power Supply Support		
	Dimensions & Rack Installation	19-inch Rack Mount with Rack Installation Kit		

	Environmental	Operating temperature: $0^{\circ}$ to $50^{\circ}$ C or Higher
3	Performance	MTBF - > 1,00,000 Hours or Higher
,	Terrormance	
	CPU, Memory	CPU – Min 1GHz or Higher
	& Packet Buffer	Memory – Minimum 2 GBytes or Higher
		Packet Buffer – Minimum 4 MBytes or Higher
	Switching &	Packet Switching Capacity - Min 680 Gbps or higher
	Stacking Capacity	Layer 2/Layer 3 throughput - Min 505 Mpps or higher
	Stacking Capacity	Stacking Bandwidth – Min 200Gbps or higher
1	Software Features	
		License should include all Advanced software features
	Network	Switch should have Commercial Enterprise NOS from same OEM as Switch.
	Operating System	Open Source based NOS not acceptable.
		MAC addresses per system: Min 32K or Higher
		Number of VLANs supported: 4K or Higher
		Range of VLAN IDs: 4K
		Jumbo frames: 9K or Higher
		STP-IEEE 802.1D, RSTP-IEEE 802.1w, MSTP-IEEE 802.1s
		Port & VLAN Mirroring
		VLAN - IEEE 802.1Q, Port-based, MAC-Based, Voice VLAN, Q-in-Q
		tunnelling
		Loopback Detection & Protection (Independent of STP)
		IEEE 802.3ad: Link Aggregation Control Protocol (LACP)
	Features	Address Resolution Protocol (ARP)
		Dynamic Host Configuration Protocol (DHCP),
		IPv4/v6 DHCP Server, Relay
		Minimum 128 or more IPv6 SVI / VLAN IP Interfaces
		Static Routing, Virtual Router Redundancy Protocol (VRRP)
		RIP v1/v2, RIPng, OSPF v2 & v3 (IPv4 & v6)
		Bidirectional Forwarding Detection (BFD) protocol
		Policy Based Routing (PBR)
		Equal-Cost Multipath (ECMP)
		VXLAN
		MAC, IPv4/v6 Access control list (ACL)
		Port-based ACL, VLAN-based ACL, L2-L4 ACL
		802.1X Radius Authentication - Port & Host based
		RADIUS, TACACS+
	Access Security	Port Security, DAI, DHCP Snooping, IPSG
		IPv6 RA Guard, DHCPv6 Guard, IPv6 ND Inspection
		Storm control
		SSH v1, v2
		IEC or ISA or equivalent Indian Cyber Security compliance
		Physical Stacking upto 6 switches with Single IP Management
		Cross-member link aggregation
	High Availability	IEEE 802.3ad / 802.1AX LACP
		Number of link aggregation groups (LAGs) supported: 32
		Maximum number of ports per LAG: 8
		Redundant Power Supply Support
		Layer 2 QoS, Layer 3 QoS, Hardware queues per port: 8
	Quality of Service	Strict-priority queuing (PQ), Weighted Round Robin / shaped-deficit
	(QoS)	weighted round robin (WDRR/SDWRR)
		802.1p remarking, Rate limiting,

	1	1
		L2-L4 classification criteria: Interface, MAC address, Ether Type, 802.1p,
		VLAN, IP address, DSCP/IP precedence, TCP/UDP port numbers
	Multicast Features	IGMP snooping: v1, v2, and v3, IGMP Filter IGMP v1/v2/v3, PIM-SM/DM
	Device Management and Operations	On-Premise Management Role-based Full Featured CLI management SNMP v1/v2/v3 SNMP Traps – Link, STP, Loop, Storm, Power, Fan, New MAC Remote monitoring (RMON) DHCP Server, Client & Relay Network Time Protocol (NTP) / SNTP SSH v2 (IPv4 & v6) IEEE 802.1AB: Link Layer Discovery Protocol (LLDP) sFlow, IPv4/v6 Dual Stack Dual Image & Dual Configurations
	NMS Monitoring	CPU Utilization Memory Utilization Port Status & Utilization SNMP Traps Syslog Monitoring sFlow analysis ARP Table & FDB Table Monitoring Private MIB
5	Certifications / Compliance	OEM/OS/Switch should have IEC or ISA or equivalent Indian Cyber Security Certification. Certificate to be submitted
6	OEM/Bidder Criteria	Offered Brand should have direct presence in India Offered Brand should have own Tech support center (TAC) in India Offered Brand should have own service/repair/support center in Karnataka for faster support Offered Brand & Models should be reputed & field proven Bidder should have Registered office in Karnataka Bidder should have qualified technical support team locally
7	Country of Origin	Non-MIC
8	EMC/EMI/Safety	Safety (ICT) – UL / EN 62368-1 or Better EMC - EN 55032, EN 61000-3-2, EN 61000-3-3, EN 55024 RoHS – EN/IEC 63000 or equivalent UL, CE & FCC
9	Compatibility	All Switches, Modules & Transceivers should be from same Brand
10	PoC/Demo	PoC / Demo needs to be arranged during technical evaluation stage (if required). Bidder should have qualified Manpower to demonstrate
11	Warranty, Services and Support	Min 3 years Warranty On-site Installation, Configuration and troubleshooting support The offered model should be latest. End of Sales (EoS) announced model or model going to be EoS in next 6 months should not be quoted
12	Documentation	Technical Compliance sheet, Datasheet & Cross Reference Manufacturer Authorization Form (MAF)

13	Package Contents	Power Supply, Necessary Port, Feature & OS License (If applicable)			
14		1U Rack Mount Kit, Console Cable, AC Power Cord, Installation Guide Should be compatible to deploy with Eduroam with Dynamic VLAN. Strom control, Access Control, setup of NITK and should be demonstrated before participating in the tender and MAF from the OEM should be submitted along with bid			

#### 25GbE SM SFP28 (LC Duplex) Transceiver

S/N	Parameter	Specification / Value			
		Preferred Make : D-Link/Cisco/Aruba			
1	Туре	25G Base LR (SM) Transceiver			
2	Form Factor	SFP28, Duplex LC Connectors, Hot Pluggable			
3	Standard Compliance	IEEE 802.3by compliant RoHS			
4	Distance	Upto 10Km			
5	Operating Temperature	upto 70°C or better			
7	Warranty, Services and Support	Min 3 years Warranty On-site Installation, Configuration and troubleshooting support The offered model should be latest. End of Sales (EoS) announced model or model going to be EoS in next 6 months should not be quoted			
8	Compatibility	All Switches, Modules & Transceivers should be from same Brand			
9	Documentation	Technical Compliance sheet, Datasheet & Cross Reference Manufacturer Authorization Letter			

### 2.2 Conditions:

### 1. Indoor/Outdoor access points, PoE injectors and PoE switches

Preferences – Compatible with the existing setup

Switches, Routers etc Preferences - Must support dynamic VLANs and eduroam

Passive Materials Preferences – R&M, Systimax, AMP, Molex, D-

Link Racks Preferences - Netrack, WallRack, APW President,

Rittal Other materials from reputed brands.

The material, make and model should be explicitly specified in your bid.

2. Please note that this is a pseudo B-o-M and not intended for actual purchase at the

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specified quantities. The company shall specify the rate for the above in their bid and hold the price during the contract with NITK. The quantity is indicative and shall only be used to identify the L1.

- 3. No purchase order will be issued based on the above B-o-M.
- 4. Uses of these rates are entirely at the discretion of NITK and it is not guaranteed that purchases at these rates will be done at any time during the contract.
- 5. Work order shall be separately and explicitly issued whenever these rates are used by NITK during the contract period for any network repair or expansion within the stipulated limit decided by NITK. Minimum cost expected per such work order if any, may be explicitly indicated.
- 6. It shall be mandatory on the part of the bidder to enter into a rate contract as specified above and non-compliance of this can render your bid non-responsive and thus rejected.
- 7. Five years warranty should be given for all active devices supplied under the rate contract.

# 3 Devices Details for AMC- Campus Wide Networking (CWN) -

- 1. Devices are to be taken into AMC including the various modules attached therein.
- 2. Drop-in replacements are expected for the devices/modules.
- 3. Proper back-to back arrangements are expected.
- 4. Minimum 99% uptime must be guaranteed and an SLA must be entered into.
- 5. Firmware updating are to be carried out where ever required & the devices are to be appropriately reconfigured as and when required.
- 6. AMC charges shall be calculated for the devices below for year wise one-year period extendable up to the end of the FM Contract/extended period as applicable subject to satisfactory performance.

# 3.1 Devices to be included in AMC

Please quote the AMC rate and GST for all of the devices listed below in the price bid.

S/N	DEPARTMENT NAME	SWI	ТСН	MODEL No.	T No.	Warranty Ends On
	ELECTRICAL & ELECTRONICS					
1		D Ll	I <b>NK</b>	DES 3252	1	
2		CIS	CO	CATALYST 2950	1	

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			POWER		
3		DELL	CONNECT 3348	1	
			POWER		
4		DELL	CONNECT 3348	1	
5		D LINK	DGS 1210-52	1	
6		D LINK	DGS 1016A	1	
7		D LINK	DGS 1016A	1	
8		D Link	DGS 1024C	1	
9		D Link	DES 1016A	1	
10		D Link	DGS 1016D	1	
11		DIGISOL	DG-GS 1528	1	
12		DIGISOL	DG-GS 1528	1	
	CENTRAL LIBRARY				
1		D LINK	DGS 1210-28X	2	
2		CISCO	SG 500-28	1	
3		CISCO	SG 350-28	1	
4		CISCO	SG 350-28	3	
5		CISCO	SG 350-28	1	
6		CISCO	SG 350-28	1	
7		LINKSYS	SRW224G4-24	1	
8		TP LINK	TL SG1024D	1	
9		CISCO	SG 350-28	1	
10		D LINK	DGS 1510-28X	1	
11		D LINK	DGS 1210-28P	1	
	ELECTRONICS &				
	COMMUNICATION				
			CATALYST 2950		
1		CISCO	48	1	
2		HP Switch	52650(I4899B) 48	1	
4		D LINK	DES 3200-28	1	
F			CATALYST 2950		
5		CISCO	48	1	
6		D LINK	DES 1210-52	1	
7		D LINK	DGS 1210-52	1	
8		D LINK	DES 3200-28	1	
9		DIGISOL	DG-GS4652E	1	
10		D LINK	DGS 1250-28X	1	
11		TP LINK	TL SG3452	1	
12		TP LINK	TL SG3452	1	
13		TP LINK	TL SG3452	1	
14		TP LINK	TL SG3452	1	

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15		TP LINK	TL SG3452	1	
16		TP LINK	TL SG3452	1	
17		TP LINK	TL SG3452	1	
18		TP LINK	TL SG3452	1	
19		TP LINK	TL SG3428X	1	
20		TP LINK	TL SG3452	1	
21		TP LINK	TL SG3452	1	
22		TP LINK	TL SG3452	1	
23		TP LINK	TL SG3452	1	
24		TP LINK	TL SG2428P	1	
	SACA				
1		D LINK	DES 1210-52	1	
2		D LINK	DGS 1210-52	1	
3		D LINK	DGS 1250-28X	1	
4		D LINK	DGS 1250-28X	1	
5		D LINK	DGS 1210-52	1	
6		D LINK	DGS 1250-28X	1	
7		D LINK	DGS 1250-28X	1	
8		D LINK	DGS 1250-28X	1	
	MACS				
1		D LINK	DGS 1210-28	1	
2		D LINK	DGS 1210-28	1	
3		D LINK	DGS 1210-28	1	
4		D LINK	DGS 1510-28X	1	
	CHEMICAL				
1		D LINK	DGS 1250-28X	1	
			XSTACK DES		
2		D LINK	3200-52	1	
3		D LINK	DGS 1210-52		
4		D LINK	DES 3052-52	1	
5		CISCO	SG 350-28	1	
6		CISCO	SG 350-28	1	
7		CISCO	SG 350-28	1	
8		CISCO	SG 350-28	1	
9		D LINK	DGS 1210-28P	4	
10		TP Link	TL SG2428P	1	
	CHEMICAL-BioTech				
9		CISCO	SG 350-28	1	

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	· · · · · · · · · · · · · · · · · · ·				
10		CISCO	CATALYST 2950-X	1	
11		CISCO	SG 350-28	1	
12		CISCO	SG 350-28	1	
	CIVIL				
1		D LINK	DES 1228-28	1	
2		D LINK	DES 3200-52	1	
3		D LINK	DES 3552-52	1	
4		D LINK	DES 3200-28	1	
5		D LINK	DGS 1250-28X	1	
6		D LINK	DGS 1250-28X	1	
7		DIGISOL	DG-GS1528	1	
8		DLINK	DES 3200-28	1	
9		D LINK	DGS 1210-52	1	
10		D LINK	DGS 1210-28	1	
11		D LINK	DES 3256-24	1	
12		D LINK	DGS 1210-28	1	
13		D LINK	DES 3200-28	1	
14		D LINK	DGS 1210-28P	1	
				-	
	WATER RESOURCES				
1		D LINK	DES 3200-28	1	
2		D LINK	DGS 1210-28	1	
3		D LINK	DGS 3200-28	1	
4		D LINK	DGS 1250-28X	1	
5		D LINK	DGS 1250-28X	1	
6		D LINK	DGS 1250 20X	1	
7		CISCO	SG 500-28	1	
8		D LINK	DGS 1510-28	1	
9		D LINK	DGS 1510-28	1	
10		D LINK	DGS 1210-28	1	
11		D LINK	DGS 3200-28	1	
12		D LINK	DGS 1210-52	1	
13		D LINK	DGS 1210-52	1	
14		TP LINK	TL SG3452-48	1	
15		D LINK	DGS 1210-28P	1	
	METALLURGICAL				
1		D LINK	DGS 1210-28	1	
2		D LINK	DGS 1250-28X	1	
3		D LINK	DGS 1210-52	1	

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	MINING				
	ENGINEERING				
1		D LINK	DES 3256-24	1	
2		D LINK	DGS 1210-28	1	
3		D LINK	DES 1024 R-24	1	
4		D LINK	DGS 1210-24	1	
5		D LINK	DGS 1210-24	1	
6		D LINK	DGS 1210-28	1	
7		D LINK	DES 3526	1	
	IT				
1		D LINK	DGS 1210-54	1	
2		D LINK	DGS 1250-52X	1	
3		D LINK	DGS 1210-52X	1	
4		D LINK	DGS 1250-52X	1	
5		D LINK	DGS 1250-52X	1	
6		D LINK	DGS 1250-28X	1	
7		D LINK	DGS 3100-48	1	
8		D LINK	DGS 1210-28	1	
9		D LINK	DES 1024D	1	
10		D LINK	DGS 1250-52X	1	
11		D LINK	DES 1210-52	1	
12		TP LINK	TL SG3452	1	
13		TP LINK	TL SG3452	1	
14		TP LINK	TL SG3452	1	
	DIRECTOR RESIDENY				
1		TP LINK	TL SG2428P 24	1	
2		TP LINK	TL SG2428P 24	1	3/27/2025
	GUEST HOUSE				- / /
1		D LINK	DES 3200-28	1	
2		D LINK	DES 1210-28	1	
3		D LINK	DES 3028	1	
<u> </u>		D LINK	DES 3526	1	
5		TP LINK	TL SG2428P	2	
6		Cisco	SG 350-28P	1	
0			00 000-201		
	ССС			+	
-		DINW			
1		D LINK	DGS 3100-24	1	

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[]			- <u> </u>	
2	D LINK	DGS 1250-28X	1	3/27/2025
3	D LINK	DGS 1250-28X	1	3/27/2025
4	D LINK	DGS 1250-28X	1	3/27/2025
5	D LINK	DGS 1510-28X	1	3/27/2025
7	D LINK	DGS 1250-52X	1	
9	D LINK	DGS 1250-28X	1	3/27/2025
10	D LINK	DGS 1250-28X	1	3/27/2025
11	D LINK	DGS 1210-52	1	
12	D LINK	DGS 1210-52	1	
13	D LINK	DGS 1250-52X	1	
14	D LINK	DGS 1510-28X	1	3/27/2025
15	D LINK	DGS 1250-52X	1	
16	D LINK	DGS 1250-52X	1	7/29/2025
17	D LINK	DGS 1250-52X	1	7/29/2025
18	D LINK	DGS 1250-52X	1	7/29/2025
19	D LINK	DGS 1250-52X	1	7/29/2025
20	D LINK	DGS 1250-52X	1	7/29/2025
21	D LINK	DGS 1250-52X	1	7/29/2025
22	D LINK	DGS 1250-52X	1	7/29/2025
23	D LINK	DGS 1250-52X	1	7/29/2025
24	D LINK	DGS 1250-52X	1	7/29/2025
25	D LINK	DGS 1250-52X	1	7/29/2025
26	D LINK	DGS 1250-52X	1	7/29/2025
27	D LINK	DGS 1250-52X	1	7/29/2025
28	D LINK	DGS 1510-28X	1	3/27/2025
29	D LINK	DGS 1510-28X	1	3/27/2025
30	D LINK	DGS 1510-28X	1	3/27/2025
31	D LINK	DGS 1510-28X	1	3/27/2025
32	D LINK	DGS 1510-28X	1	3/27/2025
33	D LINK	DGS 1510-28X	1	3/27/2025
34	D LINK	DGS 1510-28X	1	3/27/2025
35	D LINK	DGS 1510-28X	1	3/27/2025
36	D LINK	DGS 1510-28X	1	3/27/2025
37	D LINK	DGS 1510-28X	1	3/27/2025
38	D LINK	DGS 1510-28X	1	3/27/2025
39	D LINK	DGS 1510-28X	1	3/27/2025
40	D LINK	DGS 1510-28X	1	3/27/2025
41	Cisco	SG 300-28	1	-, -,
42	Cisco	SG 300-28	1	
43	Cisco	SG 300-28	1	
44	Cisco	SG 300-28	1	
45	Cisco	SG 300-28	1	
TJ .		00 000-20		

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46		Cisco	SG 300-28	1	
47		Cisco	SG 300-28	1	
48		Cisco	SG 300-28	1	
49		Cisco	SG 300-28	1	
50		Cisco	SG 300-28	1	
51		Cisco	SG 300-28	1	
52		Cisco	SG 300-28	1	
53		Cisco	SG 300-28	1	
54		TP Link	SG2428P	3	3/27/2025
	LHCC				
1		TECHROUT	ESTR-S2528D	10	
2		Cisco	SG 350-28P	5	`
3		TP Link	SG2428P	1	3/27/2025
					, ,
1	SPORTS COMPLEX	D LINK	DGS 1210-28	1	
	NEW CSE				
1		D LINK	DGS 1210-52	1	
2		D LINK	DGS 1210-28	1	
3		D LINK	DES 3200-28	1	
4		D LINK	DGS 1210-28	1	
5		D LINK	DGS 1210-52	1	
6		DIGISOL	DGFS4552-48	1	
7		D LINK	DGS 1210-52	1	
8		D LINK	DGS 1210-28	1	
9		D LINK	DGS 1210-52	1	
10		D LINK	DES 1210-52	1	
11		D LINK	DGS 1210-28	1	
12		D LINK	DGS 1210-52	1	
13		D LINK	DGS 1210-52	1	
14		D LINK	DGS 1210-28	1	
15		D LINK	DGS 1210-52	1	
16		D LINK	DGS 1210-28	1	
17		D LINK	DGS 1210-52	1	
18		D LINK	DGS 1210-28	1	
19		D LINK	DGS 1210-52	1	
20		D LINK	DGS 1210-52	1	
21		D LINK	DGS 1210-28	1	
22		D LINK	DGS 1210-52	1	
23		D LINK	DGS 1210-52	1	

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24		D LINK	DGS 1210-28	1	
25		D LINK	DGS 1210-52	1	
26		D LINK	DGS 1210-52	1	
27		D LINK	DES 3552- 52	1	
28		D LINK	DES 3200-52	1	
29		D LINK	DGS 1250-28X	1	
30		D LINK	DGS 1210-52	1	
31		D LINK	DGS 1210-28	1	
32		D LINK	DGS 1210-52	1	
33		D LINK	DGS 1210-28	1	
34		D LINK	DGS 1210-52	1	
35		Cisco	SG 350-28P	6	
	ENGLISH MEDIUM			I T	
1		D-LINK	DES 3200-28	1	
2		D-LINK	DES 1024D	1	
3		D-LINK	DES 1024D	1	
4		TP LINK	TL- SG1024D	1	
				_	
	HOSTEL OFFICE				
1		DIGISOL	DG-GS1528	1	
	MAIN BUILDING				
1		D LINK	DES 1210-28	1	
2		D LINK	DGS 1250-28X	2	7/25/2025
3		DIGISOL	DG-GS1528	1	6/10/2025
4		D LINK	DES 3200-28	1	
5		D LINK	DES 1210-52	1	
6		D LINK	DGS 1210-28	1	
7		D LINK	DES 3200-28	1	
8		D LINK	DES 1024D	1	
9		D LINK	DES 1024D	1	
10		D LINK	DES 1024D	1	
		Extreme		T T	
11		Summit	X440-48t	1	
12		D LINK	DES 3200-28	1	
13		D LINK	DGS 1210-28	1	
14		D LINK	DES 3810-28	1	
15		DIGISOL	DG-GS1528	1	6/10/2025
16		DIGISOL	DG-FS1016D/E	1	
17		D LINK	DGS 1210-28	1	

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18		D LINK	DGS 1210-28	1	
19		D LINK	DGS 1210-28	1	
1	ATB	D LINK	DGS 1210-52P	1	
		TP Link	TL SG2428P	1	
	NTB CRF				
1		D LINK	DGS 1510-28X	1	
2		D LINK	DGS 1510-28X	1	
3		D LINK	DGS 1210-28	1	
4		D LINK	DGS 1210-28	1	
5		D LINK	DGS 1210-28	1	
6		D LINK	DGS 1210-28	1	
7	CRF	TP-LINK	TL SG3428	1	
8		TP-LINK TP LINK	TL SG3428	1	
<u>8</u> 9		HPE	112 SG3452 1820J 9980A	1	
9 10		HPE	1820J 9980A 1820J 9980A	1	
10		HPE	, , , , , , , , , , , , , , , , , , ,	1	
11		HPE	1820J 9980A 1820J 9980A	1	
12		HPE	1820J 9980A	1	
13		HPE	1820J 9980A	1	
14		HPE	1820J 9980A	1	
15		HPE	1820J 9980A	1	
17		HPE	1820J 9980A	1	
17		HPE	1820J 9980A	1	
10		HPE	1820J 9980A	1	
19		TP Link	TL SG2428P	2	
			11.3624201	2	
1	CFIS	НРЕ	1920S-JL 384A	1	
-		TP Link	TL SG2428P	16	
			1 L 3G2420F	10	
	CSD				
1		CISCO	SG500X-24	1	
2		CISCO	SG500X-24 SG500X-24	1	
3		CISCO	SG3007-24	1	
4		CISCO	SG300-28	1	
-1			0000-20		
	MECHANICAL				
1		D LINK	DGS 3100-24	1	
2		D LINK	DGS 3100-24	1	
4		DTIM	DG5 5100-24		

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				<u> </u>	
3		D LINK	DGS 3100-24	1	
4		D LINK	DGS 3100-24	1	
5		D LINK	DGS 3100-24	1	
6		D LINK	DGS 3100-24	1	
7		D LINK	DGS 3100-24	1	
8		D LINK	DWS 3024L 24	1	
9		D LINK	DGS 3100-24	1	
10		D LINK	DGS 3100-24	1	
11		D LINK	DGS 3100-24	1	
12		D LINK	DGS 3100-24	1	
13		D LINK	DGS 3100-24	1	
14		D LINK	DGS 3100-24	1	
15		D LINK	DGS 3100-24	1	
16		D LINK	DGS 3100-24	1	
17		D LINK	DES 3200-28	1	
18		D LINK	DGS 3100-24	1	
19		D LINK	DGS 3100-24	1	
20		D LINK	DGS 3100-24	1	
21		D LINK	DGS 3100-24	1	
22		D LINK	DGS 3100-24	1	
23		D LINK	DGS 3100-24	1	
24		D LINK	DGS 1210-28	1	
25		CISCO	SG 350-28	1	
26		CISCO	SG 350-28	1	
27		CISCO	SG 350-28	1	
28		CISCO	SG 350-28	1	
29		CISCO	SG 350-28	1	
30		CISCO	SG 350-28	1	
31		TP-LINK	TL SG-3428	1	
32		CISCO	CBS 350 24T	1	
33		CISCO	SG 350-28	1	
34		CISCO	SG 350-28	1	
35		CISCO	SG 350-28	1	
36		CISCO	SG 350-28	1	
37		DIGISOL	DG-GS1528	1	
38		D LINK	DGS 1210-28P	4	
	CHEMISTRY				
1		D LINK	DGS 3100-24	1	
2		D LINK	DGS 3100-24	1	
3		D LINK	DGS 3100-24	1	

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1					
1	HEALTH CENTER	D LINK	DES 3200-28	1	
3			11-302420		
2 3		MUSTANG TP Link	DG-FS4552 TL-SG2428	1 1	
		DIGISOL			
1		D LINK	DGS 1210-52	1	
	SCHOOL OF MANAGEMENT				
<u> </u>			1/00/1210-201		
26 27		D LINK D LINK	DGS 1210-32 DGS 1210-28P	1	
25 26	wianagement	D LINK	DGS 1210-52	1	
25	Chemistry, Physics Building School of Management	D LINK	DGS 1210-52	1	
24	Chemistry, Physics building MACS Department BSB 6.5	D LINK	DGS 1210-52	1	
23		CISCO	SG 350-28	1	
22		CISCO	SG 350-28	1	
21		D LINK	DGS 1210-52	1	
20		D LINK	DGS 1210-28	1	
19		CISCO	SG 350-28	1	
18		CISCO	SG 350-28	1	
17		D LINK	DGS 3100-24	1	
16		D LINK	DGS 3100-24	1	
15		D LINK	DGS 3100-24	1	
14		D LINK	DGS 3100-24	1	
13		D LINK	DGS 3100-24	1	
12		D LINK	DGS 3100-24	1	
11		D LINK	DGS 3100-24	1	
	PHYSICS				
11		TP Link	TL SG2428	1	
10		D LINK	DGS 3100-24	1	
9		D LINK	DGS 3100-24	1	
8		D LINK	DGS 3100-24	1	
7		D LINK	DGS 1210-28	1	
6		D LINK	DGS 3100-24	1	
5		D LINK	DGS 3100-24	1	
4		D LINK	DGS 3100-24	1	

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	OLD PG - Pushpagiri				
1		D LINK	DGS 1250-28X	1	
2		D LINK	DGS 1250-28X	1	
3		D LINK	DGS 1250-28X	1	
4		D LINK	DGS 1250-28X	1	
5		D LINK	DGS 1250-28X	1	
6		D LINK	DGS 1250-28X	1	
7		D LINK	DGS 1250-28X	1	
8		D LINK	DGS 1250-28X	1	
9		D LINK	DGS 1250-28X	1	
10		D LINK	DGS 1250-28X	1	
11		D LINK	DGS 1250-28X	1	
12		D LINK	DGS 1250-28X	1	
13		D LINK	DGS 1250-28X	1	
14		D LINK	DGS 1250-28X	1	
15		D LINK	DGS 1250-28X	1	
	BLOCK 1-Karavali				
1		D LINK	DGS 1250-28X	1	
2		D LINK	DGS 1250-28X	1	
3		D LINK	DGS 1250-28X	1	
4		D LINK	DGS 1250-28X	1	
5		D LINK	DGS 1250-28X	1	
6		D LINK	DGS 1250-28X	1	
7		D LINK	DGS 1250-28X	1	
8		D LINK	DGS 1250-28X	1	
9		D LINK	DGS 1250-28X	1	
10		D LINK	DGS 1250-28X	1	
11		D LINK	DGS 1250-28X	1	
12		D LINK	DGS 1250-28X	1	
13		TP Link	GS-728 TP	1	
	BLOCK 2-Karavali				
1		D LINK	DGS 1250-28X	1	3/27/2025
2		D LINK	DGS 1250-28X	1	, ,
3		D LINK	DGS 1250-28X	1	
4		D LINK	DGS 1250-28X	1	
5		D LINK	DGS 1250-28X	1	
6		D LINK	DGS 1250-28X	1	
7		D LINK	DGS 1250-28X	1	
8		D LINK	DGS 1250-28X	1	

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·		T			
9		D LINK	DGS 1250-28X	1	
10		D LINK	DGS 1250-28X	1	
11		D LINK	DGS 1250-28X	1	
12		D LINK	DGS 1250-28X	1	
13		D LINK	DGS 1250-28X	1	
14		D LINK	DGS 1250-28X	1	
15		D LINK	DGS 1250-28X	1	
	BLOCK 3- Vindhya				
1		D LINK	DGS 1250-28X	1	
2		D LINK	DGS 1250-52X	1	
3		D LINK	DGS 1250-28X	1	
4		D LINK	DGS 1250-52X	1	
5		D LINK	DGS 1250-52X	1	
6		D LINK	DGS 1250-52X	1	
7		D LINK	DGS 1250-28X	1	
8		D LINK	DGS 1250-28X	1	
9		D LINK	DGS 1250-28X	1	
10		D LINK	DGS 1250-28X	1	
11		TP Link	TL-SG 2428	1	
	BLOCK 4- Satpura				
1		D LINK	DGS 1250-28X	1	3/27/2025
2		D LINK	DGS 1250-28X	1	3/27/2025
3		D LINK	DGS 1250-28X	1	3/27/2025
4		D LINK	DGS 1250-28X	1	3/27/2025
5		D LINK	DGS 1250-28X	1	3/27/2025
6		D LINK	DGS 1250-28X	1	3/27/2025
7		D LINK	DGS 1250-28X	1	
8		D LINK	DGS 1250-28X	1	
9		D LINK	DGS 1250-28X	1	
10		D LINK	DGS 1250-28X	1	
11		D LINK	DGS 1250-28X	1	
12		D LINK	DGS 1250-28X	1	
13		D LINK	DGS 1250-28X	1	
13		D LINK	DGS 1250-28X	1	
15		TP Link	TL SG2428	1	
	BLOCK 5- Nilgiri				

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1		D LINK	DGS 1250-28X	1	3/27/2025
2		D LINK	DGS 1250-28X	1	3/27/2025
3		D LINK	DGS 1250-28X	1	3/27/2025
4		D LINK	DGS 1250-28X	1	3/27/2025
5		D LINK	DGS 1250-28X	1	3/27/2025
6		D LINK	DGS 1250-28X	1	3/27/2025
7		D LINK	DGS 1250-28X	1	3/27/2025
8		D LINK	DGS 1250-28X	1	3/27/2025
9		D LINK	DGS 1250-28X	1	3/27/2025
10		D LINK	DGS 1250-28X	1	3/27/2025
11		D LINK	DGS 1250-28X	1	3/27/2025
12		D LINK	DGS 1250-28X	1	
13		D LINK	DGS 1250-28X	1	
14		TP Link	SG2428P	1	3/27/2025
15		TP Link	SG2428	2	
	BLOCK 7 - Sahyadri				
1		D LINK	DGS 1250-28X	1	
2		D LINK	DGS 1250-52X	1	
3		D LINK	DGS 1250-28X	1	3/27/2025
4		D LINK	DGS 1250-28X	1	3/27/2025
5		D LINK	DGS 1250-28X	1	3/27/2025
6		D LINK	DGS 1250-28X	1	3/27/2025
7		D LINK	DGS 1250-28X	1	3/27/2025
8		D LINK	DGS 1250-28X	1	3/27/2025
9		D LINK	DGS 1250-28X	1	3/27/2025
10		D LINK	DGS 1250-28X	1	3/27/2025
11		D LINK	DGS 1250-28X	1	3/27/2025
12		D LINK	DGS 1250-28X	1	3/27/2025
13		D LINK	DGS 1250-28X	1	3/27/2025
14		D LINK	DGS 1250-28X	1	3/27/2025
15		D LINK	DGS 1250-28X	1	
16		D LINK	DGS 1250-28X	1	
	BLOCK 8 - Triphul				
1		D LINK	DGS 1250-28X	1	3/27/2025
2		D LINK	DGS 1250-28X	1	3/27/2025
3		D LINK	DGS 1250-28X	1	3/27/2025
4		D LINK	DGS 1250-28X	1	3/27/2025
5		D LINK	DGS 1250-52X	1	
6		D LINK	DGS 1250-28X	1	3/27/2025

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7		D LINK	DGS 1250-52X	1	
8		D LINK	DGS 1250-28X	1	3/27/2025
9		D LINK	DGS 1250-52X	1	
10		D LINK	DGS 1250-28X	1	
11		D LINK	DGS 1250-28X	1	
12		D LINK	DGS 1250-28X	1	
13		TP Link	TL-SG 2428	1	
	NEW PG-1 A				
1		D LINK	DGS 1510-28X	1	
2		D LINK	DGS 1210-52	1	
3		D LINK	DGS 1210-52	1	
4		D LINK	DGS-1500-52	1	
5		D LINK	DGS 1210-52	1	
6		TP LINK	TL SG3452	1	
7		TP LINK	TL SG3452	1	
8		TP LINK	TL SG3428X	1	
9	NEW PG -2 blockl B	TP LINK	TL SG3452	1	
10		TP LINK	TL SG3452	1	
11		TP LINK	TL SG3452	1	
12		TP LINK	TL SG3452	1	
13		TP LINK	TL SG3452	1	
14	NEW PG -3 C	TP LINK	TL SG3452	1	
15	block c	TP LINK	TL SG3452	1	
	GH-1				
1		D LINK	DGS 1250-52X	1	
2		D LINK	DGS 1250-28X	1	
_				_	
	GH 2				
1		D LINK	DGS 1250-28X	1	9/15/2025
2		D LINK	DGS 1250-28X	1	9/15/2025
2 3		D LINK	DGS 1250-28X	1	9/15/2025
3 4		D LINK	DGS 1250-28X	1	9/15/2025
<del>4</del> 5		D LINK	DGS 1250-28X	1	9/15/2025
5 6		Digisol	DG S 1250-28X DG GS1528HP	2	9/ 13/ 2023
U					
	GH-3			+	
1	011-0			1	
		D LINK	DGS 1250-28X	1	
2		D LINK	DGS 1250-28X	1	
3		D LINK	DGS 1250-28X	1	

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4		D LINK	DGS 1250-28X	1	
5		D LINK	DGS 1250-28X	1	
6		D LINK	DGS 1250-28X	1	
7		D LINK	DGS 1250-28X	1	
8		D LINK	DGS 1250-28X	1	
9		D LINK	DGS 1250-28X	1	
10		D LINK	DGS 1250-28X	1	
11		D LINK	DGS 1250-28X	1	
12		D LINK	DGS 1250-28X	1	
13		D LINK	DGS 1250-28X	1	
14		D LINK	DGS 1250-28X	1	
15		D LINK	DGS 1250-28X	1	
16		TP Link	TL SG2428	1	
	GH 4				
1		D LINK	DGS 1250-28X	1	
2		D LINK	DGS 1250-28X	1	9/15/2025
3		D LINK	DGS 1250-28X	1	9/15/2025
4		D LINK	DGS 1250-28X	1	9/15/2025
5		D LINK	DGS 1250-28X	1	9/15/2025
6		D LINK	DGS 1250-28X	1	9/15/2025
7		D LINK	DGS 1250-28X	1	9/15/2025
8		D LINK	DGS 1250-28X	1	9/15/2025
9		D LINK	DGS 1250-28X	1	9/15/2025
10		D LINK	DGS 1250-28X	1	9/15/2025
11		D LINK	DGS 1250-28X	1	9/15/2025
12		D LINK	DGS 1250-28X	1	9/15/2025
13		D LINK	DGS 1250-28X	1	9/15/2025
14		D LINK	DGS 1250-28X	1	9/15/2025
15		D LINK	DGS 1250-28X	1	9/15/2025
16		D LINK	DGS 1250-28X	1	9/15/2025
17		D LINK	DGS 1250-28X	1	9/15/2025
18		Cisco	SG 350 28P	3	
19		Digisol	DG GS 1528HP	3	
	GH5				
1		D-LINK	DGS 1250-28X	1	3/27/2025
3		D-LINK	DGS 1250-28X	1	3/27/2025
4		D-LINK	DGS 1250-28X	1	3/27/2025
5		D-LINK	DGS 1250-28X	1	3/27/2025
6		D-LINK	DGS 1250-28X	1	3/27/2025
7		D-LINK	DGS 1250-28X	1	3/27/2025

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8		D-LINK	DGS 1250-28X	1	3/27/2025
9		D-LINK	DGS 1250-28X	1	3/27/2025
10		D-LINK	DGS 1250-28X	1	3/27/2025
11		D-LINK	DGS 1250-28X	1	3/27/2025
12		D-LINK	DGS 1250-28X	1	3/27/2025
13		D-LINK	DGS 1250-28X	1	3/27/2025
14		D-LINK	DGS 1250-28X	1	3/27/2025
15		D-LINK	DGS 1250-28X	1	3/27/2025
	GODHAVARI GH 6				
1		D-LINK	DGS 1250-28X	1	
2		D-LINK	DGS 1250-52X	1	
3		D-LINK	DGS 1250-52X	1	
4		D-LINK	DGS 1250-52X	1	
5		D-LINK	DGS 1250-52X	1	
6		D-LINK	DGS 1250-52X	1	
7		D-LINK	DGS 1250-52X	1	
8		D-LINK	DGS 1250-52X	1	
9		D-LINK	DGS 1250-52X	1	
10		D-LINK	DGS 1250-52X	1	
11		D-LINK	DGS 1250-52X	1	
12		D-LINK	DGS 1250-52X	1	
13		D-LINK	DGS 1250-52X	1	
14		D-LINK	DGS 1250-52X	1	
15		D-LINK	DGS 1250-52X	1	
16		D-LINK	DGS 1250-52X	1	
	SHIVALIK BOYS				
	H 9				
1		D-LINK	DGS 1250-28X	1	
2		D-LINK	DGS 1250-28X	1	
3		D-LINK	DGS 1250-52X	1	
4		D-LINK	DGS 1250-52X	1	
5		D-LINK	DGS 1250-52X	1	
6		D-LINK	DGS 1250-52X	1	
7		D-LINK	DGS 1250-28X	1	
8		D-LINK	DGS 1250-25X	1	
9		D-LINK	DGS 1250-52X	1	
10		D-LINK	DGS 1250-52X	1	
10		D-LINK	DGS 1250-52X	1	
		D-LINK	DGS 1250-52X	1	
12				1 1	

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14		D-LINK	DGS 1250-28X	1	
15		D-LINK	DGS 1250-52X	1	
16		D-LINK	DGS 1250-52X	1	
17		D-LINK	DGS 1250-28X	1	
18		D-LINK	DGS 1250-28X	1	3/27/2025
19		D-LINK	DGS 1250-28X	1	3/27/2025
20		D-LINK	DGS 1250-28X	1	3/27/2025
21		D-LINK	DGS 1250-28X	1	3/27/2025
22		D-LINK	DGS 1250-28X	1	3/27/2025
23		D-LINK	DGS 1250-28X	1	3/27/2025
24		D-LINK	DGS 1250-28X	1	3/27/2025
25		D-LINK	DGS 1250-28X	1	3/27/2025
26		D-LINK	DGS 1250-28X	1	3/27/2025
27		D-LINK	DGS 1250-28X	1	3/27/2025
1	MS Block	Digisol	DGGS1528HP	2	
	International				
1	hostel	TP Link	TL-SG 2428P	1	
-					
	MT-1				
1		D-LINK	DGS 1250-28X	1	9/15/2025
2		D-LINK	DGS 1250-28X	1	9/15/2025
3		D-LINK	DGS 1250-28X	1	9/15/2025
4		D-LINK	DGS 1250-28X	1	9/15/2025
5		D-LINK	DGS 1250-28X	1	9/15/2025
6		D-LINK	DGS 1250-28X	1	9/15/2025
7		D-LINK	DGS 1250-28X	1	9/15/2025
8		D-LINK	DGS 1250-28X	1	9/15/2025
9		D-LINK	DGS 1250-28X	1	9/15/2025
10		D-LINK	DGS 1250-28X	1	9/15/2025
11		D-LINK	DGS 1250-28X	1	9/15/2025
12		D-LINK	DGS 1250-28X	1	9/15/2025
13		D-LINK	DGS 1250-28X	1	9/15/2025
14		D-LINK	DGS 1250-28X	1	9/15/2025
15		D-LINK	DGS 1250-28X	1	9/15/2025
16		D-LINK	DGS 1250-28X	1	9/15/2025
17		D-LINK	DGS 1250-28X	1	9/15/2025
18		D-LINK	DGS 1250-28X	1	9/15/2025
19		D-LINK	DGS 1250-28X	1	9/15/2025
1)					

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21		D-LINK	DGS 1250-28X	1	9/15/2025
22		D-LINK	DGS 1250-28X	1	9/15/2025
23		D-LINK	DGS 1250-28X	1	9/15/2025
24		D-LINK	DGS 1250-28X	1	9/15/2025
25		D-LINK	DGS 1250-28X	1	9/15/2025
26		D-LINK	DGS 1250-28X	1	9/15/2025
27		D-LINK	DGS 1250-28X	1	9/15/2025
28		D-LINK	DGS 1250-28X	1	9/15/2025
29		D-LINK	DGS 1250-28X	1	9/15/2025
30		TP-Link	SG2428P	1	3/27/2025
31		TP-Link	TLSG3428XMP	1	
	MT-2				
1		D-LINK	DGS 1250-28X	1	9/15/2025
2		D-LINK	DGS 1250-28X	1	9/15/2025
3		D-LINK	DGS 1250-28X	1	9/15/2025
4		D-LINK	DGS 1250-28X	1	9/15/2025
5		D-LINK	DGS 1250-28X	1	9/15/2025
6		D-LINK	DGS 1250-28X	1	9/15/2025
7		D-LINK	DGS 1250-28X	1	9/15/2025
8		D-LINK	DGS 1250-28X	1	9/15/2025
9		D-LINK	DGS 1250-28X	1	9/15/2025
10		D-LINK	DGS 1250-28X	1	9/15/2025
11		D-LINK	DGS 1250-28X	1	9/15/2025
12		D-LINK	DGS 1250-28X	1	9/15/2025
13		D-LINK	DGS 1250-28X	1	9/15/2025
14		D-LINK	DGS 1250-28X	1	9/15/2025
15		D-LINK	DGS 1250-28X	1	9/15/2025
16		D-LINK	DGS 1250-28X	1	9/15/2025
17		D-LINK	DGS 1250-28X	1	9/15/2025
18		D-LINK	DGS 1250-28X	1	9/15/2025
19		D-LINK	DGS 1250-28X	1	9/15/2025
20		D-LINK	DGS 1250-28X	1	9/15/2025
21		D-LINK	DGS 1250-28X	1	9/15/2025
22		D-LINK	DGS 1250-28X	1	9/15/2025
23		D-LINK	DGS 1250-28X	1	9/15/2025
24		D-LINK	DGS 1250-28X	1	9/15/2025
25		D-LINK	DGS 1250-28X	1	9/15/2025
26		D-LINK	DGS 1250-28X	1	9/15/2025
27		D-LINK	DGS 1250-28X	1	9/15/2025
28		D-LINK	DGS 1250-28X	1	9/15/2025
29		D-LINK	DGS 1250-28X	1	9/15/2025

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30		TP-Link	TL SG3428XMP	1	
31		TP-Link	TLSG2428P	5	
32		Cisco	SG-350 28P	1	
	MT-3				
1		D-LINK	DGS 1250-28X	1	9/15/2025
2		D-LINK	DGS 1250-28X	1	9/15/2025
3		D-LINK	DGS 1250-28X	1	9/15/2025
4		D-LINK	DGS 1250-28X	1	9/15/2025
5		D-LINK	DGS 1250-28X	1	9/15/2025
6		D-LINK	DGS 1250-28X	1	9/15/2025
7		D-LINK	DGS 1250-28X	1	9/15/2025
8		D-LINK	DGS 1250-28X	1	9/15/2025
9		D-LINK	DGS 1250-28X	1	9/15/2025
10		D-LINK	DGS 1250-28X	1	9/15/2025
11		D-LINK	DGS 1250-28X	1	9/15/2025
12		D-LINK	DGS 1250-28X	1	9/15/2025
13		D-LINK	DGS 1250-28X	1	9/15/2025
14		D-LINK	DGS 1250-28X	1	9/15/2025
15		D-LINK	DGS 1250-28X	1	9/15/2025
16		D-LINK	DGS 1250-28X	1	9/15/2025
17		D-LINK	DGS 1250-28X	1	9/15/2025
18		D-LINK	DGS 1250-28X	1	9/15/2025
19		D-LINK	DGS 1250-28X	1	9/15/2025
20		D-LINK	DGS 1250-28X	1	9/15/2025
21		D-LINK	DGS 1250-28X	1	9/15/2025
22		D-LINK	DGS 1250-28X	1	9/15/2025
23		D-LINK	DGS 1250-28X	1	9/15/2025
24		D-LINK	DGS 1250-28X	1	9/15/2025
25		D-LINK	DGS 1250-28X	1	9/15/2025
26		D-LINK	DGS 1250-28X	1	9/15/2025
27		D-LINK	DGS 1250-28X	1	9/15/2025
28		D-LINK	DGS 1250-28X	1	9/15/2025
29		D-LINK	DGS 1250-28X	1	9/15/2025
30		TP-Link	SG2428P	3	3/27/2025
31		TP-Link	TL SG3428XMP	1	
32		TP-Link	SG2428P	9	

# DECLARATION

- 1. I have carefully read and understood all the terms and conditions of the tender and hereby accept the same.
- 2. The information/document furnished along with the Bid is true and authentic to the best of knowledge and belief.

Date:

Place:

Signature of the authorized person Company Seal

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#### **SECTION 4 - PRICE BID FORMAT** [To be used by the bidder for submission of the bid]

Tender Inviting Authority:

Name of Work/Goods/Services:

Contract No:

Name of the Bidder/ Bidding Firm / Company :

Period: Year wise One year with extension up to maximum of five years subject to good performance and / or changes in the inventory of the significant items in the Rate Contract

# PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )

Numb er	TEXT #	NUMBÉR #	NUMBER #	NUMBE R	NUMBER	NUMBER	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	BASIC RATE in Figures to be entered by the Bidder in Rs. P	COST	GST rate in %	GST Amount	TOTAL AMOUNT with Taxes Rs. P	TOTAL AMOUNT In Words
1	FM Charges (for the service of service Engineers, Help Desk co-ordinators)							
2	Rate for Bill of Materials (RFBOM) listed under table 2T							
3	AMC Charges for the devices listed under table 3.1T							
Total in	Total in Figures							
Quoted	Quoted Rate in Words					1		

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- Note : 1. Break up of Rate for Bill of Materials (RFBOM) items (unit wise) should be furnished in additional sheets with **unit rate and tax** for all of the devices listed under Table 2T of the Tender document.
  - 2. Break up of price (unit wise) for AMC Charges with **unit rate, total and tax** for all of the devices listed under Table 3.1T
  - 3. L1 will be identified by Grand Total of Total cost of RFBOM, Total Cost of AMC and Cost of FM Charges

### SECTION 5: CONTRACT FORM

[To be provided by the bidder in the business letterhead]

1.	(Name of the Supplier's Firm) hereby abide to deliver by the delivery schedule mentioned
	in section 3 tender document for supply of the items if the purchase order is awarded.

- 2. The item will be supplied conforming to the specifications stated in the tender document without any defects and deviations.
- 3. Warranty will be given for the period mentioned in the tender document and service will be rendered to the satisfaction of NITK, Surathkal during this period.

Signature of the Bidder	:	
Name and Designation	:	
Business Address :		
Place:		Seal of the Bidder's Firm

Date:

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## **Compliance Statement**

### Annexure -'A'

### Indicate whether the following are enclosed or not.

- 1. License certificate for manufacture / supply of the item & Factory license
- 2. Agreements/Purchase Orders/Completion certificates if any, for similar items from other Universities, Institutes, and Government Department/Undertakings/Public sectors
- 3. List of Owner/partners of the firm and their contact numbers (Bidder Information)
- 4. Declaration of abandoned or suspended any awarded service & Blacklist Certificate. Annexure 'C'
- 5. Integrity Pact (for procurements above Rs1.0 Crore (Rs10.0 Million). Annexure 'D'
- 6. Copy of GST certificate & PAN No.
- 7. Undertaking that the successful BIDDER agrees to give a Performance Security amounting to 3% of the purchase order value in favor of "The Director, NITK Surathkal".
- 8. Extract of the audited balance sheet for the last three years is required to submitted with the technical bid with the relevant information highlighted.
- 9. The checklist that should be submitted along with the Technical Bid.
- 10. The contract form given in Section 5
- 11. EMD
- 12. Self Certification (as per Annexure G or H), depending on the status of the bidder.
- 13. A Separate Technical Compliance sheet conforming to each component of FM, Rate for Bill of Materials (RFBOM), AMC and other relevant items listed in the tender document.
- 14. Unpriced copy of the financial bid with terms and conditions.
- 15. Declaration that all items specified in the bid for the Rate for Bill of Materials (RFBOM) and AMC are included and the specifications are matching.
- 16. Declaration that the bidder agrees to the scope of service mentioned in this tender.
- 17. Proof that the bidder has 5 years experience
- 18. Proof that the bidder is certified ISO 9001
- 19. Proof for 3 works not less than Rs 15 lakhs within the last two years
- 20. License certificate for supplying the goods.
- **21.** List of customers with contact details: Reference Letter / Phone Number / Contact address of three places or more where you have carried out similar work (Networking projects only).

Signature and Seal of the Bidder

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### ANNEXURE -'B'

# **Previous Supply Orders Executed**

Name of the firm: \_\_\_\_\_

Order placed by [Full address of the purchaser]	Order No. and Date	Order Value	Specified Delivery Date	Actual Delivery Date	Remarks indicating reasons for late delivery, if any and justification for the price difference of their supply order and those quoted to us	equipment or service been installed /provided	and E-mail address

(Add more rows if required)

Signature and Seal of the Bidder

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# ANNEXURE -'C'

### **FORMAT OF DECLARATION** (To be submitted on Letterhead)

I/We Mr./Ms.\_\_\_\_\_, S/o/ of Mr. \_\_\_\_\_ aged about \_\_\_\_\_ years, resident of \_\_\_\_\_\_, working as ------(designation) for ------ (name and address of the bidding agency).

I solemnly affirm and the state as under:

- 1. That I am working as ------ / proprietor of the ----- (name of the firm) and authorized to sign this declaration.
- 2. That the firm M/s---- (complete address of the firm) has not abandoned or suspended any contract work of any organization/ department so far/ during the previous five financial years.
- 3. That the firm M/s---- (complete address of the firm) has not been blacklisted/ debarred for competing in tenders by any organization/ department so far/ during the previous five financial years.
- 4. I solemnly confirm that the facts stated above are true and nothing has been concealed.

Seal and Signature of Bidder

# Annexure-'D'

# **INTEGRITY PACT AGREEMENT**

(To be signed by the bidder/same signatory authorized to sign the relevant contact)

## BETWEEN

National Institute of Technology Karnataka, Surathkal, an Institute of National Importance (under NIT Act -2007) represented through The Registrar, NITK, Surathkal (hereinafter referred as the **'Buyer**, which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

## AND

(Name and Address of the Individual/Firm/Company)	
Through	(Hereinafter referred to as the
"Bidder/Contractor" and which expression shall unles	s repugnant to the meaning or context
hereof include its succession and permitted assigns)	

## Preamble

WHEREAS **NITK Surathkal has** floated the Tender (Hereinafter referred to as "Tender/Bid") and intends to award, underlaid down organizational procedure, contract for "Equipment"

[Hereinafter referred to as the "Contract").

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as **"Integrity Pact" or "Pact"**), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this witness as under:

Seal and Signature of the bidder

Registrar, for NITK Surathkal

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## Article 1: Commitment of NITK Surathkal

- i. **NITK Surathkal** commits to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of NITK Surathkal, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) NITK Surathkal will, during the Tender process, treat all Bidder(s) with equity and reason. NITK Surathkal will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - (c) NITK Surathkal shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- If NITK Surathkal obtains information on the conduct of any of its employees which is a criminal offense under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, NITK Surathkal will inform the Chief Vigilance Officer and in addition, can also initiate disciplinary actions as per its internal laid down policies and procedures.

## Article 2: Commitment of the Bidder(s)/ Contractor(s)

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adheres to the highest ethical standers, and report to the Government / Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and through the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commit himself to take measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contact execution:
  - a. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contractor to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contractor.

Seal and Signature of the bidder

Registrar, for NITK Surathkal

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- b. The Bidder(s)/Contractor(s) will not enter with other Bidder(s)into an undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
- c. The Bidder(s)/Contractor(s) will not commit any offense under the relevant IPC/PC Act. Further, the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as
- d. part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- e. The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India if any. Similarly, Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives if any. Either the Indian agent on behalf of the foreign principals or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- f. The Bidder(s)/Contractor(s) will when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers, or any other intermediaries in connection with the award of the Contract.
- iii. The Bidder(s)/Contractor(s) will not instigate third persons to commit offenses outlined above or be an accessory to such offenses.
- iv. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce a public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to a justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- v. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive practices (means the act of obtaining something, compelling action or influencing a decision through intimidation, there or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

Seal and Signature of the bidder

Registrar, for NITK Surathkal

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### Article 3: Consequences of Breach

Without prejudice to any rights that may be available to NITK Surathkal under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidders/Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before awarded or during the execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving a 14-day notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determinate the Contract if already executed or exclude the Bidders/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by NITK Surathkal.
- 2) **Forfeiture of EMD/Performance Guarantee/Security Deposit:** If NITK Surathkal has disqualified the Bidder(s) from the tender process before the award of the Contract or terminate/determinate the Contractor has accrued the right to terminate/determinate the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to NITK Surathkal, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Security of the Bidders/Contractor.
- 3) **Criminal Liability**: If NITK Surathkal obtains knowledge of the conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of Indian Penal code (IPC)/Prevention of Corruption Act, or if the Principal/Owner has substantive suspicion in this regard, NITK Surathkal will inform the same to law enforcing agencies for further investigation.

### Article 4: Previous Transgression

- The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country conforming to the anti-corruption approach or with Central Government or State Government or any other Central/State Public Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes an incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/Owner.
- 3) If the Bidder/Contractor can prove that he has resorted/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its discretion, revoke the exclusion prematurely.

Seal and Signature of the bidder

Registrar, for NITK Surathkal

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## Article: 5 Equal Treatment of all Bidder/Contractors/Subcontractors

- The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidders/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
- 2) The Principal/Owner will enter into pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed pact between the Principal/Owner and the bidder, along with the Tender, or violate its provisions at any stage of the Tender process, from the Tender process.

# Article 6: Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12months after the completion of work under the contractor or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of these pacts as specified above, under it is discharged/determined by the Competent Authority of NITK, Surathkal.

# Article 7: Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is **Mangaluru**, the Headquarters of NITK Surathkal, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partners holding power of attorney signed by all partners and consortium members. In the case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement with their original intentions.
- 5) It is agreed on term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action was taken by the Owner/Principal in accordance with this Integrity Agreement/Pact or interpretation thereof shall not be subject to arbitration.

Seal and Signature of the bidder

# Article 8: LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contract documents with regard to any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of the following witnesses:

(For and on behalf of NITK Surathkal) contractor) WITNESSES:

(For and on behalf of bidder/

1. .....(Signature, name, and address)

2. .....(Signature, name, and address)

Place: Surathkal.

Dated:

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## Annexure –'E'

### Format for Bank Account details of the bidder

Name of the account holder (the bidder)	
Complete address	
Contact number	
Email address	

#### Bank Account details:

Bank name	
Branch name	
MICR number	
Account type	
Account Number	
Please re-type the Account number again	
IFSC code of the Bank	

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the Institute responsible for this.

I have read the option invitation letter and agree to discharge the responsibility expected of me as a participant under the scheme.

Seal and signature of the bidder.

### **Certification from the banker:**

Certified that the particulars furnished above are correct as per our records.

Seal and signature of the authorized officer of the bank.

#### ANNEXURE -'F'

#### FORMAT FOR PERFORMANCE GUARANTEE BOND (To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred)

To,

Director, National Institute of Technology Karnataka, Srinivasnagar P.O., Surathkal Mangaluru - 575025

And Whereas you have stipulated it in the said contract that the contractor shall furnish you with a bank guarantee by a Commercial bank for the sum specified therein as security for compliance with its obligations as per the contract;

And Whereas we have agreed to give the contractor such a bank guarantee.

Now Therefore we hereby affirm that we are guarantors and responsible to you, on behalf of the contractor, up to a total of ......(amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the contractor to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the sail debt from the contractor before presenting us with demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall be valid until the ......day of ......20.....

Our......branch at......\*(Name & Address of the .....\*(branch) is liable to pay the guaranteed amount depending on the filing of a claim and any part thereof under this Bank Guarantee only and only if you serve upon us at our ......\* branch a written claim or demand and received by us at our ......\* branch on or before Dt...... otherwise, the bank shall be discharged of all liabilities under this guarantee after that.

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of Branch

\*Preferably at the headquarters of the authority competent to sanction the expenditure for the procurement of goods or at the concerned district headquarters or the state headquarters.

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#### Annexure -'G'

#### (Compliance to be submitted in the bidder's letterhead) (as applicable)

Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017

Item Name:	
- •	
Enquiry No.:	
110	

We M/s.\_\_\_\_\_(name of the bidder company) have read the clauses pertaining to the Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1,2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country that shares a land border with India.

We hereby certify that **we are not from such a country** and eligible to be considered for this tender.

(Note: Non-compliance of above said GoI Order and its subsequent amendment, (if any), by any bidder(s) shall lead to commercial rejection of their bids by NITK)

For and behalf of \_\_\_\_\_(Name of the bidder)

(Signature, date & seal of an authorized representative of the bidder)

### Annexure -'H'

### (Compliance to be submitted in the bidder's letterhead) (as applicable)

*Sub:* Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017

Item Name:	
Enquiry No.:	
Liquity 10.	

We M/s.\_\_\_\_\_(name of the bidder company) have read the clauses pertaining to the Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1,2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India.

We are from such a country which shares a land border with India & have been registered with the Competent Authority as specified in the above-said order. We hereby certify that we fulfill all requirements in this regard and are eligible to be considered.

### **Evidence of valid registration by the Competent Authority is attached.**

(Note: Non-compliance of above said GoI Order and its subsequent amendment, (if any), by any bidder(s) shall lead to commercial rejection of their bids by NITK)

For and behalf of \_\_\_\_\_(Name of the bidder)

(Signature, date & seal of an authorized representative of the bidder)

### Annexure -'I'

## Self-Certification on the letterhead of the company

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017, P-45021/2/2017-PP (BE-II) dated 28.05.2018, P-45021/2/2017-PP (BE-II) dated 29.05.2019 and P-45021/2/2017-PP (BE-II) dated 16.09.2020, we hereby certify that

.....

(Supplier name) are local supplier meeting requirement of minimum local content \_\_\_\_\_\_% defined in as above orders for the material against Enquiry / Tender No

.....

.....

.....

Details of the location at which local value addition will be made are as follows:

.....

We also understand false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permitted under law.

Date: Place: Signature: Name and Designation: Mobile no: Office Telephone No: Email ID: Office Seal:

#### Annexure -'J'

FORMAT FOR EARNEST MONEY DEPOSIT / BID BOND (To be typed on <u>Non-judicial stamp paper</u> of value Indian Rupees One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT MANGALURU OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT MANGALURU OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT MANGALURU. BONDS ISSUED BY COOPERATIVE BANKS ARE NOT ACCEPTED)

#### LETTER OF GUARANTEE

To Director, National Institute of Technology Karnataka, Srinivasnagar P.O., Surathkal Mangaluru – 575025

IN ACCORDANCE WITH YOUR TENDER for the supply of ....., M/s..... (hereinafter called the "Bidder") having its Registered Office at the wish to participate in said bid for the supply.....as an irrevocable Bank Guarantee against Earnest Money Deposit for an amount of Rs. (Rupees.....) valid up to (180 days from the date of issue of Bank Guarantee), is required to be submitted by the bidder as a condition precedent for participating in the said bid, which amount is liable to be forfeited by the Purchaser on (1) the withdrawal or revision of the offer by the bidder within the validity period, (2) Non acceptance of the Letter of Intent/Purchase order by the Bidder when issued within the validity period, (3) failure to execute the contract as per contractual terms and condition within the contractual delivery period and (4) on the happening of any contingencies mentioned in the bid documents.

#### During the validity of this Bank Guarantee:

The Guarantee shall be irrevocable and shall remain valid up to.....(180 days from the date of issue of Bank Guarantee) If any further extension is required, the same shall be extended to such required period on receiving instruction from the Bidder, on whose behalf the is Guarantee is issued.

#### Notwithstanding anything contained herein:

\* Our liability under this Bank Guarantee shall not exceed Rs...... (Rupees......).

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\* This Bank Guarantee shall be valid up to......(date).
\* We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee Only and only if you serve upon us a written claim on or before ......(date).

### Yours truly,

Signature and seal of the guarantor: Name of Bank: Address: Date:

Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. The bank is requested to take appropriate necessary action on or after the expiry of the bond period

# Annexure-'K'

# **Checklist for BIDDERs**

BIDDERS are to indicate whether the following documents are uploaded by striking out the non-relevant option and the relevant technical bid documents should be in order.

Sl. No.	Documents	Content	Document Attached
1		A signed copy of the tender document should be uploaded	( <b>Yes/No</b> ) Pg. No
2		Self-Attested copy of GST & PAN Number	( <b>Yes/No</b> ) Pg. No.
3		License certificate for manufacture /supply of the item &Factory license. Registration with EPF and ESI	( <b>Yes/No</b> ) Pg. No.
4		Undertaking that the successful BIDDER agrees to give a 3% Performance Security.	( <b>Yes/No</b> ) Pg. No.
5		Catalogue of the Product with detailed product specifications.	( <b>Yes/No</b> ) Pg. No.
6		Copy of the Balance Sheet	( <b>Yes/No</b> ) Pg. No.
7	-	List of Owner/partners of the firm and their contact numbers (Bidder Information)	( <b>Yes/No</b> ) Pg. No.
8	Technical Bid	The contract form is given in section 5	( <b>Yes/No</b> ) Pg. No.
9	-	Format of compliance statement of specification as per Annexure-'A'	( <b>Yes/No</b> ) Pg. No.
10		Previous Supply Order as per <u>Annexure-'B'</u>	( <b>Yes/No</b> ) Pg. No.
11		Declaration of abandoned or suspended any awarded service & Blacklist Certificate. <b>Annexure 'C'</b>	( <b>Yes/No</b> ) Pg. No.
12		Integrity Pact. <u>Annexure 'D'</u>	( <b>Yes/No</b> ) Pg. No.
13		Bank details of the bidder. <u>Annexure 'E'</u>	( <b>Yes/No</b> ) Pg. No.
14		EMD FORMAT <u>Annexure 'J'</u>	( <b>Yes/No</b> ) Pg. No.
15		Technical specifications as per Technical specification format (Page No: 24 to 53), Technical Compliance Sheet and unpriced financial Bid.	( <b>Yes/No</b> ) Pg. No.

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16		Annexure –'G'	( <b>Yes /No</b> ) Pg. No.
17		Annexure –'H'	( <b>Yes /No</b> ) Pg. No.
18		Annexure –'I'	( <b>Yes /No</b> ) Pg. No.
19		Any other documents (please specify) as mentioned in the Tender document	( <b>Yes /No</b> ) Pg. No.
20	Financial- Bid	Price bid	(Yes/No)

Seal and Signature of the bidder