



MAHARANA PRATAP INSTITUTE OF TECHNOLOGY

LACHHIPUR, SONAULI ROAD, GORAKHNATH, GORAKHPUR (U. P.) - INDIA, 273015

महाराणा प्रताप इंस्टिट्यूट ऑफ टेक्नोलॉजी

लच्छीपुर, सोनौली रोड, गोरखनाथ, गोरखपुर, उ. प्र. - भारत, 273015

(UNDER UMBRELLA OF MAHARANA PRATAP SHIKSHA PARISHAD, GORAKHPUR)

Approved by AICTE, New Delhi

Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow, Uttar Pradesh

Tender Reference No. MPIT/NW/Tender-10/2026

Dated: 17.01.2026

TENDER DOCUMENT

Tenders, in three separately sealed envelopes (Technical Bid, Financial Bid, Tender Fee and Earnest Money Deposit (EMD)), are invited from reputed Manufacturers/Authorized Dealers/Vendors/Bidders/Firms for **Design, Supply, Installation, Testing, Commissioning, Operation & Maintenance of Networking Infrastructure for Center of Excellence (CoE) at Maharana Pratap Institute of Technology, Gorakhpur**. MPIT is establishing a Center of Excellence (CoE) and seeks to deploy a robust, secure, scalable, and future-ready networking infrastructure to support advanced labs e.g. Artificial Intelligence, Cyber Security, 3D Printing & Drone Technology & Space Technology labs, data centers, smart classrooms, and institutional IT services. Bidders are requested to submit their sealed bids physically in three separate envelopes as follows: - **Envelope 1:** Technical Bid with all requisite documents in support of all the claims made by the bidder, **Envelope 2:** Financial Bid containing the rates for each items/service (if applicable) and **Envelope 3:** DD of Tender Fee and EMD. Each envelope has to be sealed separately. Please mention the envelop number (1-Technical Bid, 2-Financial Bid, 3- Tender Fee and EMD), tender reference number, tender title, name of bidder, complete address, telephone/mobile number, and e-mail address of the bidder on the envelope.

Sr. No.	Tender Title	Quantity	Tender Fee in Rs.	Earnest Money Deposit in Rs.
01.	Design, Supply, Installation, Testing, Commissioning, Operation & Maintenance of Networking Infrastructure for the specified period as given in the Schedule of Requirements	As per Schedule of Requirements	Rs. 5,000/-	Rs. 2,00,000/-

Detailed description and tender documents are available on our website: - www.mpit.ac.in

Date of Publishing Tender:

17.01.2026

Bid Submission start Date:

18.01.2026

Bid Document Download Start Date:

17.01.2026

Bid Submission End Date & Time

27.01.2026, 5.00 pm

Bid Document Download End Date:

27.01.2026

Technical Bid Opening Date & Time

29.01.2026, 11.30 am

Financial Bids (Envelope 2) of only those firms will be opened that qualify in the Technical Bid evaluation stage. The date of opening of Financial Bids will be informed only to the technically qualified firms separately. The competent authority of Maharana Pratap Institute of Technology, Gorakhpur reserves the right to reject/cancel any or all the tenders without assigning any reason thereof. Sealed envelopes containing all requisite details and documents should be submitted to the office of the Director, Maharana Pratap Institute of Technology, Lacchipur, Sonauli Road, Gorakhnath Road, Gorakhpur-273015, UP so that it reaches on or before the stipulated deadline. Bidders sending their documents by registered / speed post only should ensure that the bids are received on or before the last date. Bids received after the due date shall not be entertained in any case.

(Director)

(TO BE FILLED UP BY THE BIDDER ON ITS LETTER HEAD AND SUBMITTED WITH THE TECHNICAL BID)

(Mention the Bidder Details here)

From:
.....
.....
.....
Phone No.
Fax No

To,

The Director,
Maharana Pratap Institute of Technology,
Gorakhpur-273015

Sub: Submission of Tender (Technical Bid Only) in response to your Tender Reference No. MPIT/NW/Tender-10/2026 dated: 17.01.2026

Dear Sir,

We hereby submit our **Technical Bid** along with proof of Tender Fee and EMD in full compliance of the terms and conditions given in the tender document with all technical specifications.

Thanking you,

Yours faithfully,

Date:.....

(Signature of Bidder)

Authorized Signatory with Seal

**Maharana Pratap Institute of Technology,
Gorakhpur, Uttar Pradesh**

Form -I

(To be filled in by the Bidder. Enclose necessary documents in support of your claim.)

Bidders Performa

Tender Title	Design, Supply, Installation, Testing, Commissioning, Operation & Maintenance of Networking Infrastructure for the specified period as given in the Schedule of Requirements
Name of the firm with full address and contact number	
FOR	Maharana Pratap Institute of Technology, Gorakhpur.
Tender Fee (Non-Refundable)	DD No: _____ Amount: _____ Bank: _____ Date: _____ Drawn in favor of Maharana Pratap Institute of Technology payable at Gorakhpur
Earnest Money Deposit (Refundable)	DD No: _____ Amount: _____ Bank: _____ Date: _____ Drawn on favor of Maharana Pratap Institute of Technology payable at Gorakhpur.
PAN/TIN/TAN/GST No (Attach copies of all the documents duly signed and stamped by the authorized signatory)	PAN: _____ TIN: _____ TAN: _____ GST: _____
Original Equipment Manufacturers /Authorization Letter from OEM (Duly signed and stamped by the person authorized to issue such certificates).	Attach proof
Turnover of the last three financial years (Attach CA certified Turnover Certificate)	Attach proof
Past Experience of Setting up similar kind of Networking infrastructure	Attach proof
EPF & ESIC Registration	Attach proof
ISO 9001:2015 Certificate	Attach proof

Date:.....

**(Signature of Bidder)
Authorized Signatory with Seal**

Maharana Pratap Institute of Technology, Gorakhpur, Uttar Pradesh

Form -II

(Bidder must sign and enclose this document with Technical Bid)

GENERAL CONDITIONS:

1. Tender documents are available for download on our website during the stipulated period. Tenders are invited on the prescribed Tender Forms only. Tender submitted in any other format, or send through e-mail, or any other electronic medium shall not be accepted.
2. Bidders must go through the complete tender documents and read them carefully before submission of their bids. Any clarification regarding the tender terms and conditions, process etc. should be sent to **Director, MPIT, Gorakhpur, email: directormpit@gmail.com**
3. Tender Fee is **Rs. 5,000/-** (Non-refundable), which should be paid by means of Bank Draft favoring **Maharana Pratap Institute of Technology** payable at Gorakhpur. It should be kept separately in Envelope-3 along with the EMD and sealed.
4. An Earnest Money Deposit of **Rs. 2,00,000/-** payable through a Demand Draft drawn in favor of **Maharana Pratap Institute of Technology** payable at Gorakhpur from any of the scheduled banks. The original Demand Draft for Tender Fee and EMD must be submitted separately in Envelope-3 (DD of Tender Fee and EMD). These documents should reach our office before opening of the bids. If the tender fee and EMD are not received before opening technical bids, the technical bids of such vendors shall not be opened.
5. The bidder must be a natural person, private entity, or public entity (state owned institution/ enterprise). The bidder must not be or proposes to be a Joint Venture/ Consortium. The bidder must be a manufacturer of the product offered or be a dealer authorized by the Original Equipment Manufacturer. A declaration stating the same on the bidder's letterhead duly signed and stamped by the authorized signatory should be enclosed with the technical bid.
6. The bidder must not be insolvent, in receivership, bankrupt, or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings. The bidder must not be convicted (within 3 years preceding the last date of bid submission) or stand declared ineligible/ suspended/ blacklisted/ banned/ debarred by appropriate agencies of Govt. of India, and Govt. of Uttar Pradesh. A declaration stating the same on the bidder's letterhead duly signed and stamped by the authorized signatory should be enclosed with the technical bid.
7. The bidder must fulfill all eligibility conditions mentioned here or elsewhere in any documents related to this tender. The bidder must also provide such evidence of continued eligibility to the procuring entity, if requested.
8. Bidders are requested to attend a Pre-Bid Meeting for clarification on the technical and Financial conditions or any other terms and conditions of this tender. Time, date, and place of such meeting will be notified separately on our website. Bidders are requested to regularly visit our website for pre bid meeting notice. Participation in the Pre-Bid Meeting is not mandatory. If a bidder does not participate or submit any query, then no subsequent representations from them regarding the Technical/Financial specifications/conditions shall be entertained.
9. Delegates participating in the Pre-Bid Meeting must provide a Photo ID Card and authorization letter from the prospective bidder on their letterhead; else they shall not be allowed to participate. The Pre-Bid meeting may also be held online at the discretion of the procuring entity
10. The procuring entity reserves the right without assigning any reasons: (a) to reject any or all of the bids; (b) to cancel the tender process; (c) to abandon the procurement of goods; (d) to issue another tender for identical or similar goods; (e) to issue corrigendum/ addendum in the specifications or terms and conditions of the tender; (f) to extend the last date of bid submission. It would have no liability to the affected bidder/ bidders or any obligation to the inform the affected bidder/ bidders of the grounds of such actions.
11. Subject to the provisions of the tender documents, participation in this tender process is open to all bidders who fulfill all the eligibility conditions, technical requirements, and tender terms and

conditions.

12. Any bidder having a conflict of interest, which substantially affects fair competition, shall not be eligible to bid in this tender. Bids found to have a conflict of interest shall be rejected as non-responsive. Bidders are required to declare the absence of such conflict of interest on their letterhead duly signed and stamped by the authorized signatory.
13. The prices should be arrived at independently, without restricting competition, any consultation, communication, or agreement with any other bidder of competitor relating to those prices or the intention to submit an offer, or the methods of factors used to calculate the prices offered. The prices should neither be nor shall be knowingly disclosed by the bidder, directly or indirectly, to any other bidding competitor before bid opening or contract award, unless otherwise required by law.
14. Prices should be mentioned only in Form V (Financial Bid Format). It should be separately sealed in Envelope 2: Financial Bid. Financial Bids (Envelope 2) of only those firms will be opened that qualify in the Technical Bid evaluation stage. The currency of bid and payment shall be quoted by bidder in Indian Rupees. All payment shall be made in Indian Rupees only. Tender where prices are quoted in any other way shall be rejected as non-responsive.
15. All the bidders should ensure that they are GST compliant and their quoted tax structure/rates as per GST Act/ Rules. Bidder should be registered under GST and furnish GSTIN number and GST Registration Certificate along with their Technical Bid.
16. The bidder(s) shall bear all direct or consequential costs, losses and expenses associated with or relating to the preparation, submission, and subsequent processing of their bids. The procuring entity shall not be liable in any manner whatsoever for the same or any other costs, losses, and expenses incurred by Bidder(s) for participation in the Tender process, regardless of conduct or outcome of the Tender process.
17. The tenderer must submit the proof of relevant experience in state/central govt. institutions/ departments, reputed Universities/ Institutions of National Importance.
18. The duration of validity of Tenders/Quotations shall be 90 days from the date of opening of the tenders.
19. No interest shall be payable on the amount of earnest money and the same shall be released within 30 days to the tenderers who fails to qualify after finalization of the tenders.
20. The bidder must submit the Manufacturer's Authorization Form (MAF) from the concerned OEMs for participating in the bid.
21. In the event of the successful tenderer withdrawing his offer within the validity period or fails to accept the offer for any reason whatsoever, the earnest money deposited by him shall be forfeited by Maharana Pratap Institute of Technology, Gorakhpur.
22. Conditional offers/ alternative offers, multiple bids by a bidder shall not be considered.
23. The competent authority/ Director, Maharana Pratap Institute of Technology, Gorakhpur reserves the right for not accepting the lowest or any/all the tenders in whole or in part without assigning any reason for such non-acceptance.
24. The competent authority/ Director, Maharana Pratap Institute of Technology, Gorakhpur reserves the right to increase/ decrease/ remove/ add quantity of the items. Intimation for the same shall be given at the time of placing work/supply order.
25. Full description & specifications of the items offered by the bidder should be clearly mentioned in the tender, failing which the tender will not be considered.
26. Force Majeure: Any failure or omission to carry out the provisions of this supply by the supplier shall not give right for any claim by supplier and purchaser to one against the other, if such failure or omission arises from an act of God which shall include all acts of natural calamities from civil strikes compliance with any statistics and or requisitions of the Government lockout and strikes, riots, embargoes or from any political or other reasons beyond the suppliers control including war (whether declared or not) civil war or state of incarceration provided that notice of the occurrence of any event by either party to the other shall be within two weeks from the date of occurrence of such an event which could be attributed to force majeure. Any delay due to Force Majeure will not be attributable to the either of the parties.
27. Bidder must enclose unconditional Warranty Certificate for all equipment of the duration mentioned in the Schedule of Requirement (Specifications) on OEM letterhead. The warranty shall be effective from the date of acceptance of goods. The warranty must cover all parts of the

equipment. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any breakdown during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service.

28. BIDDER/OEM must have Dedicated / toll Free Telephone No. for Service Support. Details of Service Centers near consignee destinations are to be uploaded along with the bid.
29. After having been notified of the defects/ service requirement during warranty period, Seller must complete the required Service / Rectification within 3 days' time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Retention amount.
30. The bidder should not be under liquidation; court receivership or similar proceedings should not be bankrupt. Bidder should upload an undertaking on its letterhead clearly stating that it is not under liquidation; court receivership or similar proceedings and is not bankrupt. Such undertaking should be enclosed with the Technical Bid.
31. In case any false information/ statements/ documents are furnished along with the bid, such bids shall be liable for rejection and the respective bidder shall be solely responsible for the same.
32. The bidder should upload an undertaking on its letterhead stating his/her acceptance and compliance of all the terms and conditions mentioned in the Bid document.
33. Bidders should ensure that the products being offered by them strictly adhere to the technical specifications, quality, and quantity mentioned in the Schedule of Requirement.
34. The bidder/OEM shall furnish an undertaking on its letterhead stating that the firm has never been blacklisted in the past by any Central/ State Govt. Organization/ PSU/ Public Listed Company/ Reputed University/ Educational Institutions and that there is no vigilance/CBI case pending against the firm/ supplier.
35. In the case of not honoring the supply order within stipulated period as per tender conditions, the Institute will have the right to impose penalty as deemed fit to resort to make purchase at the suppliers cost and risk and may forfeit his/her security/EMD.
36. Legal Jurisdiction:- All disputes and question, if any arising between the Institute and the bidder out of or in connection with the terms and conditions contained herein or as to the construction of application thereof, or the respective rights and obligations of the parties there under or as to any clause or thing herein contained or by reason of the supply or failure or refusal to supply any material or as to any other matter in any way relating to these presents shall be referred to the sole arbitration of the competent authority of the Institute or his nominee. The decision of the sole arbitrator shall be final and binding upon both parties and subject to adjudication of Gorakhpur Court. Place for arbitration shall be at Gorakhpur (U.P.), India.
37. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. After filling the financial bid format, it should be duly signed and stamped by the authorize signatory and sealed in a separate envelop (Envelope -2 Financial Bid).
38. The estimated values of the tender is **Rs. 1,49,77,156**). This figure is purely indicative and is an approximation. The actual rates may be lesser than that.
39. The successful bidder must submit performance security (Retention Amount) in the form of Account Payee DD. The amount of performance security shall be equal to 2 % of the total quoted rate. DD should be made in favor of Maharana Pratap Institute of Technology, Gorakhpur payable at Gorakhpur.

I hereby agree with the above conditions.

Date:

(Signature of Tenderer/Authorized Signatory with Seal)

**Maharana Pratap Institute of Technology,
Gorakhpur, Uttar Pradesh**

Form -III

(Bidder must sign and enclose this document with Technical Bid)

SPECIAL CONDITIONS:

1. Rates quoted for different items in your quotation should be valid for 90 days from the date of opening of the tender. Rates shall remain firm during the execution of the tender.
2. Prices are required to be quoted as per items mentioned in the Financial Bid.
3. The tenders should quote on the basis of 'FOR' destination/delivery at site.
4. All available technical literature, catalogues and other data sheets in support of the specifications and details of the items should be furnished along with the offer.
5. Goods/Materials offered should strictly confirm our specifications. Deviation if any should be clearly indicated by the tenderers in their quotation. The tenderer should also indicate the Make/Mode number of the items offered and provide catalogues of technical literature and samples, wherever necessary along with the quotations.
6. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right to accept the whole or any part of the tender or portion of the quantity offered, and tenderers shall supply the same at the rates quoted.
7. Corrections if any must be attested. All amounts shall be indicated both in words as well as in figures, where there is difference between the amount quoted in words and figures quoted in words shall prevail.
8. The tenderer should supply along with his tender the name of his bankers as well as the latest Income Tax Clearance Certificate/ Latest Income Tax Return, failing which the tender is liable to be rejected.
9. The Financial bid of those firms will be opened whose technical bids are qualified. The date of opening of financial bids will be informed to the firms whose technical bid is qualified.
10. All the equipment supplied must have a minimum warranty of **3 year** on site from the date of installation, commissioning and acceptance by Maharana Pratap Institute of Technology, Gorakhpur, which will cover free maintenance services, proper functioning and operation of the instruments/materials installed and commissioned under this project.
11. The quantity of Items may increase / decrease as per requirement.
12. The authority of the person signing the tender if called for should be present.
13. **Financial Bid Evaluation Criteria:** The Financial bids shall be evaluated considering the total value of Supply and Installation.
14. **Supply / Delivery:** Regarding the supply of the materials, the Purchase order will be placed by TCS Foundation. TCS Foundation is the sponsor for the project under its Corporate Social Responsibility (CSR) program. The supplier should deliver goods in sealed and good condition along with the triplicate bills for the same directly to Stores of Maharana Pratap Institute of Technology, Gorakhpur. All the material should be supplied within 8 weeks from the date of placement of the order and installation must be completed within 16 weeks from the date of placement of order by Maharana Pratap Institute of Technology, Gorakhpur.

15. Payment:

- All invoices/bills will be raised on 'TCS Foundation, 9th Floor, Nirmal Building, Nariman Point, Mumbai – 400021'.
- 50% advance payment shall be made upon issuance of purchase order, receipt of proforma invoice and against the submission of Bank Guarantee for the same amount.
- 40% payment against supply & receipt of material and after installation against submission of 100% tax invoice.
- 10% payment will be retained and released after completion of defect liability period or warranty whichever is later.
- All the payment will be made through NEFT or RTGS.
- Payment terms for any other services/deliverables and changes in payment terms mentioned above, if any, will be mutually agreed before the issuance of purchase order.

16. Other Standard Terms and Conditions which will be included at the time of issuance of purchase order.**STANDARD TERMS & CONDITIONS****1. Price Escalation:**

The price specified on the order shall remain fixed and be deemed to be free from escalation of any kind. The price is valid for quantity variation; unit price shall apply and will remain valid till completion of the work. TFND shall not accept for any reason whatsoever, price escalation for any item of work, or any other claim in respect of supply, labour and material unless otherwise agreed in writing by both parties.

2. Specifications:

The material / equipment supplied and the installation & commissioning carried out; and the workmanship/services provided must be as per agreed tender specifications and BOQ of this order. Any change in specifications shall be effected only after obtaining written approval from TCS/TFND Project Director or consultants selected by TFND.

3. Acceptance / Rejection:

- a. Acceptance of any of the goods/work/services, covered by this order shall not discharge Vendor from liability for damages or other legal remedy for any breach of any condition or Defect Liability Period contained herein or implied by law and if after accepting any of the goods/ services, any discrepancies or defects therein either in material, workmanship or otherwise become known to TFND and such defects amount to breach of any condition and Defect Liability Period herein under or implied by law the TFND shall notify the Vendor of such defects and shall (in addition to any other rights and remedies that TFND may possess by contract conditions) be entitled to reject the defective goods/work/services.
- b. In case there is any rejection of goods/work/services, a notification of the rejection will be sent to the Vendor who will arrange the removal of the rejected goods from TFND/Project premises within fifteen days. Until the time, the Vendor, collects these goods, the rejected goods may remain at TFND premises, but they shall be on account of and on the sole risk of the Vendor, TFND shall not be responsible for or accountable for these goods left in TFND premises after an elapsed of three days from the notice of rejection.

- c. In case the rejected goods/ work /services is not collected within stipulated time, TFND shall dispose of the rejected goods/ work/services at the risk of the Vendor and will have no liability whatsoever to the Vendor.

4. Assignments and Sub- contacting:

The Vendor shall not subcontract, transfer or assign any part of this order without the prior written consent of TFND.

5. Indemnification:

Vendor shall, at its sole, expenses, settle or defend and hold TFND harmless from and against any and all claims and liability, including without limitation, damages, awards, expenses, legal fees and court cost by reason of (a)loss, property damage or destruction or personal injury of any nature or is alleged to be caused, in whole or in part, by the acts or omissions of the Vendor, its employees, agents or sub-vendors, or (b)any claim against TFND, its subsidiaries, affiliates, and /or their respective customers alleging that products or services or any part or item thereof furnished under the order or any use thereof ,infringes any patent, copyright, trademark, trade secret, or other intellectual property right of a third party.

6. Confidential Information and Publicity:

The Vendor shall treat the terms, conditions and existence of the work order as confidential information. Vendor shall obtain TFND's written consent prior to any publication, presentation, public announcement concerning its relationship as a Vendor to TFND.

Any drawings, specifications, data, documents and other information provided by TFND to the Vendor in connection with the work order and all intellectual property rights therein shall remain the property of TFND.

The Vendor shall be obliged to keep all information gathered from TFND completely confidential and not to share the same with anyone or organization.

7. Liquidated Damages:

With regard to performance of the work order by the Vendor, time is of the essence. The delivery completion of the work should be performed on or before the date and at the place specified in the work order. Vendor shall immediately inform TFND of any foreseen or foreseeable delay in the delivery and secure further instructions from TFND regarding the delivery. TFND's acceptance of the Vendor's notice will not constitute TFND's waiver of any of Vendor's obligations.

In case of delays, liquidated damages will be applicable 0.5% of work order value per week of delay beyond the date of work stipulated in the work order or beyond the date of extension if granted in writing by TFND, subject to maximum 5% of the work order value.

Liquidated damages shall also become payable by the Vendor in the following circumstances:

- i. Non compliance by the Vendor to project schedules;
- ii. Non compliances to official project requirements/ and official mail responses;
- iii. Operational/ground commitments as committed by owner are breached.
- iv. Delays caused without any logical/satisfactory reasons to TFND's site management.
- v. All major intermediate milestones, as determined by project manager, will also be assessed and liquidated damages shall be applied for the delay in completion of those milestones, on the percentage rates and delayed periods as mentioned above and in that case, the date of completion shall be referred to as date of completion of that particular milestone. However, if the Vendor manages to capture part of or complete lost time, a proportionate reduction in already applied liquidated damages may be considered.

8. Force Majeure:

Except for payment obligations, neither party will be liable to the other for any failure to meet its obligations due to any cause beyond the non performing party's reasonable control. If any inability to perform continues for longer than 90 days, either party may terminate this order by providing written notice to the other party and TFND will pay the Vendor for products delivered and services satisfactorily performed prior to termination. Force majeure events may include but are not limited to: (1) Government embargoes, (2) blockades, (3) seizure or freeze of assets, (4) delays or refusals to grant an export license or the suspension or revocation thereof, (5) any other acts of any government that would limit the ability for contract performance, (6) fires, earthquakes, floods, severe weather conditions, (7) any other acts of god, (8) quarantines or regional medical crises, (9) labour strikes or lockouts, (10) riots, strife, insurrection, civil disobedience, armed conflict, terrorism or war, declared or not (or impending threat of any of the foregoing, if such threat might reasonably be expected to cause injury to people or property), (11) inability or refusal by TFND directed third party suppliers to provide the Vendor parts, services, manuals, or other information necessary to the goods or services to be provided by the Vendor under this order.

9. Termination:

- a. TFND may forthwith without notice and without further obligation save as it is herein expressly provided, terminate this work order in the event of the Vendor becoming bankrupt or having a receiver appointed for Vendor assets or any proceedings being commenced for the dissolution, liquidation or bankruptcy of the Vendor being incapacitated for any reason from performance of the work order.
- b. TFND may also terminate the work order in the event of the Vendor fails to commence or complete the work order on time or for work not done to the satisfaction of TFND, after giving fifteen (15) days written note to the Vendor. The Vendor shall reimburse the amount paid to them for the work not completed.
- c. In the event of termination of the work order, TFND shall make payment of the price payable for the items delivered and the services completed by the contactor and accepted by TFND. The Vendor shall not be entitled to any further compensation for any termination of work order.

10. Settlement of Disputes/ Arbitration:

Any disputes or differences arising between the parties hereto as to the effect,

interpretation or application of this order or as to their rights, duties or liabilities thereunder, or as to any act, matter or thing arising out of, or consequent to, or in connection with the transaction herein shall be referred to any finally resolved by arbitration by three arbitrators, one to be appointed by each party and the third to be appointed in accordance with the provision of the arbitration and conciliation act, 1996. The arbitration proceedings shall be in accordance with the provisions of the arbitration and conciliation act, 1996, or any subsequent enactment or amendment thereof. Such arbitration proceedings shall be held in Mumbai, India and shall be conducted in English language.

Any injunctive action or claim arising out of the transactions arising here from shall be subject to the jurisdiction of the courts at Mumbai.

11. Compliance with Laws and Security Policies:

- a. Vendor represents and warrants that it will comply with all applicable local and national laws and regulations pertaining to its performance of its obligations under this work order.
- b. Vendor shall be responsible in respect of persons engaged, for the compliance of all statutory provisions including but not limited to under the contract law/ act, ESIC, PF, etc. The Vendor shall be fully responsible and liable, in respect of persons engaged in the performance of its services and execution of the works, to comply with all applicable rules, regulations or laws including all applicable labour laws. The Vendor shall indemnify TFND and at all times hold TFND fully indemnified and harmless from and against all claims, actions, proceedings or demands whatsoever that may be made or instituted against TFND or its directors, officers or employees resulting from the failure of the Vendor, and/or their sub -Vendors in complying with the applicable rules, regulations or laws and the indemnification herein shall cover all costs, expenses, losses or damages that may be incurred or suffered by TFND.
- c. Vendor will comply with TFND security, HSE, and workplace policies, rules and procedures at TFND's site.

12. Safety Code:

- a. All the safety codes and the preventive measures for the work shall be strictly followed. All the personnel and staff shall be under the Vendor, authority and it shall be the responsibility of the Vendor, for all insurance, accident claims etc., at the site. The Vendor shall strictly abide by the labour laws in force from time to time and comply with the same and will co-ordinate directly with the concerned authorities.
- b. The Vendor shall at all times hold TFND and its representatives harmless and effectively indemnified against any claims that may rise out of such non - compliance of applicable law by the Vendor, and their sub-Vendors including without limitation, any claim relating to death or injury to any person, and such indemnification shall extend to the reasonable attorney's fees that may be spent by TFND its representative to defend such a claim. This clause shall survive the termination of this order.

13. Site office and Storage Yard:

Vendor will be solely responsible for protection and security of the materials starting from material receipt and unloading at the site, storage at the site, transportation, handling, installation, commissioning and handing over the works of TFND. The Vendor shall set up suitable stores for itself at its own cost and shall be responsible for the safe custody of

its goods, equipment, materials in premises till the entire tenure of the project.

14. Co- ordination of Work:

The Vendor shall co-ordinate with other Vendors selected and appointed by TFND for other works of the project during the course of executing the contract.

15. Insurance:

All insurance policies related to transit insurance, workmen compensation, CAR policy, third party liability etc., under separate policies for relevant amount shall be taken by the Vendor. These policies must remain in force at all times during the execution of the work. These policies should be in the joint name of TFND and the Vendor as applicable. During the contract period, CAR policy should be 110% of the contract value at any point of time.

Any insurance required under law-Vendor shall at its own cost carry and maintain any and all other insurance which may be required under any law or regulation from time to time. Availing, insurance policies shall not be construed as relieving the obligation described under indemnity clause except to the extent of utilization of the proceeds of the claim for the intended purpose.

16. Site Clearing:

On completion of the work, the site of works and installation shall be cleared of all plants, equipment, debris, etc. of any kind pertain to Vendor's scope of work. If it is noticed that the Vendor does not clean/maintain the place of work appropriately, then TFND reserves the right to get the area cleaned and unilaterally debit the cost of cleaning to the Vendor, or deduct the same from any amounts due to the Vendor as deemed fit.

17. Continuity of Services:

The Vendor must have in place at all times a detailed contingency and business continuity plan that covers situations where the services cannot be provided by the Vendor including due to force majeure events, malfunction or unavailability of the Vendor's personnel and resources and any other causes. The Vendor must ensure that the contingency and business continuity plan and each update to, and revised version of the contingency and business continuity plan is approved by TFND. In the event that the Vendor is unable to provide any services for any reason including a force majeure event, malfunction or unavailability of the Vendor resources or any other cause, the Vendor must immediately notify TFND and comply with the current approved contingency and business continuity plan to ensure continuity of the services. The Vendor confirms that its contingency and business continuity plan will be such that notwithstanding non availability of its resources for any reason whatsoever, the Vendor is able to continue to provide the services in accordance with the agreed service levels and otherwise perform all its obligations under this order without interruption.

18. Right to Audit:

Vendor shall provide access to TFND, its internal and external auditors, inspector's regulators and other representatives that TFND may designate from time to time, at reasonable hours to Vendor personnel and to Vendor records and other pertinent

information, all to the extent relevant to the performance of Vendor's financial obligations under this work order. Such access shall be provided for the purpose of performing audits and inspections to (i) verify the accuracy and completeness of Vendor's invoice; (ii) verify the accuracy and completeness and pass-through expenses; (iii) examine the financial controls, process and procedures utilized by Vendor in connection with the obligations under the agreement (iv) enable TFND to meet applicable legal, regulatory and contractual requirements. Vendor shall provide any assistance reasonable during the term and up to 10 (ten) years thereafter. Vendor shall not be required to provide any of its internal or external auditors to participate in such audit unless specifically requested by TFND in writing, in which case TFND shall be responsible for any incremental cost for such auditor's participation.

19. Ownership / Proprietary Rights:

Vendor agrees and acknowledges that any customized Goods or Services specifically and exclusively developed for TFND hereunder shall be the sole and exclusive property of TFND upon receipt of payment of full Price/Service fee by the Vendor. Upon TFND's written request, Vendor shall execute and deliver to TFND all instruments and other documents and shall take such other reasonable actions as may be necessary or reasonably requested by TFND, so that TFND may protect and defend its rights in and to such Supply(ies) and Associated Proprietary / Intellectual Property Rights.

All the Intellectual Property Rights and Ownership of all tools, processes, software, utilities and methodology including any of the Vendor proprietary products or components thereof used in the any customized Goods or Services including related services or all modifications, enhancements or customization made thereto, other than any customized Goods or Services including related services developed specifically and exclusively for the TFND, even if form part of or incorporated into the any customized Goods or Services referred above shall remain the sole and absolute property of the Vendor, with full ownership rights therein ("Vendor Property"). The Vendor shall grant in favor of the TFND a non-exclusive, royalty free, worldwide user license to use the Vendor Property to the extent they form part of the any customized Goods or Services and will be required for the proper functioning of the any customized Goods or Services, provided that the rights of the TFND to use such the Vendor Property does not include the rights to (a) sell, lease, exchange, mortgage, pledge, license, sub-license, assign or in any other way convey, transfer or alienate the Vendor Property in favor of any person (either for commercial consideration or not (including by way of transmission)) and/or (b) reverse compile or in any other way arrive at or attempt to arrive at the source code of the Vendor Property.

20. Limitation of Liability:

Neither Party shall be liable to the other Party for any indirect, incidental, contingent, consequential, punitive, exemplary, special, or similar damages, including but not limited to, loss of profits or loss of data, whether incurred because of negligence or otherwise, irrespective of whether either Party has been advised of the possibility of the incurrence by the other Party of any such damages.

TFND's liability arising out of or in connection with this Work Order, whether based in contract, tort (including negligence and strict liability) or otherwise, shall not exceed the amount of fees paid by TFND to Vendor during the tenure of the Work Order.

Nothing in this order shall operate so as to exclude or in any way limit Vendor's liability whether based in contract, tort (including negligence and strict liability) or otherwise for (a) material breach of its obligations under this order (b) fraud, misrepresentations (c) negligence or misconduct of Vendor or its Personnel (d) for death or personal injury caused by the Vendor's negligence during transportation and delivery of Goods or provision of Services at the TFND Facility/TFND Customer Facility (e) violation of the TFND's intellectual property rights, or breach of confidentiality obligations (f) security breaches committed by Vendor or its Personnel using embedded tools in the Goods/Services connected to and interoperating with TFND's IT systems and (g) any other liability that may not be excluded or limited in law.

21. Non solicitation:

The Vendor agrees that it shall not entice, solicit, or seek directly or knowingly with a view to offer employment to any of TFND's employees or representatives during the Supply Term and Service Term of the Work Order and for a period of one (1) year after the expiry, cancellation, or termination of this order.

22. Waiver:

No forbearance, indulgence, relaxation by any party at any time to require performance of any provision of this Work Order shall in any way affect, diminish or prejudice the right of such party to require performance of that provision and any waiver by any party or breach of any provisions of this Work Order shall not be construed as a waiver or an amendment of the provisions itself, or a waiver of any right under or arising out of this Work Order.

23. Illegal Gratification:

The Vendor hereby represents that it has not and shall not itself or through any of its representatives given or give or promise to give any money or gift to any employee/official of TFND to influence their decision regarding this Work Order, nor shall it exert or utilize any unlawful influence through a promise to pay a commission, percentage, brokerage, or contingent fee to secure or solicit any extension hereof.

The Vendor acknowledges and agrees that it has not, and will not, make or promise to make corrupt payments of money or anything of value, directly or indirectly, to any government or public international organization officials, political parties, or candidates for public office, or employee of a commercial customer or supplier, for the purpose of obtaining or retaining business or securing any improper advantage.

The Vendor agrees that breach of this clause shall be adequate ground for TFND to terminate this Work Order immediately without prejudice to the Agency's liability under applicable laws. Further, breach of this clause shall also be adequate ground for TFND to withhold all payments, which may be due to the Vendor and for TFND to initiate appropriate legal actions against the Agency.

24. Independent Vendor:

In performing its obligations under this Work Order, Vendor shall be deemed to be acting as an Independent Vendor and shall not be deemed an agent, legal representative, joint venture, or partner of TFND. Neither party is authorized to bind the other to any

obligation, affirmation, or commitment with respect to any other person or entity.

25. Severability:

Any provision of this Work Order, that is determined to be invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such invalidity or unenforceability in such jurisdiction, without rendering invalid or unenforceable the remaining provisions of this Work Order or affecting the validity or enforceability of such provision in any other jurisdiction.

26. Entirety:

This Work Order contains the entire understanding of the Parties relating to supply of Goods and Services and supersedes all previous correspondence, proposals, representations, agreement, or memorandum of understanding.

I hereby agree to the above conditions.

Date:.....

**(Signature of Tenderer)
Authorized Signatory with Seal**

**Maharana Pratap Institute of Technology,
Gorakhpur, Uttar Pradesh**

Form -IV

(Bidder must sign and enclose this document with Technical Bid)

Eligibility of Bidder

1. The Bidder/OEM must have average turnover not less than **Rs. 3 Crore** in each of the last 03 Financial Years i.e. 2022-23, 2023-24 and 2024-25.
2. The Bidder/OEM must have executed same or similar works in Govt./ Public Sector organizations in any of the 4 Financial Years i.e. 2021-22, 2022-23, 2023-24 & 2024-25 as per the following:
 - Three works each costing not less than the amount equal to 30% of advertised value of the tender, or
 - Two works each costing not less than the amount equal to 40% of advertised value of the tender, or
 - One work costing not less than the amount equal to 60% of advertised value of the tender.
3. The Bidder/OEM should be an experienced in Design, Supply, Installation, Testing, Commissioning, Operation & Maintenance of Networking Infrastructure, similar work having at least 5 years' experience of supply, installation, testing and commissioning of same/ similar works in Govt. Department/ PSU/ reputed Universities/ Educational Institutions
4. The Bidder/OEM should be and ISO 9001:2015 certified vendor.
5. The Bidder must be registered with the Employee Provident Fund and Employees State Insurance Scheme (ESIC) department.
6. Bidder (if not OEM) must submit valid authorization for this tender from the OEM's of the quoted equipment.
7. The Bidder should not have been blacklisted or banned by any State / Central Government Department or PSU.
8. The bidder should enclose copy of the GST registration certificate with technical bid.
9. The bidder should have prior experience of setting up similar kind of work, documentary proof or MOU to be submitted.

I hereby certify that I fulfill the above conditions, and I have enclosed documentary evidence for the same with the Technical Bid documents.

Date:.....

**(Signature of Tenderer)
Authorized Signatory with Seal**

**Maharana Pratap Institute of Technology,
Gorakhpur, Uttar Pradesh**

Form -V

FINANCIAL BID FORMAT

**(MUST BE COMPLETELY FILLED UP AND SIGNED BY THE BIDDER. SHOULD BE
SEALED IN ENVELOPE -2 FINANCIAL BID)**

**Tender Inviting Authority: Director, Maharana Pratap Institute of Technology,
Gorakhpur**

Name of Work: Design, Supply, Installation, Testing, Commissioning, Operation & Maintenance of Networking Infrastructure for the specified period as given in the Schedule of Requirements

Tender Reference No.: MPIT/NW/Tender-10/2026

SECTION – A : NETWORK ACTIVE COMPONENTS					
S. No.	Item Description	Required Quantity	Make	All inclusive rate in figure (incl. of all taxes/charges /duties etc.)	Total amount in words
A.1	Core Switch: 24 Port 10G Layer-3 with required 10G SFP+ ports	1 Nos	CISCO Nexus 9364C-H1 Ethernet Switch		
A.2	Distribution / Aggregation Switch with 24 × 10G SFP+ ports	1 Nos	CISCO C 1300-24XS		
A.3	Access Switch: 24 × 1G Base-T PoE Ports with 4 × 10G SFP+ uplinks – Non PoE	22 Nos	CISCO C 1300-24T-4X Switch		
A.4	Access Switch: 24 × 1G Base-T PoE Ports with 4 × 10G SFP+ uplinks- PoE	8 Nos	CISCO C 1300 24P-4X		
A.5	Wireless LAN Controller with minimum 75 AP licenses	1 Nos.	CISCO Catalyst 9800-L Series		
A.6	Controller-based Indoor Wi-Fi Access Point (Wi-Fi 6 compliant)	40 Nos	CISCO C9115AXI-S Series Catalyst 9115		
A.7	10G SFP+ Optical Transceiver Modules	70 Nos	CISCO 10G SR		
A.8	IP CCTV Camera – Dome Type, minimum 4MP	75 Nos	CP PLUS : CP-UNC-VC41ZL5C-VMD-Q		

A.9	IP CCTV Camera – Bullet Type, minimum 4MP	15 Nos	CP PLUS CP-UNC- TA41L6C-Q		
A.10	Network Video Recorder (NVR), 64 Channel, enterprise grade	2 Nos	CP PLUS CP-UNR- 4K664R16-V2		
A.11	Surveillance Hard Disk – 16 TB, Enterprise Grade	4 Nos	Segate Exos X18 Model No: ST16000NM 000J		
A.12	EPABX / IP-PBX System	1 Nos	Grandstream UCM6300 Series		
A.13	IP Phones	24 Nos	Grandstream GXP1782 8- Line Gigabit IP Phone		
A.14	Enterprise Firewall with 3-Year Comprehensive Security Protection	1 Nos.	Sophos XGS 4500		

SECTION-B. PASSIVE NETWORKING INFRASTRUCTURE i.e. PASSIVE ITEMS FOR LAN, WIFI & CCTV

S. No.	Item Description	Required Quantity	Make	All inclusive rate in figure (incl. of all taxes/charges /duties etc.)	Total amount in words
B.1	CAT 6.0 UTP Cable 305M Roll for LAN, CCTV & IP Phone	42 Nos.	Commscope		
B.2	CAT 6A Cable 305M roll for Wifi	8 Nos.	Commscope		
B.3	Double Port Face Plate	58 Nos.	Commscope		
B.4	Single Port Face Plate	277 Nos.	Commscope		
B.5	CAT 6.0 I/O Blue for Data (Field)	358 Nos.	Commscope		
B.6	CAT 6A I/O White for WiFi (Field)	37 Nos.	Commscope		

B.7	CAT 6.0 Patch Panel Unloaded	30 Nos.	Commscope		
B.8	CAT 6.0 I/O Blue for Data (Rack)	358 Nos.	Commscope		
B.9	CAT 6.0 I/O Yellow for Camera (Rack)	93 Nos.	Commscope		
B.10	CAT 6A I/O White for WiFi (Rack)	37 Nos.	Commscope		
B.11	CAT 6.0 UTP Patch Cord 1M Blue	358 Nos.	Commscope		
B.12	CAT 6.0 UTP Patch Cord 1M Yellow	93 Nos.	Commscope		
B.13	CAT 6A UTP Patch Cord 1M White	74 Nos.	Commscope		
B.14	RJ45 Connector	100 Nos.	Commscope		
B.15	6 Core SM Armored OFC	1000 Nos.	Commscope		
B.16	24 Port Loaded LC Type 1U LIU	8 Nos.	Commscope		
B.17	6 Port Loaded LC Type 1U LIU	12 Nos.	Commscope		
B.18	LC-LC Single Mode Dupex OFC PC	44 Nos.	Commscope		
B.19	CAT 6.0 UTP Patch Cord 2M Blue	358 Nos.	Commscope		
B.20	20U, 600 mm x 800 mm Depth, Trolley Rack	11 Nos.	Commscope		
B.21	6/16Amt 1U Rack Mount PDU	22 Nos.	Commscope		
B.22	42U 800x1000mm Rack with accessories	1 Nos.	Commscope		
B.23	PVC Gang Box	340 Nos.	Honeywell MK Logic Plus PVC Box		
B.24	PVC Channel 4"	800 meter	ISI marked Havells		
B.25	PVC Channel 2"	1500 meter	ISI marked Havells		
B.26	PVC Channel 1"	500 meter	ISI marked Havells		

SECTION C – ALLIED ACTIVE & INFRASTRUCTURE ELEMENT

S. No.	Item Description	Required Quantity	Make	All inclusive rate in figure (incl. of all taxes/charges /duties etc.)	Total amount in words
C1	LED Television – 65 inch (for Surveillance Monitoring)	2 Nos	LG 164 cm 65" Ultra HD 4K LED Smart TV		
C2	Split Air Conditioner – 1.5 TR, 5 Star (Dedicated for Server Room)	1 Nos	Voltas 1.5 Ton 5 Star Split Inverter AC		
C3	Raised Flooring – Antistatic / (for Server Room)	200 Sq.ft.	OEM		
C4	UPS – 2 KVA with Inbuilt Batteries & LAN Monitoring (for Floor Racks)	11 Nos	Vertive		
C5	UPS – 20 KVA with Inbuilt Batteries (for Central Server Room)	1 Nos	Vertive		
C6	External Battery – 42 Ah (for UPS backup extension)	16 Nos	EXIDE		
C7	Rack Earthing & Bonding Kit with all accessories	1 Lot	OEM		
C8	Power Cable – 10 Sq.mm Copper, Flexible, 3 Core	25 Mtr	HAVELLS		
C9	MCB – 64 Ampere, Double Pole	4 Nos	HAVELLS		

SECTION D – INSTALLATION, TESTING & COMMISSIONING OF NETWORKING

S. No.	Item Description	Required Quantity
D1	Laying of UTP Cat-6 Cable (LAN, Wi-Fi, CCTV & IPPBX – including Labs)	15,630 Mtr

D2	Laying of Optical Fiber Cable (Single-Mode Backbone & Labs)	1,300 Mtr
D3	Installation of PVC Channel / Raceway (All Areas including Labs)	3,600 Mtr
D4	Installation of Single-Port Face Plate with Mounting Box	495 Nos
D5	Termination of I/O Points at Both Ends (Rack & User End)	760 Nos
D6	Installation & Dressing of Patch Panels (24 Port)	38 Nos
D7	Installation of Patch Cord at Rack End with Proper Labelling	600 Nos
D8	Installation of 15U Network Rack (Floor-wise & Lab-wise)	15 Nos
D9	Installation of 42U Network Rack (Central Server Room)	1 Nos
D10	Splicing of Optical Fiber Cores	180 Cores
D11	Installation & Configuration of Firewall	1 Nos
D12	Installation & Configuration of Network Switches (Core / Access / Distribution)	47 Nos
D13	Installation & Commissioning of Wi-Fi Access Points	45 Nos
D14	Installation & Commissioning of IP CCTV Cameras	102 Nos
D15	Installation & Configuration of NVR System	2 Nos

SECTION E SERVICES, WARRANTY & AMC		
Sl. No.	Item Description	Scope
E1	Installation, Testing & Commissioning	Complete installation, integration, configuration, testing and commissioning of the entire Networking, Wi-Fi, CCTV, IPPBX and Server Room infrastructure, ensuring end-to-end operational readiness as per approved design and technical specifications.
E2	Training & Documentation	On-site training for designated IT/technical staff covering operation, basic troubleshooting and best practices. Submission of complete technical documentation including network diagrams, IP addressing scheme, configuration

		backups, test reports and user manuals.
E3	3-Year Comprehensive OEM Warranty	Three (3) years comprehensive warranty on all supplied active and passive components from the date of successful commissioning, covering manufacturing defects, performance issues and replacement of faulty parts as per OEM terms and conditions. Manufacturer Authorization (MAF), Escalation matrix for support is also needed.
E4	Comprehensive operation & management Support during Warranty Period	Proactive and reactive operation and management support during the warranty period including fault diagnosis, corrective maintenance, firmware/software updates, configuration support, periodic health checks and coordination with OEM for replacements.
E4	AMC (Post-Warranty – Annual)	Annual comprehensive AMC after expiry of warranty period, covering preventive maintenance, breakdown support, replacement/repair of components (as defined in tender), service level commitments and reporting, as per tender terms and conditions.

I hereby certify that I have filled up the above rates keeping in view all the tender terms and conditions as well as technical requirements.

Date:.....

**(Signature of Tenderer)
Authorized Signatory with Seal**

Schedule of Requirements/ Scope of Supply

S.No.	Name & Specification
A.1	<p>Cisco Nexus 9364C-H1 switch</p> <p>Technical :</p> <ul style="list-style-type: none"> ● 64-port 100G QSFP28 ports ● Supports 4 x 10G and 4 x 25G breakout ● On-die buffer: 40MB ● System memory: 32GB, expandable to 64GB ● SSD: 128GB ● USB: 1 port ● RS-232 serial console ports: 1 ● Management ports: 2 ● CPU: 4 cores <p>Power and cooling:</p> <ul style="list-style-type: none"> ● Power: 1400W AC, 2000W DC, 2000W HV ● Hot-swappable, 4 fans, 3+1 redundancy ● Typical power: 605 W ● Maximum power: 1100 W <p>Physical and environmental :</p> <ul style="list-style-type: none"> ● Dimensions (H x W x D): 3.39 x 17.41 x 22.28 in. (8.6 x 44.2 x 56.6 cm) ● Acoustics: <ul style="list-style-type: none"> ▪ Port-side intake: <ul style="list-style-type: none"> ▪ at 50% fan speed: 77.5 dBA ▪ at 70% fan speed: 87.1 dBA ▪ at 90% fan speed: 92 dBA ▪ at 100% fan speed: 94.3 dBA ▪ Port-side exhaust: <ul style="list-style-type: none"> ▪ at 60% fan speed: 82.3 dBA ▪ at 80% fan speed: 90 dBA ▪ at 100% fan speed: 96.6 dBA ● Operating temperature: 32 to 104F (0 to 40C) ● Nonoperating (storage temperature): -40 to 131F (-40 to 55C) ● Humidity: 5 to 95% (non-condensing) ● Altitude: 0 to 13,123 ft (0 to 4000m) ● Mean Time Between Failure (MTBF): 192,380 hours
A.2	<p>CISCO C 1300-24XS</p> <p>Performance : Switching capacity and forwarding rate. All switches are wire speed and nonblocking</p> <p>Capacity in Millions of Packets Per Second (mpps) (64-byte packets) : 357.14</p> <p>Switching capacity in Gigabits per second (Gbps) : 480</p> <p>Switch Type</p> <ul style="list-style-type: none"> ● Managed Ethernet Switch ● Layer-2 with Layer-3 (static routing) capability ● Fixed configuration, rack-mountable (1U) <p>Performance Requirements</p> <ul style="list-style-type: none"> ● Switching Architecture: Wire-speed, non-blocking ● Switching Capacity: 480 Gbps ● Forwarding Rate: 357.14 Million Packets Per Second (MPPS) (64-byte packets) ● All ports shall operate at line rate without performance degradation

	<p>Port Configuration</p> <ul style="list-style-type: none"> • 24 × 10 Gigabit Ethernet ports (SFP+ / combo as per OEM design) • Dedicated out-of-band management port (1G Ethernet) • Console access via RJ-45 / USB <p>Networking Features</p> <ul style="list-style-type: none"> • VLAN support (IEEE 802.1Q) • Link Aggregation (IEEE 802.3ad / LACP) • Spanning Tree Protocol (STP, RSTP, MSTP) • Jumbo Frame support • Quality of Service (QoS) with traffic prioritization <p>Layer-3 Features</p> <ul style="list-style-type: none"> • Static routing support • Inter-VLAN routing • Policy-based routing (PBR) <p>Security Features</p> <ul style="list-style-type: none"> • Access Control Lists (ACLs) • IEEE 802.1X port-based authentication • RADIUS / TACACS+ support • DHCP Snooping • IGMP Snooping • Secure management via SSH and HTTPS <p>Management & Monitoring</p> <ul style="list-style-type: none"> • CLI and Web-based management • SNMP v2/v3 support • Syslog and RMON • Firmware upgrade and configuration backup support <p>Hardware & Power</p> <ul style="list-style-type: none"> • Internal power supply (100–240V AC, 50/60 Hz) • Energy Efficient Ethernet (IEEE 802.3az) • Front-to-back airflow suitable for rack deployment <p>Standards & Compliance</p> <ul style="list-style-type: none"> • IEEE 802.3, 802.3u, 802.3ab, 802.3ae • IEEE 802.1D, 802.1Q, 802.1p, 802.1X • CE, FCC, RoHS compliant
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<p>A.3</p>	<p>CISCO C 1300-24T-4X Switch</p> <p>The Cisco C1300-24T-4X is a fixed configuration, fully managed Ethernet switch designed for enterprise and data-centric networks. The switch shall support Layer-2 switching with basic Layer-3 capabilities, advanced security features, high availability functions, VLAN segmentation, QoS, and centralized management.</p> <p>Technical Specifications</p> <p>Performance</p> <table border="0"> <tr> <td>Parameter</td> <td>Minimum Specification</td> </tr> <tr> <td>Switching Architecture</td> <td>Wire-speed, non-blocking</td> </tr> <tr> <td>Switching Capacity (Aggregate Bandwidth)</td> <td>≥ 176 Gbps</td> </tr> <tr> <td>Forwarding Rate (64-byte packets)</td> <td>≥ 131.1 Mpps</td> </tr> </table> <p>Ports & Interfaces</p> <table border="0"> <tr> <td>Port Type</td> <td>Quantity</td> <td>Speed</td> </tr> <tr> <td>10/100/1000BASE-T Ethernet Ports (RJ-45)</td> <td>24</td> <td>1 Gbps</td> </tr> <tr> <td>Uplink Ports (SFP+/SFP or Combo)</td> <td>4 × 10G SFP+</td> <td>10 Gbps</td> </tr> <tr> <td>Management Port</td> <td>1 × 1G RJ-45</td> <td>Out-of-band management</td> </tr> <tr> <td>Console Port</td> <td>1 × RJ-45 / USB</td> <td>Local management</td> </tr> </table>	Parameter	Minimum Specification	Switching Architecture	Wire-speed, non-blocking	Switching Capacity (Aggregate Bandwidth)	≥ 176 Gbps	Forwarding Rate (64-byte packets)	≥ 131.1 Mpps	Port Type	Quantity	Speed	10/100/1000BASE-T Ethernet Ports (RJ-45)	24	1 Gbps	Uplink Ports (SFP+/SFP or Combo)	4 × 10G SFP+	10 Gbps	Management Port	1 × 1G RJ-45	Out-of-band management	Console Port	1 × RJ-45 / USB	Local management
Parameter	Minimum Specification																							
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Management Port	1 × 1G RJ-45	Out-of-band management																						
Console Port	1 × RJ-45 / USB	Local management																						

Layer-2 Features

The switch shall support:

- IEEE 802.1D (STP), 802.1w (RSTP), 802.1s (MSTP)
- IEEE 802.1Q VLAN tagging and VLAN translation
- VLAN per port, port-based and protocol-based VLANs
- Link Aggregation Group (LAG) / IEEE 802.3ad LACP
- IGMP Snooping (v1/v2/v3) and multicast control

Layer-3 Features

The switch shall support:

- Static Routing (IPv4)
- Inter-VLAN Routing
- Policy-based Routing (PBR)
- Routing Information Base (RIB)

Security & Access Control

The switch shall provide:

- IEEE 802.1X port-based authentication
- Secure management (SSH v2, HTTPS)
- RADIUS / TACACS+ authentication
- DHCP Snooping
- Dynamic ARP Inspection (DAI)
- Access Control Lists (ACLs)

Quality of Service (QoS)

The switch shall support:

- Traffic classification and prioritization
- IEEE 802.1p QoS
- Class-of-Service (CoS) mapping
- Traffic shaping and policing

Management Protocols

The switch shall support:

- Command Line Interface (CLI)
- Web UI management
- SNMP v2/v3
- RMON (Group 1–4)
- Syslog
- Management via Telnet (optional)

Reliability & Redundancy

- Redundant power supply (if applicable)
- Hot-swappable fan modules (if applicable)
- Support for STP / RSTP / MSTP
- Link Aggregation for uplink redundancy

Environmental & Physical

Parameter	Requirement
Form Factor	1U Rack Mount
Operating Temperature	0°C to 45°C (Typical)
Humidity Range	10% to 90% non-condensing
Power Supply	100–240V AC, 50/60 Hz
Certifications	CE, FCC, RoHS compliant

Compliance & Standards

	<p>The offered switch should comply with all applicable standards:</p> <ul style="list-style-type: none"> • IEEE 802.3, 802.3u, 802.3ab, 802.3z • IEEE 802.1D, 802.1Q, 802.1p, 802.1X • TIA/EIA-568 structured cabling standards • Environmental and safety standards (CE, FCC, RoHS) 																							
<p>A.4</p>	<p>CISCO C 1300 24P-4X</p> <p>The Cisco Catalyst C1300-24P-4X is a fixed, managed Ethernet switch supporting 24 × 1G PoE+ ports and 4 × 10G uplinks for high-speed data aggregation. It shall support Layer-2 switching, basic Layer-3 routing, advanced security, VLAN segmentation, QoS, and centralized network management.</p> <p>Technical Specifications</p> <p>Performance</p> <table border="0"> <tr> <td>Parameter</td> <td>Specification</td> </tr> <tr> <td>Switching Architecture</td> <td>Wire-speed, non-blocking</td> </tr> <tr> <td>Switching Capacity</td> <td>≥ 176–192 Gbps</td> </tr> <tr> <td>Forwarding Rate (64-byte packets)</td> <td>≥ ~131 Mpps</td> </tr> </table> <p>Ports & Interfaces</p> <table border="0"> <thead> <tr> <th>Port Type</th> <th>Quantity</th> <th>Speed / Notes</th> </tr> </thead> <tbody> <tr> <td>24 × 10/100/1000 BASE-T PoE+ Ports (RJ-45)</td> <td>24</td> <td>Supports IEEE 802.3af/at</td> </tr> <tr> <td>4 × 10G SFP+ Uplink Ports</td> <td>4</td> <td>Uplink / Stacking capable</td> </tr> <tr> <td>Out-of-Band Management</td> <td>1</td> <td>1G RJ-45</td> </tr> <tr> <td>Console</td> <td>1</td> <td>RJ-45 / USB (local management)</td> </tr> </tbody> </table> <p>Power over Ethernet (PoE)</p> <ul style="list-style-type: none"> • PoE Type: IEEE 802.3at (PoE+) compliant • Total PoE Budget: ≥ 370 W (typical – confirm OEM datasheet) • Port PoE Priority: Support for prioritization <p>Switching & VLAN</p> <ul style="list-style-type: none"> • Support for IEEE 802.1Q VLAN tagging • VLAN per port / Protocol-based VLAN • Support for up to 4K VLANs <p>Layer-2 Features</p> <ul style="list-style-type: none"> • Spanning Tree: 802.1D, RSTP, MSTP • Link Aggregation: IEEE 802.3ad (LACP) • MAC Address Table: ≥ 16K entries • Jumbo Frames: Up to 9K bytes <p>Layer-3 Features</p> <ul style="list-style-type: none"> • Static IPv4 Routing • Inter-VLAN routing • Policy-Based Routing (PBR) • IPv6 basic support (as per OEM) <p>Quality of Service (QoS)</p> <ul style="list-style-type: none"> • 802.1p QoS prioritization • Class-of-Service (CoS) marking • Shaping and policing • Rate limiting 	Parameter	Specification	Switching Architecture	Wire-speed, non-blocking	Switching Capacity	≥ 176–192 Gbps	Forwarding Rate (64-byte packets)	≥ ~131 Mpps	Port Type	Quantity	Speed / Notes	24 × 10/100/1000 BASE-T PoE+ Ports (RJ-45)	24	Supports IEEE 802.3af/at	4 × 10G SFP+ Uplink Ports	4	Uplink / Stacking capable	Out-of-Band Management	1	1G RJ-45	Console	1	RJ-45 / USB (local management)
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	<p>Security & Access Controls</p> <ul style="list-style-type: none"> • IEEE 802.1X port authentication • RADIUS / TACACS+ support • ACLs (IPv4 & IPv6) • DHCP Snooping • Dynamic ARP Inspection (DAI) • Secure management (SSH v2, HTTPS) <p>Management Protocols</p> <ul style="list-style-type: none"> • Command-Line Interface (CLI) • Web/GUI based management • SNMP v2/v3 supported • RMON (Group 1-4) • Syslog <p>Stacking & Scalability</p> <ul style="list-style-type: none"> • Support for Cisco front-panel stacking (up to N units; confirm in datasheet) • Single IP management across stacked units <p>Reliability & Maintenance</p> <ul style="list-style-type: none"> • Hot-swappable fans (if applicable) • Redundant power (if applicable) • Firmware rollback / backup support <p>Hardware & Physical</p> <table border="0"> <tr> <td>Parameter</td> <td>Specification</td> </tr> <tr> <td>Form Factor</td> <td>1U Rack Mountable</td> </tr> <tr> <td>Mounting Kit</td> <td>Included</td> </tr> <tr> <td>Input Voltage</td> <td>100–240VAC, 50/60Hz</td> </tr> <tr> <td>Operating Temperature</td> <td>0°C to 45°C</td> </tr> <tr> <td>Humidity</td> <td>10% – 90% non-condensing</td> </tr> <tr> <td>Certifications</td> <td>CE, FCC, RoHS compliant</td> </tr> </table> <p>Compliance & Standards</p> <ul style="list-style-type: none"> • IEEE 802.3 (Ethernet), 802.3u, 802.3ab • IEEE 802.1D, 802.1Q, 802.1p, 802.1x • IEEE 802.3ad (LACP) • IEEE 802.3af / 802.3at (PoE / PoE+) • TIA/EIA-568 structured cabling standards • Safety and EMC standards (CE / FCC / BIS / others) 	Parameter	Specification	Form Factor	1U Rack Mountable	Mounting Kit	Included	Input Voltage	100–240VAC, 50/60Hz	Operating Temperature	0°C to 45°C	Humidity	10% – 90% non-condensing	Certifications	CE, FCC, RoHS compliant
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A.5	<p>CISCO Catalyst 9800-L Series</p> <p>Technical Specifications</p> <p>Capacity & Performance</p> <table border="0"> <thead> <tr> <th>Feature</th> <th>Requirement</th> </tr> </thead> <tbody> <tr> <td>Maximum Access Points Supported</td> <td>250 (expandable to 500 with performance license)</td> </tr> <tr> <td>Maximum Clients Supported</td> <td>5,000 (10,000 with performance license)</td> </tr> <tr> <td>Maximum Throughput</td> <td>5 Gbps (upgradeable to 10 Gbps with performance license)</td> </tr> <tr> <td>Maximum WLANs (SSID)</td> <td>4096</td> </tr> </tbody> </table>	Feature	Requirement	Maximum Access Points Supported	250 (expandable to 500 with performance license)	Maximum Clients Supported	5,000 (10,000 with performance license)	Maximum Throughput	5 Gbps (upgradeable to 10 Gbps with performance license)	Maximum WLANs (SSID)	4096				
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Maximum WLANs (SSID)	4096														

Maximum VLANs 4096

Hardware & Interfaces

Parameter	Description
Form Factor	1RU Rack-mountable controller
Uplink Interfaces	2 × 10 G (copper or fiber, variant dependent)
Ethernet Ports	Models typically include multiple 1G/2.5G/10G interfaces for management and AP control
Management Ports	RJ-45 Management and console ports
Redundancy Port	RJ-45 redundancy interface
USB/Console	USB 3.0 and micro-USB console ports for local access
Power Supply	External AC/DC 110 W adapter (included)
Power Consumption	Approx. 84–87 W depending on model and configuration

Software & Management

- Operating System: Cisco IOS XE with intent-based networking features and Smart Licensing enabled.
- Management Protocols: CLI, Web/UI, SNMP, REST APIs.
- Controller Deployment Modes: Centralized, Cisco FlexConnect, and fabric mode.
- Supports Integration with: Cisco DNA Center and Cisco Prime Infrastructure for automation, provisioning and monitoring.

Security Features

- Encrypted Traffic Analytics (ETA) and RF security.
- Secure Boot, runtime defenses, image signing and hardware authenticity checks at boot.
- WPA3, 802.1X authentication and advanced wireless security.

Wireless & Protocol Support

- Supports 802.11 a/b/g/n/ac/ax (Wi-Fi 6) access points.
- CAPWAP/Control and Provisioning of Wireless Access Points (protocol support for managed APs).
- Dynamic RF management (RRM) and load balancing.

Environmental & Physical

Parameter	Specification
Operating Temperature	0 °C to 40 °C
Storage Temperature	–25 °C to 70 °C
Operating Humidity	10 %–95 % non-condensing
Weight	Approx. ~1.8 kg
Dimensions	Approx. 8.5" × 9.06" × 1.58"

Licensing & Scalability

- Base controller includes support for up to 250 APs and upgradable to 500 APs with additional performance licenses.
- Controller requires appropriate Cisco DNA subscription licenses for advanced feature sets and AP joins.

Warranty & Support

- Minimum 3-year Cisco warranty with hardware replacement.
- Includes software maintenance and smart licensing support.

	<ul style="list-style-type: none"> • Optional extended support and TAC access for Cisco IOS XE and security updates. <p>Compliance & Standards Controller shall comply with relevant standards including IEEE 802.11 variants, IEEE Ethernet, VLAN and management protocols, and global safety/EMC requirements per Cisco documentation.</p> <p>Scope of Supply</p> <ul style="list-style-type: none"> • Cisco Catalyst 9800-L Wireless Controller (as per chosen variant) • Power adapter (C9800-AC-110W) • Console and mounting accessories • Required base software and smart licensing license tokens 												
<p>A.6</p>	<p>Cisco C9115AXI-S Series Catalyst 9115</p> <p>Product Type: Enterprise Indoor Wireless Access Point Wireless Technology: Wi-Fi 6 (802.11ax) Wireless & Performance 2.4 GHz & 5 GHz Dual-Band Wi-Fi: Supports simultaneous dual-band operation with multi-user capabilities. Wi-Fi Standards Supported: <ul style="list-style-type: none"> • IEEE 802.11a/b/g/n/ac/ax (Wi-Fi 6) compliant. MU-MIMO & OFDMA: <ul style="list-style-type: none"> • 4x4 MU-MIMO with four spatial streams. • OFDMA uplink and downlink for enhanced capacity. • Beamforming, A-MPDU and A-MSDU packet aggregation supported. Maximum PHY Data Rates: <ul style="list-style-type: none"> • Up to approximately 5.38 Gbps combined (depending on channel width and regulatory domain). Target Wake Time (TWT) & BSS Coloring: <ul style="list-style-type: none"> • Supports TWT for improved power efficiency and enhanced performance. Antennas <ul style="list-style-type: none"> • Internal Omnidirectional Antennas: <ul style="list-style-type: none"> • 2.4 GHz: ~3 dBi peak gain • 5 GHz: ~4 dBi peak gain Interfaces & Connectivity <table border="1" data-bbox="336 1541 1497 1839"> <thead> <tr> <th>Interface</th> <th>Quantity</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Ethernet Port</td> <td>1 × RJ-45</td> <td>1 G/2.5 G Multigigabit Ethernet (802.3bz) for data uplink and PoE</td> </tr> <tr> <td>Management Console</td> <td>1 × RJ-45</td> <td>Local management / debug</td> </tr> <tr> <td>USB Port</td> <td>1 × USB 2.0</td> <td>For future use/management</td> </tr> </tbody> </table> Power Power over Ethernet (PoE): <ul style="list-style-type: none"> • IEEE 802.3at PoE+ (full features) • IEEE 802.3af (reduced performance mode: radios degrade to 2x2 and Ethernet to 1 Gb) </p>	Interface	Quantity	Details	Ethernet Port	1 × RJ-45	1 G/2.5 G Multigigabit Ethernet (802.3bz) for data uplink and PoE	Management Console	1 × RJ-45	Local management / debug	USB Port	1 × USB 2.0	For future use/management
Interface	Quantity	Details											
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Management Console	1 × RJ-45	Local management / debug											
USB Port	1 × USB 2.0	For future use/management											

	<ul style="list-style-type: none"> • Cisco Universal PoE / UPOE / UPOE+ support (where supported) <p>Security & Radio Management</p> <ul style="list-style-type: none"> • Enterprise-grade security — WPA3, 802.1X authentication, and advanced encryption. • Rogue AP detection, RF protection, DFS support and CSD (Cyclic Shift Diversity). • Supports centralized wireless controller management (Cisco 9800 Series, Embedded WLC, or Cisco DNA Center). <p>Environmental & Physical</p> <table border="0"> <thead> <tr> <th>Parameter</th> <th>Specification</th> </tr> </thead> <tbody> <tr> <td>Dimensions (AP)</td> <td>~203 × 203 × 38 mm (8.0" × 8.0" × 1.5")</td> </tr> <tr> <td>Weight</td> <td>~0.9 kg (2 lb)</td> </tr> <tr> <td>Operating Temp.</td> <td>0 °C to 50 °C</td> </tr> <tr> <td>Operating Humidity</td> <td>10 %–90 % non-condensing</td> </tr> <tr> <td>Storage Temp.</td> <td>–30 °C to 70 °C</td> </tr> <tr> <td>Altitude (Operating)</td> <td>Up to ~3,000 m / 9,843 ft</td> </tr> </tbody> </table> <p>Management & Standards Support</p> <ul style="list-style-type: none"> ✓ Wi-Fi certified 802.11ax ✓ Cisco DNA Center / Cisco 9800 WLC support (centralized configuration / telemetry) ✓ SNMP and CLI/GUI based management 	Parameter	Specification	Dimensions (AP)	~203 × 203 × 38 mm (8.0" × 8.0" × 1.5")	Weight	~0.9 kg (2 lb)	Operating Temp.	0 °C to 50 °C	Operating Humidity	10 %–90 % non-condensing	Storage Temp.	–30 °C to 70 °C	Altitude (Operating)	Up to ~3,000 m / 9,843 ft
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Dimensions (AP)	~203 × 203 × 38 mm (8.0" × 8.0" × 1.5")														
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Operating Humidity	10 %–90 % non-condensing														
Storage Temp.	–30 °C to 70 °C														
Altitude (Operating)	Up to ~3,000 m / 9,843 ft														
<p>A.7</p>	<p>CISCO 10G SR</p> <p>Technical Specification — Cisco 10G SFP+ Optical Transceiver Module (10GBASE-SR)</p> <p>Product Name / Make & Model</p> <ul style="list-style-type: none"> • Product: 10G SFP+ Optical Transceiver Module • Make: Cisco • Model: 10GBASE-SR SFP+ Optical Transceiver (e.g., Cisco SFP-10G-SR Optical Transceiver Module) <p>General Description</p> <p>The 10G SFP+ Optical Transceiver Module shall be a Cisco-qualified, hot-swappable fiber optic transceiver compliant with IEEE 802.3ae 10GBASE-SR standard for 10 Gbps short-reach multimode fiber (MMF) links. It shall be suitable for use with Cisco switches, routers and optical devices supporting SFP+ interfaces in data center, core/distribution and enterprise campus networks.</p> <p>Form Factor & Standards</p> <ul style="list-style-type: none"> • Form Factor: Small Form-factor Pluggable Plus (SFP+) • Standards: <ul style="list-style-type: none"> • IEEE 802.3ae 10GBASE-SR • SFF-8431, SFF-8432 compliant • Function: Optical transceiver for 10 Gbps Ethernet over multimode fiber • Hot-Swappable: Yes (can be replaced without powering down equipment) <p>Optical & Electrical Specifications</p> <p>Optical Performance</p> <table border="0"> <thead> <tr> <th>Parameter</th> <th>Specification</th> </tr> </thead> <tbody> <tr> <td>Data Rate</td> <td>10 Gbps</td> </tr> <tr> <td>Wavelength</td> <td>850 nm</td> </tr> <tr> <td>Connector Type</td> <td>Duplex LC fiber</td> </tr> </tbody> </table>	Parameter	Specification	Data Rate	10 Gbps	Wavelength	850 nm	Connector Type	Duplex LC fiber						
Parameter	Specification														
Data Rate	10 Gbps														
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	<p>Fiber Type Multimode Fiber (MMF)</p> <p>Max Link Distance Up to 300 m on OM3; up to 400 m on OM4</p> <p>Transmission Mode Short-Reach (SR)</p> <p>Transmit & Receive Characteristics</p> <table border="0"> <tr> <td>Parameter</td> <td>Typical Range</td> </tr> <tr> <td>Transmit Power (dBm)</td> <td>≤ -1 dBm (max) to ≥ -7.3 dBm (min)</td> </tr> <tr> <td>Receive Sensitivity (dBm)</td> <td>≥ -9.9 dBm (min)</td> </tr> <tr> <td>Wavelength Band</td> <td>840–860 nm (Tx/Rx)</td> </tr> </table> <p>Power & Diagnostics</p> <ul style="list-style-type: none"> • Supply Voltage: 3.3 V ± 5% • Power Consumption: ≤ 1 W typical • Digital Diagnostic Monitoring (DDM / DOM): Supported (real-time optical metrics such as Tx power, Rx power, temperature and supply voltage) <p>Mechanical & Environmental</p> <ul style="list-style-type: none"> • Operating Temperature Range: 0 °C to 70 °C (commercial) • Storage Temperature: -40 °C to 85 °C • Humidity: Up to ~85 % non-condensing • Dimensions: Standard SFP+ housing (approx. 13.5 × 56.5 × 8.5 mm) <p>Interface & Compatibility</p> <ul style="list-style-type: none"> • Electrical Interface: SFP+ electrical connector compliant with SFF-8431 specification • Fiber Interface: Duplex LC/UPC • Cisco Compatibility: Works with Cisco switches and routers with SFP+ 10 Gbps ports, including Catalyst and Nexus series (per product datasheets and Cisco compatibility matrices) <p>Applications</p> <ul style="list-style-type: none"> • 10 Gigabit Ethernet links in data centers • Core and distribution layer uplinks • High-speed campus backbone connections • Short-reach multimode fiber connections up to ~400 m on OM3/OM4 fiber types <p>Compliance & Safety</p> <p>Transceiver shall comply with:</p> <ul style="list-style-type: none"> • IEEE 802.3ae 10GbE optical Ethernet standard • RoHS compliant • CE, FCC Class A (as per Cisco product compliance) • SFF Multisource Agreement (MSA) specifications for SFP+ modules 	Parameter	Typical Range	Transmit Power (dBm)	≤ -1 dBm (max) to ≥ -7.3 dBm (min)	Receive Sensitivity (dBm)	≥ -9.9 dBm (min)	Wavelength Band	840–860 nm (Tx/Rx)
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Transmit Power (dBm)	≤ -1 dBm (max) to ≥ -7.3 dBm (min)								
Receive Sensitivity (dBm)	≥ -9.9 dBm (min)								
Wavelength Band	840–860 nm (Tx/Rx)								
<p>A.8</p>	<p>CP PLUS : CP-UNC-VC41ZL5C-VMD-Q</p> <p>4MP Network IR Vandal Dome Camera - 50Mtr.</p> <ul style="list-style-type: none"> • 1/2.7" 4MP PS CMOS Image Sensor (0.9407 Centimeters) • Max. 4MP (2688 × 1520)@1–20 fps/ (2560 x 1440)@1-25/30 fps • Instastream, H.265, H.264, H.264H, H.264B, MJPEG • Support Quad Stream • WDR(120dB), Day/Night(ICR), 3D NR, ROI, BLC, HLC, AWB, AGC • 2.7mm–13.5mm Motorized Lens • IR Range of 50 Mtr. • Support Starlight Technology • Support Built-in Mic 								

	<ul style="list-style-type: none"> • Micro SD Card, IP67, IK10, PoE
A.9	<p>CP-UNC-TA41L6C-Q</p> <p>4MP Network IR Bullet Camera - 60Mtr.</p> <ul style="list-style-type: none"> • 1/2.8" 4MP PS CMOS Image Sensor (0.9071 centimeters) • Max. 4MP (2688 × 1520)@1-25/30fps/ (2560 × 1440)@1-25/30fps • Instastream, H.265, H.264, H.264H, H.264B, MJPEG • Support Triple stream • DWDR, Day/Night(ICR), 3D DNR, AWB, AGC, BLC, HLC • 6mm Fixed Lens • Support Built-in Mic • IR Range of 60 Mtr., IP67, PoE
A.10	<p>CP-UNR-4K664R16-V2</p> <p>64 Ch. 4K Network Video Recorder</p> <ul style="list-style-type: none"> • Up to 64 channel IP camera input • Up to 12MP resolution preview and playback • Max 384Mbps incoming bandwidth • Support 16 SATA III ports, up to 16TB Each, 4 USB(2 USB3.0), 1 eSATA port • Support Mini SAS for Expanded Storage Space • 2 HDMI / 1 VGA simultaneous video output • Support Multi-brand network cameras • Support RAID 0/1/5/10 • ONVIF Version 2.4 conformance • Mobile Software: iCMOB, gCMOB • CMS Software: KVMS Pro
A.11	<p>Segate Exos X18 Model No: ST16000NM000J</p> <p>Capacity16TB , Dimensions: H x W x D26.1mm/1.028in × 101.85mm/4.010in × 147.0mm/5.787 in , Weight670g/1.477lb</p>
A.12	<p>UCM6300 Series</p> <ul style="list-style-type: none"> • Supports up to 3000 users and up to 450 concurrent calls • Zero configuration provisioning of Grand stream SIP endpoints • Built-in conferencing & meetings platform; supports desktop, Wave app, and SIP endpoints • Wave for Android, iOS, Chrome and Firefox browsers allows communication with all UCM6300 users & solutions • API available for third-party integrations, including CRM and PMS platforms • Advanced security protection with secure boot, unique certificate and random default password to protect calls and accounts • Three Gigabit auto-sensing RJ45 network ports with integrated PoE+ and support NAT router • Automated NAT firewall traversal service facilitates secure remote connections • Supports Full-Band Opus voice codec and H.265/H.264/H.263/ H.263+/VP8 video codec, jitter resilience up to 50% packet loss • Compatible with GDMS for cloud setup, management and monitoring • Based on Asterisk* version 16 open source telephony operating system
A.13	<p>GXP1782 8-Line Gigabit IP Phone</p> <p>Telephony & Protocol Support</p> <ul style="list-style-type: none"> • Lines supported: 8 parallel call appearances

	<ul style="list-style-type: none"> • SIP Accounts: Up to 4 SIP accounts • Protocol Standards: <ul style="list-style-type: none"> • SIP RFC 3261 and related SIP standards • TCP/IP, UDP, RTP/RTCP, HTTP/HTTPS, DHCP, PPPoE, DNS, ARP, ICMP • STUN, SIMPLE, LLDP, TR-069 (auto provisioning) • 802.1X, TLS, SRTP, IPv6 supported for security and interoperability
A.14	<p>Sophos XGS 4500</p> <ul style="list-style-type: none"> • Firewall Throughput 80,000 Mbps • Firewall IMIX 37,000 Mbps • Firewall Latency (64 byte UDP) 4 μs • IPS Throughput 36,500 Mbps • Threat Protection Throughput 8,650 Mbps • NGFW Throughput 30,000 Mbps • Ports - GbE Copper 4 x GbE copper • Ports - 2.5 GbE Copper 4 x 2.5 GbE copper • Ports - SFP+ 10 GbE Fiber 4 x SFP+ 10 GbE fiber • Model XGS 4500 • Manufacturer Sophos • Network Security Features • Firewall • IPS • NGFW • Threat Protection • Hardware Encryption : Yes • Deployment Options : On-premises • Firewall Policies Customizable • VPN Support : Yes • High Availability : Supported • Management Interface Web-based, CLI • Operating System : Sophos OS • Scalability: Enterprise-grade

SECTION B – PASSIVE NETWORKING INFRASTRUCTURE i.e. PASSIVE ITEMS FOR LAN, WIFI & CCTV

S.No.	Name & Specification
B.1	CAT 6 UTP Cable – 305 Meter Roll: Category 6, UTP, 23 AWG solid bare copper conductor, minimum 250 MHz bandwidth, supports 1G/10G Ethernet, FR/LSZH jacket, compliant with ANSI/TIA-568, ISO/IEC 11801, UL & RoHS. Suitable for LAN, CCTV & IP Phones. Make: Commscope.
B.2	CAT 6A UTP Cable – 305 Meter Roll: Category 6A, UTP, 23 AWG solid copper, minimum 500 MHz bandwidth, supports 10G Ethernet, FR/LSZH jacket, compliant with ANSI/TIA-568, ISO/IEC 11801, IEEE 802.3bt. Suitable for Wi-Fi Access Points. Make: Commscope.
B.3	Double Port Face Plate: Flame-retardant PVC/ABS material, compatible with CAT6/CAT6A keystone I/O modules, standard size, white color, ANSI/TIA compliant. Make: Commscope.
B.4	Single Port Face Plate: Flame-retardant PVC/ABS material, compatible with CAT6/CAT6A keystone I/O modules, standard size, white color, ANSI/TIA compliant. Make: Commscope.

B.5	CAT 6 I/O Module – Blue (Field Side): Keystone jack, CAT6 performance, 110-type IDC termination, supports Gigabit/10G Ethernet, ANSI/TIA-568 compliant. Make: Commscope.
B.6	CAT 6A I/O Module – White (Field Side): Keystone jack, CAT6A performance, 110-type IDC or tool-less termination, supports 10G Ethernet, ANSI/TIA-568 compliant. Make: Commscope.
B.7	CAT 6 Patch Panel – Unloaded: 24-port, 1U, 19-inch rack mount, powder-coated steel body, compatible with CAT6 keystone I/O modules, ANSI/TIA compliant. Make: Commscope.
B.8	CAT 6 I/O Module – Blue (Rack Side): Keystone jack, CAT6, 110 IDC termination, supports Gigabit/10G Ethernet, ANSI/TIA-568 compliant. Make: Commscope.
B.9	CAT 6 I/O Module – Yellow (Camera – Rack Side): Keystone jack, CAT6, 110 IDC termination, color-coded for CCTV identification, ANSI/TIA-568 compliant. Make: Commscope.
B.10	CAT 6A I/O Module – White (Rack Side): Keystone jack, CAT6A, supports 10G Ethernet, ANSI/TIA-568 compliant. Make: Commscope.
B.11	CAT 6 UTP Patch Cord – 1 Meter (Blue): Factory-terminated CAT6 patch cord, stranded copper conductor, snag-less boot, ANSI/TIA-568 compliant. Make: Commscope.
B.12	CAT 6 UTP Patch Cord – 1 Meter (Yellow): Factory-terminated CAT6 patch cord, color-coded for CCTV, snag-less boot, ANSI/TIA-568 compliant. Make: Commscope.
B.13	CAT 6A UTP Patch Cord – 1 Meter (White): Factory-terminated CAT6A patch cord, supports 10G Ethernet, ANSI/TIA-568 compliant. Make: Commscope.
B.14	RJ45 Connector: 8P8C modular connector, CAT6 compatible, minimum 50-micron gold-plated contacts, ANSI/TIA compliant. Make: Commscope.
B.15	6 Core Single-Mode Armored Optical Fiber Cable: OS2 single-mode (9/125 μm), 6 core, armored construction, PE/LSZH outer jacket, ITU-T G.652D compliant, suitable for campus backbone. Make: Commscope.
B.16	24 Port Loaded LIU – LC Type (1U): 19-inch rack mount, 1U height, LC connectors, single-mode, complete with splice tray, pigtails and adapters. Make: Commscope.
B.17	6 Port Loaded LIU – LC Type (1U): 1U rack mount, LC connectors, single-mode, complete with splice tray, pigtails and adapters. Make: Commscope.
B.18	LC-LC Single-Mode Duplex OFC Patch Cord: OS2 single-mode fiber, LC-LC connectors, duplex, UPC polish, LSZH jacket. Make: Commscope.
B.19	CAT 6 UTP Patch Cord – 2 Meter (Blue): Factory-terminated CAT6 patch cord, stranded copper, snag-less boot, ANSI/TIA-568 compliant. Make: Commscope.
B.20	20U Trolley-Mounted Network Rack: 20U height, 600 mm (W) × 800 mm (D), floor-standing trolley type, CRCA steel construction, lockable front door (toughened glass/metal), rear access, ventilation with fan provision, casters for mobility, includes cable managers and mounting accessories. Make: Commscope.
B.21	1U Rack Mount PDU (6/16 Amp): 1U horizontal mounting, 6/16 Amp sockets, 16 Amp input, industrial-grade construction. Make: Commscope.
B.22	42U Floor Standing Rack with Accessories: 42U height, 800 × 1000 mm, heavy-duty CRCA steel, perforated front & rear doors, load capacity ≥1000 kg, includes fan tray, PDU, cable managers, grounding kit and castor wheels. Make: Commscope.
B.23	PVC Gang Box: High-impact, flame-retardant PVC gang box suitable for modular face plates and data/voice outlets. Minimum thickness 2.5 mm, rigid construction, smooth finish, resistant to heat and deformation, suitable for concealed wiring. Compliant with relevant IS/IEC standards. Make: Honeywell MK – Logic Plus PVC Box.
B.24	PVC Channel – 4 Inch Width: Heavy-duty rigid PVC cable trunking/channel with smooth internal surface, snap-fit cover, UV-resistant and self-extinguishing properties.

	Suitable for structured cabling and power segregation. ISI marked and compliant with applicable Indian Standards. Make: Havells.
B.25	PVC Channel – 2 Inch Width: Rigid PVC cable trunking with high mechanical strength, smooth finish, easy snap-on cover, suitable for LAN, CCTV and low-voltage cabling. ISI marked , flame-retardant and compliant with Indian Standards. Make: Havells.
B.26	PVC Channel – 1 Inch Width: Rigid PVC cable trunking/channel, heavy-duty construction, smooth finish, self-extinguishing, suitable for drop cables and final outlet routing. ISI marked and compliant with applicable IS standards. Make: Havells.

SECTION C – ALLIED ACTIVE & INFRASTRUCTURE ELEMENT

S.No.	Name & Specification
C.1	LED Television – 65 Inch (for Surveillance Monitoring): 164 cm (65") Ultra HD 4K LED Smart Television with minimum 3840 × 2160 resolution, LED backlit display, HDMI & USB ports, suitable for 24×7 surveillance monitoring. Wall-mount and table stand included. Make: LG.
C.2	Split Air Conditioner – 1.5 TR, 5 Star (Dedicated for Server Room): Inverter-based split air conditioner, 1.5 Ton capacity, 5 Star energy rating, copper condenser coil, suitable for continuous operation in server room environment, with stabilizer-free operation and standard installation accessories. Make: Voltas.
C.3	Raised Flooring – Antistatic (for Server Room): Antistatic raised access floor system with high-density core, antistatic surface finish, load bearing capacity suitable for server racks, pedestal and stringer system included, compliant with relevant IS/IEC standards. Make: OEM.
C.4	UPS – 2 KVA with Inbuilt Batteries & LAN Monitoring (for Floor Racks): Online double-conversion UPS, 2 KVA capacity, inbuilt maintenance-free batteries, minimum backup as specified, SNMP/LAN monitoring card, input/output protection, suitable for network racks. Make: Vertiv
C.5	UPS – 20 KVA with Inbuilt Batteries (for Central Server Room): Online double-conversion UPS, 20 KVA capacity, three-phase input/output (as applicable), inbuilt battery bank, high efficiency, suitable for critical server room loads. Make: Vertiv
C.6	External Battery – 42 Ah (for UPS Backup Extension): Sealed maintenance-free (SMF) VRLA battery, 12V 42 Ah rating, suitable for UPS applications, long service life, compliant with relevant IS standards. Make: Exide.
C.7	Rack Earthing & Bonding Kit with Accessories: Complete earthing and bonding kit including copper earth bars, bonding straps, lugs, cables and mounting accessories for network and server racks, ensuring proper grounding and safety. Make: OEM.
C.8	Power Cable – 10 Sq.mm Copper, Flexible, 3 Core: High-quality electrolytic grade copper conductor, 10 sq.mm cross-section, flexible, PVC insulated and sheathed, suitable for power distribution, compliant with IS 694. Make: Havells.
C.9	MCB – 64 Ampere, Double Pole: Double pole miniature circuit breaker, 64A rating, thermal-magnetic protection, suitable for electrical distribution panels, compliant with IS/IEC standards. Make: Havells.

SECTION D – INSTALLATION, TESTING & COMMISSIONING (INCLUDING LABS)

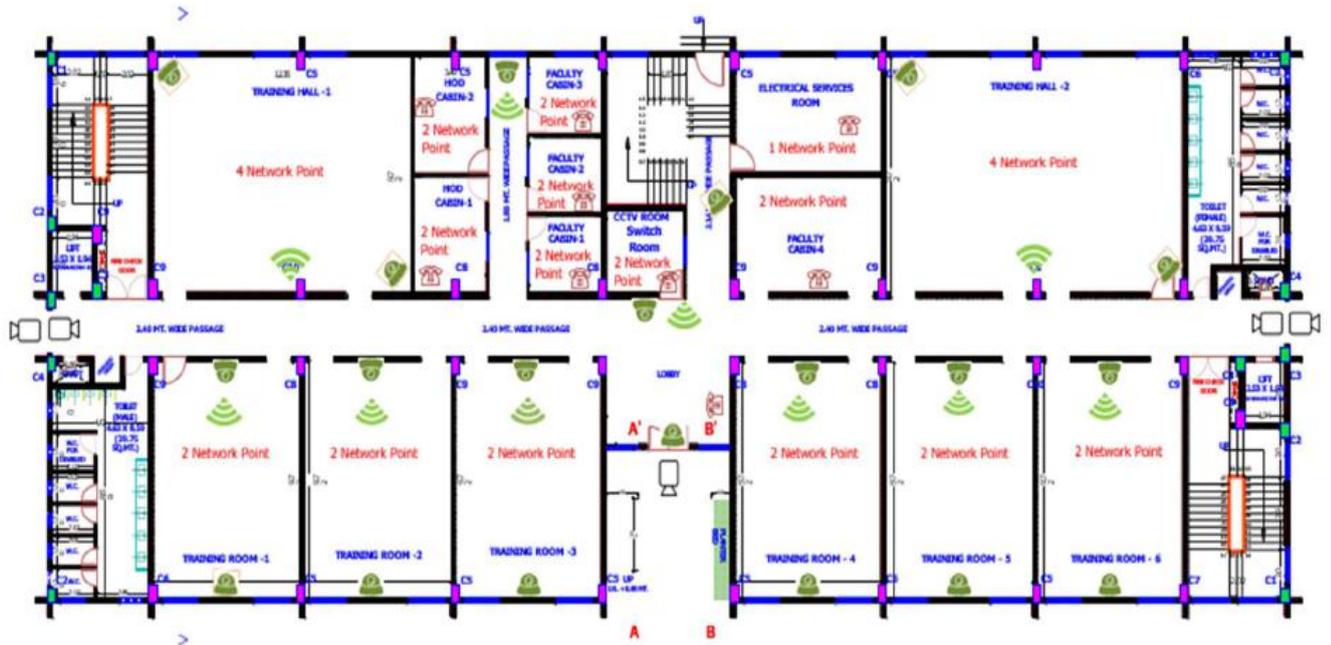
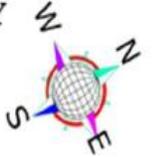
S.No.	Name & Specification
D.1	Laying of UTP CAT-6 Cable (LAN, Wi-Fi, CCTV & IPPBX including Labs): Supply, laying, routing and dressing of CAT-6 UTP cable in PVC conduit/raceway or concealed manner, including all accessories, bends, supports and fixing, complete as per ANSI/TIA standards and approved drawings.

D.2	Laying of Optical Fiber Cable (Single-Mode Backbone & Labs): Laying, routing and securing of single-mode optical fiber cable including trenching/concealment, protection, tagging and documentation, complete as per ITU-T and OEM guidelines.
D.3	Installation of PVC Channel / Raceway (All Areas including Labs): Installation of heavy-duty PVC channel/raceway with proper fixing, bends, joints and end caps, ensuring neat routing and segregation of data and power cables.
D.4	Installation of Single-Port Face Plate with Mounting Box: Fixing of single-port face plate with PVC gang box, including termination, alignment and labeling, complete in all respects.
D.5	Termination of I/O Points at Both Ends (Rack & User End): Termination of CAT-6/CAT-6A I/O modules at rack and user end using standard tools, maintaining bend radius and labeling as per ANSI/TIA-568.
D.6	Installation & Dressing of Patch Panels (24-Port): Mounting of patch panels in network racks, proper termination, cable dressing, labeling and testing, ensuring organized and professional finish.
D.7	Installation of Patch Cords at Rack End with Proper Labelling: Installation of factory-terminated patch cords at rack end, including port labeling, routing and dressing for easy identification and maintenance.
D.8	Installation of 15U Network Rack (Floor-wise & Lab-wise): Placement, leveling and fixing of 15U wall/floor mount racks including earthing, PDU installation and cable management accessories.
D.9	Installation of 42U Network Rack (Central Server Room): Installation and commissioning of 42U floor-standing rack including accessories, grounding, PDU mounting and alignment as per server room layout.
D.10	Splicing of Optical Fiber Cores: Fusion splicing of single-mode fiber cores including pigtails, protection sleeves, testing and proper documentation of splice loss.
D.11	Installation & Configuration of Firewall: Physical installation, initial configuration, policy setup, basic security hardening and testing of enterprise firewall as per network design.
D.12	Installation & Configuration of Network Switches (Core / Access / Distribution): Rack mounting, stacking (if applicable), VLAN configuration, IP addressing and connectivity testing of switches.
D.13	Installation & Commissioning of Wi-Fi Access Points: Mounting, cabling, controller integration, SSID configuration and testing of Wi-Fi access points for coverage and performance.
D.14	Installation & Commissioning of IP CCTV Cameras: Mounting, cabling, focusing, IP configuration and integration with NVR system, including live testing.
D.15	Installation & Configuration of NVR System: Installation, configuration, camera integration, storage setup and testing of Network Video Recorder system.

PROPOSED FLOOR PLAN FOR YOUR REFERENCE

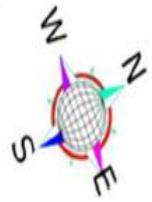
(Please prepare as per your Network Design)

PROPOSED GROUND FLOOR PLAN FOR DATA CCTV & WI-FI CENTER OF EXCELLENCE-MAHARANA PRATAP INSTITUTE OF TECHNOLOGY



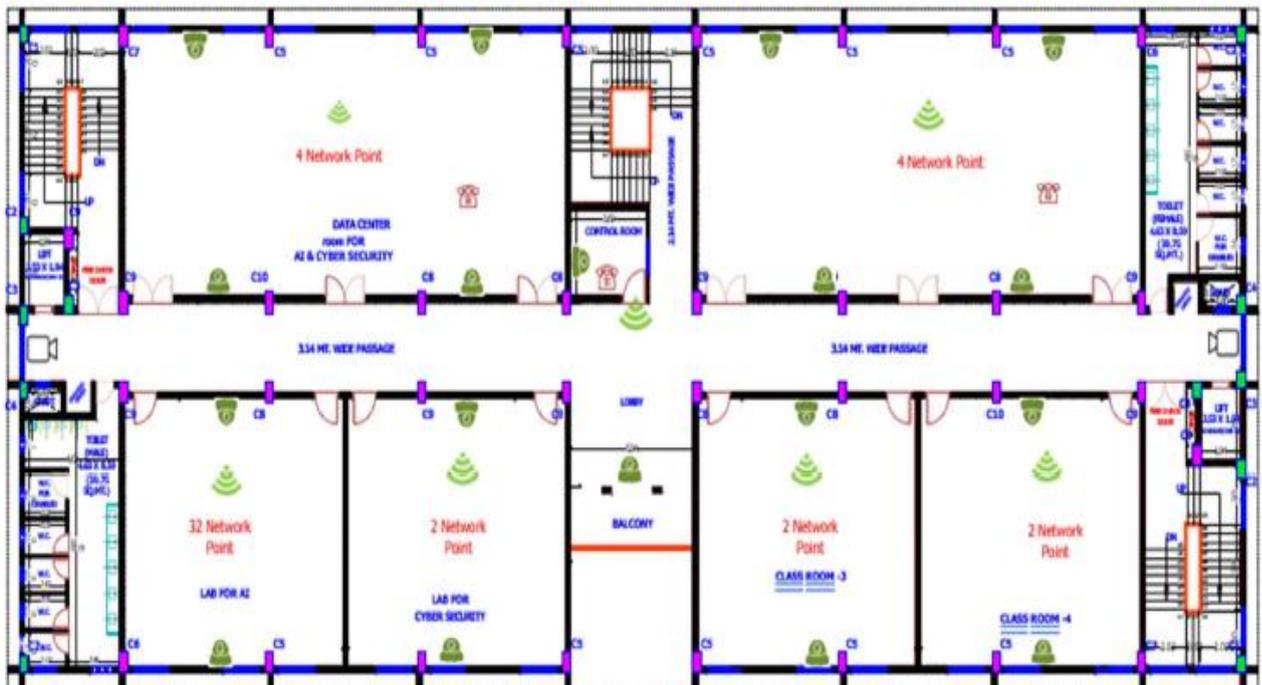
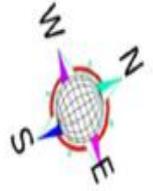
PROPOSED GROUND FLOOR PLAN

**PROPOSED FIRST FLOOR PLAN FOR DATA,CCTV & WI-FI
CENTER OF EXCELLENCE-MAHARANA PRATAP INSTITUTE OF TECHNOLOGY**



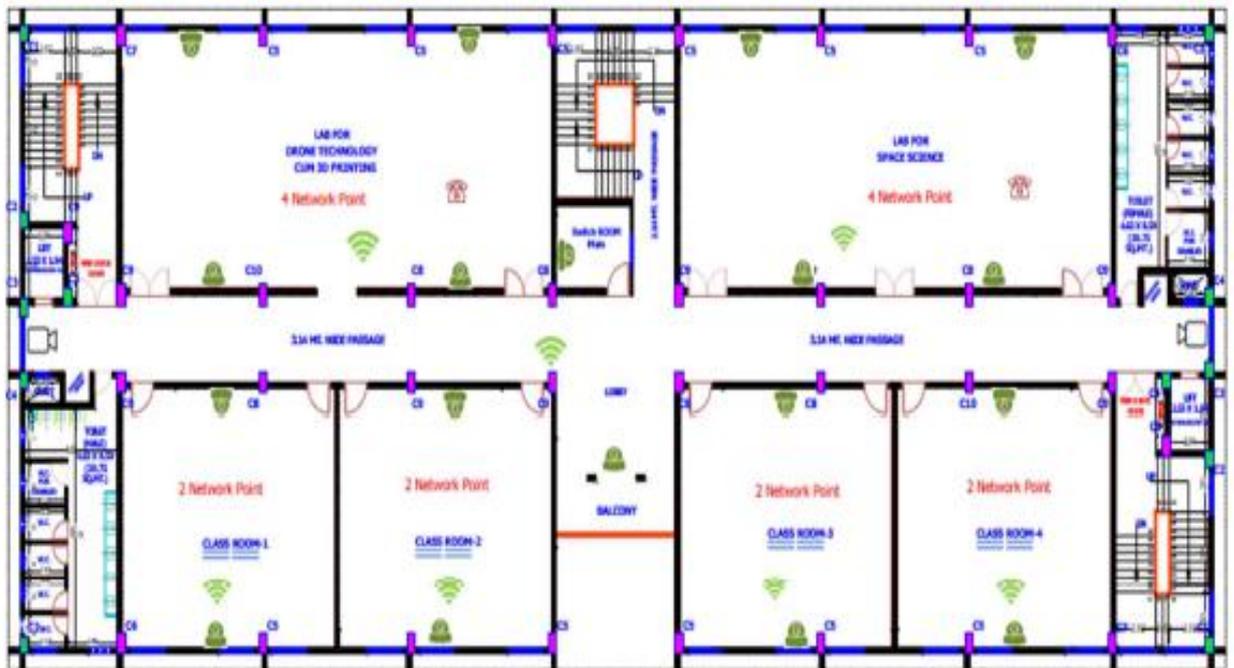
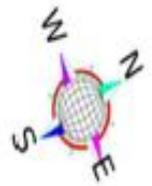
PROPOSED FIRST FLOOR PLAN

PROPOSED SECOND FLOOR PLAN FOR DATA CCTV & WI-FI CENTER OF EXCELLENCE-MAHARANA PRATAP INSTITUTE OF TECHNOLOGY



PROPOSED SECOND FLOOR PLAN

PROPOSED THIRD FLOOR PLAN FOR DATA,CCTV & WI-FI
CENTER OF EXCELLENCE-MAHARANA PRATAP INSTITUTE OF TECHNOLOGY



PROPOSED THIRD FLOOR PLAN