HIGH COURT OF UTTARAKHAND

Request For Proposal (RFP)

FOR

MODERN E-CLASSROOM WITH LIVE STREAMING FACILITY, LECTURE THEATER TECHNOLOGY INTERVENTION THROUGH VIRTUAL REALITY (VR)

&

ESTABLISHMENT OF CYBER FORENSIC SPECIALIZED CENTRE, AI TOOLS TO ENHANCE THE DIGITAL LIBRARY AND APPLICATION OF EMERGING TECHNOLOGIES FOR ACADEMIC ADMINISTRATION AND LOW CODE/NO-CODE DEVELOPMENT TOOLS-RPA ALONG WITH

DIGITAL INFRASTRUCTURE, LIKE SIGNAGE ETC.

AND

A WIFI ENABLED CAMPUS

ON TURN-KEY MODE

AT

UTTARAKHAND JUDICIAL AND LEGAL ACADEMY(UJALA)

BHOWALI (NAINITAL)

UTTARAKHAND

Tender Reference Number:

Tender ID 2025_HCUK_84805_1/UHC/E-COURTS/ICT-UJALA/2025

Office of the Registrar General
HIGH COURT OF UTTARAKHAND, AT NAINITAL
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SECTION-I

NOTICE INVITING e-TENDER

1.1 INTRODUCTION AND OBJECTIVE:

On November 9, 2000 the new state of Uttarakhand was carved out from Uttar Pradesh. The foundation stone of Uttarakhand Judicial and Legal Academy (hereinafter referred as UJALA) was laid on December 19, 2004. Subsequently the Administrative-cum-Training block, a Mess and a hostel was constructed in the first phase of infrastructure construction.

The UJALA is meant for the training of judges of the Trial Courts of the State of Uttarakhand and the Academy organizes Induction/Orientation and Reflective Training Programmes for newly appointed judges, Refresher Programmes, Workshop, Seminars, and Specialized Training Programmes for other judges of Trial Courts of the State. However, the ultimate goal of the Academy is "to strengthen the administration of justice as a whole". To ensure the achievement of the goal, efforts are made that every stake holder in justice delivery system may benefit from the resources of UJALA. In this process the public prosecutors of the State, officers of various Departments of State Government, who by virtue of their official position have to take judicial or quasi judicial decision, police officers etc are imparted training in UJALA to suit their needs. This process, on one hand ensures the resources of UJALA being utilized to the optimum level for strengthening the administration of justice and on the other hand it is expected to help the officers of other services to acquire proficiency in the process of applying law in more functional manner. Consequently, training programmes/workshops on legal matters for the officers of Secretariat, Police Department, Medical & Health Department, Urban Development Department and PWD/RES/Irrigation/Minor Irrigation Department have also been organized to cater to training needs of various Government departments.

This RFP is aimed at providing a solution for "Modern e-classroom with Live Streaming Facility, Lecture Theater Technology intervention through augmented reality (AR) and virtual reality (VR), establishment of cyber forensic specialized centre, AI tools to enhance the digital library and application of emerging technologies for academic administration and low code/no-code development tools-RPA along with digital infrastructure, like signage etc.Anda wi-fi enabled campus.

1.2 Location of project:

The project implementation location shall be Uttarakhand Judicial and Legal Academy (UJALA) campus at Bhowali, Nainital, Uttarakhand.

1.3 Bidders must read the complete 'Tender Document':

This NIT is an integral part of the Tender Document and serves a limited purpose of invitation, and does not purport to contain all relevant details for submission of bids. Bidders must go through the complete Tender Document for details before submission of their Bids.

1.4 Availability of the Tender Document:

The Tender Document shall be published on the Portal **https://uktenders.gov.in**. It shall be available for download after the date and time of the start of availability till the deadline for availability as mentioned

in **TIS**. If the High Court of Uttarakhand happens to be closed on the deadline for submitting the bids as specified above, this deadline shall not be extended. Any query/ clarification regarding downloading Tender Documents and uploading Bids on the e-Procurement portal may be addressed to the Portal's Help Desk only.

1.5   Clarifications:

A Bidder requiring any clarification regarding the Tender Document may ask questions in writing/ electronically from Office/ Contact Person as mentioned in TIS. This deadline shall not be extended in case of any intervening holidays. Bidder should specify eTender Number in all your correspondence. Interested parties may view and download the tender document containing the detailed terms & conditions, free of cost from the website **https://uktenders.gov.in**.

1.6   Eligibility Criteria for Participation in this Tender:

Subject to provisions in the Tender Document, Bidder (including any changed name or created a new "Allied Firm" or Technology Partner/Consortium) should meet the eligibility criteria as of the date of his bid submission and should continue to meet these till the award of the contract-

1.6.1   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 for any of aforesaid reasons.

1.6.2   Not stand declared ineligible/ blacklisted/ banned/ debarred by the Procuring Organization or its Ministry/ Department by Supreme Court or any High Court from participation in its Tender Processes; and/ or

1.6.3   Not be convicted (within three years preceding the last date of bid submission) or stand declared ineligible/ suspended/ blacklisted/ banned/ debarred by appropriate agencies of Government of India or Government of Uttarakhand or by Supreme Court or any High Court from participation in Tender Processes of all of its entities.

1.6.4   Not have an association (as a bidder/ partner/ director/ employee in any capacity) of the near relations of executives of High Court of Uttarakhand or Government of Uttarakhand involved in this Tender Process.

1.6.5   Not have a conflict of interest, which substantially affects fair competition. The prices quoted should be competitive and without adopting any unfair/ unethical/ anti-competitive means. No attempt should be made to induce any other bidder to submit or not to submit an offer for restricting competition,

1.6.6   Must fulfil other additional eligibility condition prescribed in Tender Document.

1.7   Purchase Preference Policies of the Government:

The State Government, through the Administrative Department and with the consent of the Finance Department of the Government, may give preference in purchase/price to small cottage industries/Khadi/Micro enterprises manufacturing within the geographical area of the state. This will not be more than 10 percent of the preferred minimum rate. Provided that up to 15 percent discount on purchase basis will be allowed on materials manufactured in micro, small and medium industries/units established at an altitude of more than 4000 feet in the state of Uttarakhand. However, a valid document as mentioned above shall be filed by bidder for that purpose.

1.8   Pre-bid Conference:

Bidders are requested to attend a Pre-bid conference for clarification on the Tenders' technical specifications and commercial conditions, on the time, date, and place mentioned in TIS. If a bidder does not participate or submit any query within the stipulated time and period, then no subsequent representations from them regarding the Technical/ commercial specifications/ other conditions shall be entertained.

1.9   Submission of Bids:

Bids must be uploaded till the deadline for submission mentioned in (Tender Information Summary) **TIS**. If the office happens to be closed on the deadline to submit the bids as specified above, this deadline shall not be extended.
No manual Bids shall be made available or accepted for submission (except for originals of scanned copies as per sub-clause above). Bidder must comply with the conditions of the e-Procurement portal **https://uktenders.gov.in**, including registration, compatible Digital Signature Certificate (DSC) etc. In the case of downloaded documents, Bidder must not make any changes to the contents of the documents while uploading, except for filling in the required information.

1.10 Bid Opening:

Bids received shall be opened online at *the **specified date and time given in TIS**.* If the office is closed on the specified date of opening of the bids, the opening shall be done on the next working day at the same time.

1.11 Disclaimers and Rights of High Court of Uttarakhand:

The issue of the Tender Document does not imply that the High Court of Uttarakhand is bound to select bid(s), and it reserves the right without assigning any reason to:

- ✓ reject any or all of the Bids, or
- ✓ cancel the tender process; or
- ✓ abandon the procurement of the Services; or
- ✓ issue another tender for identical or similar Services

1.12 **Bidding schedule:**

*In case, a bidder fails to submit the Banker's cheque/DD/FD for EMD in original before last date/time of bid submission end date, the bid of the bidder shall not be accepted and rejected out rightly. No communication shall be entertained in this regard.

TENDER INFORMATION SUMMARY (TIS)

SN	DESCRIPTIONS	DETAILS
1	Date of release of tender	13.06.2025; 17:30 PM
2	Document down load start date	13.06.2025; 18:00 PM
3	Bid submission start date	13.06.2025; 18:00 PM
4	Pre Bid Meeting	21.06.2025; 11:00 AM
6	Bid submission end date	04.07.2025; 05:00 PM
7	Date of Technical Bid opening	05.07.2025; 11:00 AM
8	Date of Financial Bid opening	Will be specified later
9	Venue of Opening of Bids/Pre-Bid Meeting/Presentation	High Court of Uttarakhand, Nainital
10	E-tender Fees (Non-refundable) in the form of Demand Draft in favor of **"Registrar General, High Court of Uttarakhand at Nainital".**	**Rs.4,720/-(**Four thousand seven hundred twenty only)
11	**Earnest Money Deposit (E.M.D.)** (Refundable) valid for 180+45 days or more from the date of proposal submission in favor of Registrar General, High Court of Uttarakhand at Nainital.	**Rs. 10,00,000/-** (Ten Lakh Only) **in the form of Unconditional Bank Guarantee/FDR**
12	**Address for Communication**	Registrar General, High Court of Uttarakhand at Nainital
13	**Websites for downloading RFP/Bidding documents**	**https://uktenders.gov.in**

SECTION-II

INSTRUCTIONS TO BIDDERS

2.1 Preparation of Bids:

2.1.1 Bidder should take into account any corrigendum published on the e-Tender document before submitting their bids.

2.1.2 Please note the manner in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that needs to be submitted. Any deviations from these may lead to rejection of the bid. Bidder should not upload commercial bids in any kind of documentary format (scanned images/ .pdf /.doc /.docx /.xls /.xlsx) other than uploading in prescribed field in e-procurement portal of this tender.

2.2 Submission of Bids:

2.2.1 Bidder should log into the **https://uktenders.gov.in** well in advance for bid submission so that he/ she uploads the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

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

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

2.2.4 The bidder shall seal the original Bank Draft/ Bankers Cheque / Bank Guarantee /FDR in an envelope. The Bidder shall mark "**name and tender reference number on the back of the Bank Draft/ FDR/Bankers Cheque**" before sealing the same. The address of High Court, name and address of the bidder and the Tender Reference Number shall be marked on the envelope. If the envelope is not marked as specified above, High Court of Uttarakhand will not assume any responsibility for its misplacement, pre-mature opening etc.

2.2.5 The bidder shall deposit the envelope at the designated time and place, on or before bid submission date. In case EMD is sent through Speed Post and it must reach as per date and time mentioned above.

2.2.6 Tender Fee/EMD not meeting above deadlines will not be accepted and their uploaded bid will be rejected.

2.2.7 A standard Bill of Quantity (**BoQ**) format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the requisite cells with their respective financial quotes and other details (such as name of the bidder etc.). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected summarily.

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

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

2.2.10 Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

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

2.3 Assistance to Bidders:

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

2.3.2 Any queries relating to the process of online bid submission or queries relating to State e-tender portal in general may be directed to the 24x7 State e-tender portal Helpdesk. The contact numbers for the

helpdesk is mentioned in the respective e-Procurement Portal. No queries related with online portal shall be cnsdered by this Court.

2.4   Clarification on Tender Document:

2.4.1   A prospective Bidder requiring any clarification on the Tender Document may submit his queries, in writing, at the High Court of Uttarakhand in the mailing address i.e. cpc-uk@nic.in. The queries must be submitted in the following format (in Excel file,*.xls or .xlsx) only to be considered for clarification:

SN	Section No.	Clause No.	Reference/ Subject	Clarification Sought

2.4.2   All queries on the Tender Document should be received on or before as prescribed in Section I of this tender document. The High Court shall hold a pre-bid conference (**PBC**) as per the date mentioned in **TIS**. Queries not submitted within this deadline or not in the given format may not be taken up at the **PBC**. High Court of Uttarakhand may hold a virtual **PBC** in case of contingencies and information regarding the same will be published on the portal/website.

2.4.3   Only two representatives of each prospective bidder shall be allowed to participate in the pre bid conference. Letter from Authorized signatory from the intended bidder will clearly specify the names of the participants.

2.4.4   This proposal is based on turnkey basis for services which may includes goods and items and thus, queries without basis, like particular item belongs to particular OEM (original Equipment Manufacturer) will not be entertained in absence of proper documentation or relevant papers.

2.4.5   High Court of Uttarakhand's response (**including the query but without identifying the source of inquiry**) would be uploaded in the State e-tender portal (URL: **https://www.uktenders.gov.in**). Bidders are responsible for duly checking the above website for any clarifications.

2.4.6   High Court of Uttarakhand reserves the right to not to respond to any/all queries raised or clarifications sought if, in their opinion and at their sole discretion, they consider that it shall be in appropriate to do so or do not find any merit in it.

Note: Inputs/ suggestions/ queries submitted by bidders as part of the pre-bid meeting and otherwise will be given due consideration by the e-Tender committee, however, High Court of Uttarakhand is not mandated to accept any submission made by the bidder and nor the bidder will be given any written response to their submissions. If an input is considered valid by the committee the same will be accepted and incorporated as part of the corrigendum.

2.5   Eligibility Criteria:

Following are the pre-requisites for bidding/participating in the RFP /Tender as qualification criteria-

SN	Qualification Criteria	Enclose document
Criteria 1 - Entity		
1.	The Bidder should be a Registered Company under the Companies Act or A Partnership Firm or Trust or Society having registered offices in India and should be in existence for at least last 5 years	Certificate of Incorporation
2.	OEM should be a registered company in India under the Indian Companies Act 1956 / Partnership Act and should be in existence for a minimum period of Ten (10) years as on the date of RFP.	Certificate of Incorporation
3.	Bidder must have PAN card and GST Registration Certificate	Documentary evidence to be provided
4.	A duly stamped Power of Attorney in the name of the Authorized Signatory for this tender	Power of Attorney must be specific for this tender.
Criteria 2 - Experience and Past Performance:		
1.	Single Work order should be of similar work (INR 1 Cr or above). i.e Contract should have experience in setup audio visual setup for broadcasting in court premises or related to judicial premises/Experience of having successfully completed similar works towards supplies and installation of Multi-Cam Studio / Recording Studio / Production Studio Setups / Universities/ Reputed Higher Educational Institution	Copy of Work Order

2.	The OEM should have experience of 1 Nos of OPS Room / Auditorium Indoor LED screens of pixel pitch 2.5mm or less having min size of 50sqmtr in a single project in any Government / State Government / PSU / Defense sector of India directly during last 3 (three) Years as of the bid submission date		Completion certificate and purchase order copies to be attached

Criteria 3 –Non-performing Contracts and Litigation

1.	Declaration regarding Non-Blacklisting	Self Declaration on Bidder letter head on Estamp of Rs100 Notary
2.	Declaration of Acceptance of Terms and Conditions in RFP	Self Declaration on Bidder letter head
3.	Checklist for Technical Bid duly filled in along with details of all the submitted documents as part of technical bid	Proper document to be attached
4.	Supplier's minimum 5 year onsite warranty and service support. At least one visit to the customer premises every month during warranty period is required (Declaration for the same should be submitted along with technical bid).	Self Declaration on Bidder letter head

Criteria 4 – Performance Capability

1.	Bidder must be the manufacturer (OEM)/authorized dealer. Hard copy of the Bid Specific MAF with Ink signed stamped on OEM letter head should be submitted for all the Major Components i.e. Video Wall, LED Boards, Interactive /Display, Cameras, Wi-Fi Access Points, Firewall etc., failing which bidder will be disqualified.	Authorizing letter for First bidder from OEM on OEM Letter Head
2.	CE (EN55035 -2017/ EN61000-3-3-2013), FCC (CFR47 FCC part 15-B ANSI C63.4:2014), & BIS Certificate for proposed solution should be on Indian OEM name.	Certificates to be attached in technical bids
3.	ETL Certificate of Offered Product certified from NABL Lab.	Certificates to be attached in technical bids
4.	LED Display & Controller & Software should be from same OEM.	Data sheet to be attached in the technical bids and BIS of both on Indian address should be submitted.
5.	OEM should have Direct registered own Service Centers in Metro Cities like Delhi/NCR, Mumbai, Bangalore in India at least form last 2 year.	Copies of relevant certificates be attached.
6.	Test Report: Material Test Certificate Should Be Sent Along with The Supply. The Material may Be Checked by Buyer's Lab & the Results of the Lab will be the Sole Criteria for Acceptance of the Item.	Proper document to be attached
7.	Bidder shall take note of Rule 144 (xi) of GFR 2017 which selecting the OEM and proposing the make and model. The OEM / manufacturing plant shall not be from country sharing land border with India highlighted in the Rule 144 (xi) of GFR 2017 and subsequent clarification.	Proper document to be attached
8.	Preference to be given to Make in India (MII) as per amended Public Procurement policy dated 16.09.2020. Authority will deploy agency to verify the factory/ manufacturing facility of OEM in India before releasing the final order. In-case any discrepancy Authority may blacklist the bidder to participate in upcoming tenders for the period of one year.	Proper document to be attached
9.	Certifications required of OEM/OEM subsidiary in India (Copy to be submitted along with the bid) a.) Quality Management System 9001:2015 b.) Environmental Management System 14001: 2015 c.) Occupational Health & Safety Management System 45001:2018 d.) Security Management System 27001: 2013	Proper document to be attached
10.	Brightness Measurement Tool: The Bidder/OEM of LED Display in India should have a luminance meter for brightness measurement of the offered LED screen.) a.) Provide details (Model No. & Date of Purchase) along with its latest calibration certificate. b.) Note: luminance meters without calibration certificate are not acceptable. c.) Copy of Latest Valid Calibration Certificate from National Physical Laboratory.	Proper document to be attached
11.	OEM shall be ISO 9001, ISO 14001, OHSAS 45001 & ISO 27001:1 certified with the scope to include visual displays as well. Certificates to be submitted	Certificates to be attached in technical bids
12.	OEM's for Interactive /Display should have valid BIS and ROHS certificate.	Certificate need to be attached
13.	OEM quoted model should be in public domain with all technical specifications.	Relevant documents must be submitted.

Criteria 5- Financial Status:

1.	Bidder should have a minimum average annual turnover of Rs. 2 CR. during the last three financial years.	Audited Balance Sheet and P&L Account Statement along with CA Certificate

2.	The OEM should have a minimum average annual turnover of Rs. Fifty-(50) Crore in LED Video wall work during last three financial years.	Copies of Financial Statements required along with the Average Annual Turnover Certificate duly certified by CA.
3.	OEM should have Audited profit and loss statement and balance sheet last three financial years.	Documents to be submitted
4.	Tender cost as mentioned in the tender towards tender Cost of Rs. 4,720/- drawn from a Scheduled Bank and in favour of the Registrar General, High Court of Uttarkhand, Nainital	Original Demand be Draft
5.	EMD as mentioned in the tender towards EMD as mentioned in the tender	Original BG/DD/FDR

Note: -

- *The criteria mentioned above will constitute the preliminary scrutiny and only those bidders complying with them will be eligible for technical evaluation.*
- *All the document should be placed only in this (as listed in this clause) order and an index be provided separately.*
- *The bid will be summarily rejected if all the documents mentioned above are not enclosed in technical bid. All supporting documents must be clearly visible and readable.*

2.6 BID FORMAT:

The tender is of "**Two Cover Bid Proposal"** which consists of Technical and Commercial Bids– to be submitted separately by the bidder on or before the specified date and time, in e-Procurement Portal in relevant fields only. No manual submission or uploading of commercial bids in any other format is permissible. Manual submission/uploading commercials in any other format are liable for rejection.

(a) Technical Bid: Bidder shall specify all the requisite technical parameters in the compliance sheet along with description on how application is complying with the requirements and screenshots of the functionality. Words like "Comply", "Compliance", "Yes" Or "No" shall not be used in isolation. In Support of technical parameters, the bidder shall upload a datasheet, technical brochure which shall be part of respective annexure and are required for needful scrutiny. **Uploading of all applicable annexure is mandatory.**

(b) Commercial Bid: Bidder shall upload his offer per unit inclusive of taxes, GST, all taxes, freight & forwarding, etc., in respective commercial column fields in e-procurement portal only, including for the said period of warranty. Bidder shall not upload the commercial document in any form other than entering the unit price offers in relevant fields of the e-Procurement portal.

2.7 Unresponsive Bids:

Bids with incomplete documentation will be treated as non-responsive and summarily be rejected. Bidders are hereby directed to ensure that all documentation/supporting documentation in support of qualification criteria, testimonials, etc., is complete and submitted as part of the Bid.

2.8 Performance Bank Guarantee(PBG):

The successful bidder is required to furnish an unconditional and irrevocable Bank Guarantee from any nationalized bank for an amount equivalent to 10% of the total price as quoted in the commercial bid within 15 days of issue of LOI order valid for the period of **contract + 3 months**. Else, as per the EMD Clause/Amount would be revoked/forfeited/debarred to participate for one year.

2.9 Validity of the Bid:

The bid validity is 270 days from the date of opening the Technical Bid.

2.10 Forfeiture of the Earnest Money Deposit (EMD)/debarred to participate for one year:

a. If the bidder withdraws his bid during the period of bid validity or violates EMD Declaration, or
b. In case of successful bidder fails to execute the agreement and furnish the Performance Bank Guarantee (PBG) within 15 days from the date of issuing of the purchase order.

2.11 Unsuccessful bidder's Earnest Money Deposit (EMD):

If EMD amount is paid, refund will be initiated in the e-Procurement portal as early as possible after the validity of tender/RFP or within 30 days of signing of contract with successful bidder.

2.12 Successful bidder's Earnest Money Deposit (EMD):
If EMD amount is paid, it will be discharged upon the bidder furnishing the Performance Bank Guarantee (PBG) as per other compliances of Supply, Installation, Configure and commissioning, etc., Refund of EMD of Successful bidder will be initiated if deposited on completion of

Installation and submission of all installation reports, invoice and on furnishing PBG (Performance Bank Guarantee).

2.13 Presentations (Mandatory):

The High Court of Uttarakhand shall call the shortlisted eligible Bidders (whose bid is found responsive) to provide a presentation of their Proposal. The presentation be prepared in light of Technical Evaluation Criterion that is for which specific marks shall be assigned during Technical Bid Criterion.

2.14 Site not ready:

In case it is found that the site is not ready for delivery and installation, the Office head of the UJALA will make arrangements to accept the material into stock, test the items and certify for further needful steps in written documentation under proper acknowledgment.

2.15 Tax/Currency Rate Variation:

High Court of Uttarakhand is not responsible for variation in tax structure or foreign currency exchange rates, after submission of the bid.

2.16 Applicable Rules:

This tender is processed following the Uttarakhand Procurement Rules, 2017 and amendments therein.

2.17 Submission, Receipt and Opening of Bids Time Lines:

The original proposal shall be uploaded in the e-procurement portal of the Government of Uttarakhand on or before the due date. Scheduled dates are mentioned in TIS.

2.18 Amendment of Tender Document:

At any time prior to the last date for receipt of bids, the High Court of Uttarakhand, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Tender Document by an amendment. The amendment will be notified on e-procurement portal https://www.uktenders.gov.in and should be taken into consideration by the prospective agencies while preparing their bids.

2.19 Language of Bids:

The Bids prepared by the Bidder and all correspondence and documents relating to the bids exchanged by the Bidder and the High Court of Uttarakhand, shall be written in English/Hindi language.

2.20 Documents Comprising the Bids:

The bid prepared by the Bidder shall comprise of the following components:

(a) Earnest Money Deposit (EMD) in the form of a Demand Draft/Bankers Cheque/Bank Guarantee/Fixed Deposit Receipt of a Scheduled/Nationalized Bank
(b) Eligibility Criteria Forms mentioned in the Eligibility Criteria Table
(c) Technical Bid
(d) Financial Bid
(e) Power of Attorney executed by the Bidder in favor of the tender calling authority or the duly Authorized Representative, certifying him as an authorized signatory for the purpose of this Tender (As per e-Tender)
(f) Self-Declarations as requested
(g) Document of proof as requested in the all the Schedules & the Annexure.

2.21 BID PRICES:

(a) The Bidder shall indicate in the Performa prescribed, the unit rates and total Bid Prices of the Equipment / Services, proposes to provide under the Contract. Prices should be shown separately for each item as detailed in Tender Documents.
(b) In absence of above information as requested in, a bid may be considered incomplete and be summarily rejected.
(c) Prices quoted in the bid must be firm and final and shall not be subject to any upward modifications, on any account whatsoever. The Bid Prices shall be indicated in Indian Rupees (INR) only.
(d) The bidders shall quote in Indian Rupees and the quoted price shall be inclusive of all taxes, duties, statutory levies, supplying support for installing, commissioning, freight & forwarding. Any modification/change in the quoted price is not allowed after the submission of the bid.
(e) The rate quoted by the bidder should be valid **for 9 months** from the contract award date, in case the High Court of Uttarakhand decides to procure/place an order for additional quantity of IT infrastructure within 9 months from the contract award date.

(f) The Bidder shall prepare the bid based on details provided in the tender documents. It must be clearly understood that the Scope of Work & the BOQ is intended to give the Bidder an idea about the order and magnitude of the work and is not in any way exhaustive and guaranteed by the High Court of Uttarakhand. The Bidder shall carry out all the tasks in accordance with the requirement of the tender documents and it shall be the responsibility of the Bidder to fully meet all the requirements of the tender documents. If during the course of execution of the project any revisions to the work requirements i.e. Technical specifications, Equipment sizing, Technical Architecture etc. are to be made to meet the goals of the High Court of Uttarakhand, all such changes shall be carried out within the current price without any impact to the High Court of Uttarakhand .

2.22 Last Date for Receipt of Bids:

Bids will be received by the High Court of Uttarakhand at the address specified under **Section I – Invitation for Bids** through e-Tender Portal, no later than the time and date specified in Section I -Invitation for Bids. In the event of the specified date for the receipt of Bids being declared a holiday for the High Court of Uttarakhand, only hard copy of EMD and Tender Fee will be received up to the appointed time on the next working day.

2.23 Late Bids:

Any bid received by the High Court of Uttarakhand after the last date and time for receipt of bids prescribed by the High Court of Uttarakhand, pursuant to Section I - Invitation for Bids, will be rejected.

2.24 Modification and Withdrawal of Bids:
No bid may be altered / modified subsequent to the closing time and date for receipt of bids. Unsolicited correspondences from Bidders will not be considered. No bid may be withdrawn in the interval between the last date for receipt of bids and the expiry of the bid validity period specified by the Bidder in the Bid. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its EMD.

2.25 Address for Correspondence:

The Bidder shall share the official mailing address, place and fax number to which all correspondence shall be sent by the High Court of Uttarakhand.

2.26 Contacting the High Court of Uttarakhand:

No Bidder shall contact the High Court of Uttarakhand on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. Any effort by a Bidder to influence the High Court of Uttarakhand bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

2.27 Local Conditions:

It will be incumbent upon each Bidder to fully acquaint himself with the local conditions and other relevant factors at the site which would have any effect on the performance of the contract and / or the cost.

The Bidder is expected to make a site visit to obtain for himself on his own responsibility all information that may be necessary for preparing the bid and entering into contract. Obtaining such information shall be at Bidder's own cost.

Failure to obtain the information necessary for preparing the bid and/or failure to perform activities that may be necessary for the providing services before entering into contract will in no way relieve the successful Bidder from performing any work in accordance with the Tender documents.

The bidder and any of its personnel or authorized agents will be granted permission by High Court of Uttarakhand to enter its facilities at various locations for the purpose of such visits, but only upon the condition that the bidder, its personnel, and authorized agents, will indemnify the High Court of Uttarakhand from and against all liability in respect thereof, and will be responsible for any loss of or damage to property/manpower, and any other loss, damage, costs, and expenses incurred as a result of such inspection, undertaken by the bidder. The Bidder shall at its own risk, peril, cost and liability undertake site visits to designated facilities in the state.

2.28 Sub-Contracting:

Sub contracting of the work or any part is not allowed.

2.29 Overall Evaluation Methodology and Award Criteria:

The Technical bid will be opened by Bid opening and Evaluation Committee (BEC) in the e-Procurement portal. Further commercial bids of technically qualified bidders will be opened in e-portal as per the rules by Bid opening and Evaluation Committee (BEC). **Financial Bid variation of more than 40% of average**

quote of successful bidders shall be considered as non responsive. Bid evaluation will be sole discretion of BEC and no communication in this regard shall be entertained and the decision of BEC shall be binding to all the bidders.

2.30   Award of Contract:

The Contract will be awarded to the successful Bidder, whose Bid has been determined to be substantially responsive with reasonableness and the **Best Value Bid**. The decision of the High Court of Uttarakhand is final in this regard.

SECTION-III

GENERAL AND SPECIFIC CONDITIONS OF CONTRACT

3.1   Definitions:

In this RFP/Contract, the following terms shall be interpreted as indicated:
3.1.1 "**The High Court**" means High Court of Uttarakhand at Nainital.

3.1.2 "**UJALA**" means Uttarakhand Judicial & Legal Academy at Bhowali, Nainital.

3.1.3 "**Purchase Officer**" means the officer signing the acceptance of tender and includes any officer who has authority to execute the relevant contract on behalf of the High Court of Uttarakhand.

3.1.4 "**Representative of High Court of Uttarakhand**" means the person or the persons appointed by the High Court of Uttarakhand from time to time to act on its behalf for over all co-ordination, supervision, and project management including High Court of Uttarakhand Technical Representative.

3.1.5 "**Representative of UJALA**" means the person or the persons appointed by the Director, UJALA from time to time to act on its behalf for over all co-ordination, supervision, and project management including UJALA's Technical Representative.

3.1.6 "**Technology Provider/OEM**" means the Original Equipment Manufacturer of any equipment / system /software / product that is providing such goods/solution to the Bidder under the scope of this Tender / Contract.

3.1.7 "**Bidder/Bidder's Representative/Project Coordinato**r" means the person or the persons appointed by the Bidder from time to time to act on its behalf for overall coordination, supervision and project management.

3.1.8 "**Parties**" means the High Court of Uttarakhand and the Bidder and "Party" means either of the Parties.

3.1.9 "**Contrac**t" means the Agreement entered into between the Bidder and the High Court of Uttarakhand as recorded in the Contract form signed by the High Court of Uttarakhand and the Bidder including all attachments and Annexes thereto, the Tender and all Annexes thereto and the agreed terms as set out in the bid, all documents incorporated by reference therein and amendments and modifications to the above from time to time.

3.1.10 "**Acceptance of Tender**" means the letter/fax or any memorandum communicating to the Tenderer, the acceptance of his tender, and includes an advance acceptance of his tender.

3.1.11 "**Business Day**" means any day that is not a Sunday or a public holiday (as per the official holidays observed by High Court of Uttarakhand).

3.1.12 "**Confidential Information**" means any information disclosed to or by any Party to this Contract and includes any information in relation to the Parties, a third party or any other person who is covered within the ambit of the High Court of Uttarakhand's legislation including any such information that may come to the knowledge of the Parties hereto / Bidder's Team by virtue of this Contract that:

(a)   is by its nature confidential or by the circumstances in which it is disclosed confidential; or
(b)   is designated by the disclosing Party as confidential or identified in terms connoting its confidentiality; but does not include information which is or becomes public knowledge other than by a breach of this Contract;

3.1.13 "**System**" means all of the goods or services or both, if required under the scope of this contract together as an integrated solution.

3.1.14 "**Commissioning of System**": The system shall be deemed to have been commissioned, when all the activities as defined in the Scope of Work have been successfully executed and completed.

3.1.15 "**Acceptance of System**": The system shall be deemed to have been accepted by the High Court of Uttarakhand, subsequent to its commissioning, when all the activities as defined in Section IV - Scope of Work have been successfully executed and completed.

3.1.16 "**Document**" means any embodiment of any text or image however recorded and includes any data, text, images, sound, voice, codes or and databases or micro film or computer-generated micro fiche.

3.1.17 "**Effective Date**" means the date on which this Contract is signed and executed by the parties hereto. If this Contract is executed in parts, then the date on which the last of such Contracts is executed shall be construed to be the Effective Date;

3.1.18 "**Intellectual Property Rights**" means any patent, copyright, trademark, trade name, service marks, brands, propriety information, software whether arising before or after the execution of this Contract and the right to ownership and registration of these rights.

3.1.19 "**Kick Off Meeting**" means a meeting convened by the High Court of Uttarakhand to discuss and finalize the work execution plan and procedures with the Bidder.

3.1.20 "**Service**" means services to be provided as per the requirements / conditions specified in this tender / contract. In addition to this, the definition would also include other related/ancillary services that may be required to execute the scope of work under this contract including the goods.

3.1.21 "**Service Specification**" means and includes detailed description, statements to technical data, performance characteristics, and standards (Indian as well as International) as applicable and as specified in the Contract, as well as those specifications relating to Industry standards and codes applicable to the performance of the work, work performance quality and specifications affecting the work or any additional specification required to be produced by the Bidder to meet the design criteria.

3.1.22 "**The Contract Value**" means the price payable to the Bidder under this Contract for the full and proper performance of its contractual obligations. The Contract Value shall be equal to the total Bid Price.

3.1.23 "**Delivery of System**" shall be deemed to have completed when the Delivery of all the goods/items under the proposed bill of material has reached the designated Data Center Site for installation.

3.1.24 "**Notice**" means: notice; or consent, approval or other communication required to be in writing under this Contract.

3.2   Representations & Warranties
In order to induce the High Court of Uttarakhand to enter into this Contract, the Bidder hereby represents and warrants as of the date hereof, which representations and warranties shall survive the term and termination hereof, the following:

(a)   That the Bidder has the power and the authority that would be required to enter into this Contract and the requisite experience, the technical know-how and the financial wherewithal required to successfully execute the terms of this contract and to provide services sought by the High Court of Uttarakhand under this contract.

(b)   That the Bidder is not involved in any major litigation or legal proceedings, pending, existing, and potential or threatened, that may have an impact of affecting or compromising the performance or delivery of Services under this Contract.

(c)   That the Bidder has the professional skills, personnel, infrastructure and resources/authorizations that are necessary for providing all such services as are necessary to fulfill the scope of work stipulated in the Tender and this Contract.

(d)   That the Bidder shall ensure that all assets/ components including but not limited to equipment, software, licenses, processes, documents, etc. installed, developed, procured, deployed and created during the term of this Contract are duly maintained and suitably updated, upgraded, replaced with regard to contemporary requirements.

(e)   That the Bidder shall use such assets of the UJALA as the High Court of Uttarakhand/UJALA may permit for the sole purpose of execution of its obligations under the terms of the Bid, Tender or this Contract. The Bidder shall however, have no claim to any right, title, lien or other interest in any such property, and any possession of property for any duration whatsoever shall not create any right in equity or otherwise, merely by fact of such use or possession during or after the term hereof.

(f)   That there shall not be any privilege, claim or assertion made by a third party with respect to right or interest in, ownership, mortgage or disposal of any asset, property, movable or immovable as mentioned in any Intellectual Property Rights, licenses and permits.

(g)   That the execution of the scope of work and the Services herein is and shall be in accordance and in compliance with all applicable laws.

(h)   That the Bidder certifies that all registrations, recordings, filings and notarizations of the Contract and all payments of any tax or duty, including but not limited to stamp duty, registration charges or similar amounts which are required to be effected or made by the Bidder

which is necessary to ensure the legality, validity, enforceability or admissibility in evidence of the Contract have been made.

(i) That the Bidder shall provide adequate and appropriate support and participation, on a continuing basis, in tuning all supplied Infrastructure to meet the requirements of the applications.

3.3 <u>**Scope of Contract:**</u>

3.3.1 The work under this contract shall include the furnishing of all labor, tools, power supply points and equipment *etc* for performing all work required for the installation, termination, testing Operation, execution and Maintenance of entire A to Z activities in this regard.

3.3.2 If any services, functions or responsibilities not specifically described in this Contract, are an inherent, necessary or customary part of the Services or are required for proper performance or provision of the Services in accordance with this Contract, they shall be deemed to be included within the scope of the work to be delivered for the Charges, as if such services, functions or responsibilities were specifically described in this Contract.

3.3.3 The High Court of Uttarakhand reserves the right to amend any of the terms and conditions with mutual agreement in relation to the Scope of Work and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfillment of the Scope of Work pursuant as mentioned in eTender.

3.4 <u>**Key Performance Measurements:**</u>

3.4.1 Unless specified by the High Court of Uttarakhand to the contrary, the Bidder shall perform the Services and carry out the scope of work in accordance with the terms of this Contract, Scope of Work and the Service Specifications as laid down in this Tender.

3.4.2 The High Court of Uttarakhand reserves the right to amend any of the terms and conditions in relation to the Contract / Service Specifications and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfillment of the scope of work.

3.5 <u>**Commencement and progress:**</u>

3.5.1 The Bidder shall be subject to the fulfillment of the condition's precedent set out as mentioned in eTender, commence the performance of its obligations in a manner as specified in the Scope of Work and Service Specifications.

3.5.2 The Equipment's supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards, such standard shall be the latest issued by the concerned institution.

3.6 <u>**Bidder's Obligations:**</u>

3.6.1 The Bidder's obligations shall include end to end setup creation at UJALA as specified by the High Court of Uttarakhand in the Scope of Work and other sections of the Tender and Contract and changes thereof to enable the High Court of Uttarakhand/UJALA to meet their objectives and operational requirements. It will be the Bidder's responsibility to ensure the proper and successful implementation, performance and continued operation of the proposed solution in accordance with and in strict adherence to the terms of his Bid, the Tender and this Contract.

3.6.2 The Bidder shall ensure that the Bidder's Team is competent, professional and possesses the requisite qualifications and experience appropriate to the task they are required to perform under this Contract.

3.6.3 The Bidder shall be responsible on an ongoing basis for coordination with other vendors and agencies of the UJALA in order to resolve issues and oversee implementation of the same. The Bidder shall also be responsible for resolving conflicts between vendors in case of borderline integration issues.

3.6.4 The Bidder shall employ appropriate advanced technology and engineering practices and safe and effective equipment, machinery, material and methods. The Bidder shall always act, in respect of any matter relating to this Contract, as faithful advisors to the High Court of Uttarakhand/UJALA and shall, at all times, support and safeguard the High Court of Uttarakhand's legitimate interests in any dealings with Third Parties.

3.7 <u>**High Court of Uttarakhand's Obligations:**</u>

3.7.1 The High Court of Uttarakhand's Representative shall interface with the Bidder, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract. High Court of Uttarakhand shall provide adequate cooperation in providing details, assisting with coordinating and obtaining of approvals from various governmental agencies, in cases, where the intervention of the High Court of Uttarakhand is proper and necessary.

3.7.2 High Court of Uttarakhand/UJALA shall ensure that timely approval is provided to the Bidder, where deemed necessary, which should include technical architecture diagrams and all the specifications

along with data sheets related to Installation of Infrastructure/material required to be provided as part of the Scope of Work.

3.7.3 The High Court of Uttarakhand's/UJALA's Representative shall interface with the Bidder, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract.

3.8 **Representative:**

3.8.1 The Bidder's representative shall have all the powers requisite for the performance of services under this contract. The Bidder's Representative shall liaise with the High Court of Uttarakhand's representative for the proper coordination and timely completion of the works and on any other matters pertaining to the works. He will extend full co-operation to High Court of Uttarakhand's representative in the manner required by them for supervision/inspection/observation of the material, procedures, performance, reports and records pertaining to the works.

3.8.2 The High Court of Uttarakhand's representative upon receipt of request from the Bidder intimating commencement of installation at the designated Sites shall give to the Bidder access to as much of the Sites as may be necessary to enable the Bidder to commence and proceed with the installation in accordance with the timeline of work.

3.9 **Adherence to safety procedures, rules regulations and restrictions:**

3.9.1 Bidder shall comply with the provision of all laws including labor laws, rules, regulations and notifications issued there under from time to time. All safety and labor laws enforced by statutory agencies and by High Court of Uttarakhand shall be applicable in the performance of this Contract and Bidder shall abide by these laws.

3.9.2 Bidder shall take all measures necessary to protect the personnel, work and facilities and shall observe all reasonable safety rules and instructions. High Court of Uttarakhand's employee also shall comply with safety procedures/policy.

3.9.3 The Bidder shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.

3.9.4 Bidder shall also adhere to all security requirement/regulations of the High Court of Uttarakhand during the execution of the work.

3.10 **Statutory Requirements:**
During the tenure of this Contract nothing shall be done by the Bidder in contravention of any law, act and/ or rules/regulations, there under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep High Court of Uttarakhand indemnified in this regard.

3.11 **High Court of Uttarakhand's Right of Monitoring, Inspection and Periodic Audit**

3.11.1 The High Court of Uttarakhand/UJALA reserves the right to inspect and monitor/assess the progress/performance/maintenance of the delivered ongoing work at the mentioned sites at any time during the course of the Contract, after providing due notice to the Bidder. The High Court of Uttarakhand may demand and upon such demand being made, the High Court of Uttarakhand shall be provided with any document, data, material or any other information which it may require, to enable it to assess the progress of the project.

3.11.2 The High Court of Uttarakhand/UJALA shall also have the right to conduct, either itself or through another Bidder as it may deem fit, an audit to monitor the performance by the Bidder of its obligations/functions in accordance with the standards committed to or required by the High Court of Uttarakhand and the Bidder undertakes to cooperate with and provide to the High Court of Uttarakhand / any other Bidder appointed by the High Court of Uttarakhand, all documents and other details as may be required by them for this purpose.

3.12 **Intellectual Property Rights:**

High Court of Uttarakhand/UJALA shall own and have a right in perpetuity to use all Intellectual Property Rights which have arisen out of or in connection with the implementation of this Contract, including all processes, products, software, specifications, reports, diagrams and other documents which have been developed by the Bidder during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under this Contract.

3.13 **Information Security:**

3.13.1 The Bidder acknowledges that High Court of Uttarakhand's/UJALA's business data and other proprietary information or materials, whether developed by High Court of Uttarakhand or being used by High Court of Uttarakhand pursuant to a license agreement with a third party (the foregoing collectively referred to herein as "proprietary information") are confidential and proprietary to High Court of Uttarakhand ; and the Bidder along with its team agrees to use reasonable care to safeguard the proprietary information and to prevent the unauthorized use or disclosure thereof, which care shall not be less than that used by the Bidder to protect its own proprietary information. The Bidder may come into possession of such proprietary information, even though the Bidder does not take any direct part in or

furnish the services performed for the creation of said proprietary information and shall limit access thereto to employees with a need to such access to perform the services required by this agreement. The Bidder shall use such information only for the purpose of performing the said services.

3.13.2 The Bidder shall, upon termination of this agreement for any reason, or upon demand by High Court of Uttarakhand, whichever is earliest, return any and all information provided to the Bidder by High Court of Uttarakhand, including any copies or reproductions, both hardcopy and electronic.

3.14   Ownership and Retention of Documents:

3.14.1 The High Court of Uttarakhand/UJALA shall own the Documents, prepared by or for the Bidder arising out of or in connection with this Contract.

3.14.2 Forthwith upon expiry or earlier termination of this Contract and at any other time on demand by the High Court of Uttarakhand, the Bidder shall deliver to the High Court of Uttarakhand all Documents provided by or originating from the High Court of Uttarakhand and all Documents produced by or from or for the Bidder in the course of performing the Services, unless otherwise directed in writing by the High Court of Uttarakhand at no additional cost. The Bidder shall not, without the prior written consent of the High Court of Uttarakhand store, copy, distribute or retain any such Documents.

3.15   Ownership of Equipment/licenses:

3.15.1 The High Court of Uttarakhand/UJALA shall be the owner of the Infrastructure, equipments, design, data etc, supplied by the Bidder arising out of or in connection with this Contract.

3.15.2 All the Licensees should be in the name of High Court of Uttarakhand/UJALA at Nainital.

3.15.3 Licenses should be perpetual in nature with major security and upgrades provided to the Tendering Authority with perpetual rights to use the software during the project period.

3.15.4 All the equipment's (Hardware, Software etc.) should be OEM certified.

3.16   Indemnity:

3.16.1 The Bidder will indemnify the High Court of Uttarakhand from and against all third-party claims of infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied software/ hardware/manpower etc. and related services or any part thereof. High Court of Uttarakhand   /User department stand indemnified from any claims that the hired manpower / Bidder's manpower may opt to have towards the discharge of their duties in the fulfillment of the purchase orders. High Court of Uttarakhand/User department also stand indemnified from any compensation arising out of accidental loss of life or injury sustained by the hired manpower / Bidder's manpower while discharging their duty towards fulfillment of the purchase orders.

3.16.2 The Bidder shall execute and furnish to the High Court of Uttarakhand, a Deed of Indemnity in favor of the High Court of Uttarakhand in a form and manner acceptable to the High Court of Uttarakhand, indemnifying the High Court of Uttarakhand from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind howsoever suffered, arising or incurred inter alia during and after the Contract period out of:

   (a) Any negligence or wrongful act or omission by the Bidder or the Bidder's Team or any third party in connection with or incidental to this Contract; or
   (b) Any breach of any of the terms of the Bidder's Bid as agreed, the Tender and this Contract by the Bidder, the Bidder's Team or any third party.

3.16.3 The indemnity shall be to the extent of 100% in favor of the High Court of Uttarakhand/UJALA and would be in conjunction to as mentioned in e-Tender of this section.

3.17   Confidentiality:

3.17.1 The Bidder shall not use Confidential Information, the name or the logo of the High Court of Uttarakhand except for the purposes of providing the Service as specified under this contract.

3.17.2 The Bidder shall not, either during the term or after expiration of this Contract, disclose any proprietary or confidential information relating to the Services, Contract or the hardware architecture or network architecture, High Court of Uttarakhand's business or operations without the prior written consent of the High Court of Uttarakhand.

3.18   Warranty& Support:

3.18.1 Bidder should provide onsite comprehensive warranty of entire solution deployed for **the period of 5 Years** from the implementation date. The bidder shall also give adequate training to the staff of UJAJA and deploy atleast one technical resident engineer for the same at UJALA for the period of initial 3 months so that the staff of UJALA will also get familiar with entire solution

3.18.2 Warranty and Annual Maintenance support on all goods supplied under this contract shall be provided by the respective Original Equipment Manufacturer (OEM) through Bidder's engineers till the end of the Contract.

3.18.3 Technical Support for software shall be provided by the respective OEM for till the end of the contract period. The Technical Support should include all updates and patches to the respective Software for the above stated period.

3.18.4 The Bidder warrants that the goods supplied under the Contract are new, non-refurbished, unused and recently manufactured; shall not be nearing End of sale / End of support at least for next 5 Years from the date of launch; and shall be supported by the Bidder and respective OEM along with service and spares support to ensure its efficient and effective operation for the entire duration of the contract.

3.18.5 In case of issues with provided equipment's, the Bidder shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without prejudice to any other rights which the High Court of Uttarakhand may have against the Bidder under the Contract.

3.19 Stipulated Time Schedule:
The bidder has to follow the given timelines on award of the contract. The key milestone dates ("Critical dates") and attached penalty clauses are mentioned in the below table (**T= Date of Issuance of Work Order**)-

Delivery and Implementation Timelines		
S.No.	Activity	Timelines for the completion of activity
1	Site survey, Solution Design, Preparation & Acceptance	Max (T + 10 Days)
2	Implementation of Pilot	Max (T + 45 Days)
3	Implementation and Go Live of Complete Setup at UJALA	Max (T + 90 Days)

3.20 Prices:

3.20.1 Price quoted must be firm and shall not be subject to any upward revision on any account whatsoever throughout the period of contract. High Court of Uttarakhand, however reserves the right to review the charges payable for the Maintenance and Management of the Infra structure t the beginning of each year or at any time at the request of High Court of Uttarakhand whichever is earlier to incorporate downward revisions as applicable and necessary.

3.20.2 If at any time during the period of contract, the Bidder offers services similar in nature to any other customer or if the OEM offers the Bidder its products, at prices lower than those chargeable under this contract; he shall notify the same to the High Court of Uttarakhand and extend such reduced prices to the High Court of Uttarakhand with immediate effect.

3.21 Change Orders/Alteration/Variation:

Regarding change order, a Change Management Board comprising of representative from bidder and High Court of Uttarakhand shall be formed and details thereof shall be mutually finalized and will be the part of contract.

3.22 Transit and Store Risks:

Any damage during transit or at the time of storage in the premises of High Court of Uttarakhand due to whatsoever reason, cost shall be borne by the successful bidder.

3.23 Suspension of Work:

The Bidder shall, if ordered in writing by the High Court of Uttarakhand's Representative, temporarily suspend the works or any part thereof for such a period and such a time as ordered. The Bidder shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of the Works as aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of the works as aforesaid shall be granted to the Bidder, if request for same is made and that the suspension was not consequent to any default or failure on the part of the Bidder.

3.24 Completion of Contract:

Unless terminated earlier, the Contract shall terminate on the completion of term as specified in the Contract and only after the obligations mentioned in as mentioned in eTender are fulfilled to the satisfaction of the High Court of Uttarakhand

3.25 Event of Default by the Bidder:

3.25.1 The failure on the part of the Bidder to perform any of its obligations or comply with any of the terms of this Contract shall constitute an Event of Default on the part of the Bidder. The events of default as mentioned above may include inter-alia the following:

(a) The Bidder has failed to perform any instructions or directives issued by the High Court of Uttarakhand which it deems proper and necessary to execute the scope of work under the Contract, or

(b) The Bidder has failed to adhere to any of the key performance indicators as laid down in the Key Performance Measures/ Contract, or if the Bidder has fallen short of matching such standards/targets as the High Court of Uttarakhand may have designated with respect to any task necessary for the execution of the scope of work under this Contract. The above-mentioned failure on the part of the Bidder may be in terms of failure to adhere to timelines, specifications, requirements or any other criteria as defined by the High Court of Uttarakhand; or

(c) The Bidder has failed to remedy a failure to perform its obligations in accordance with the specifications issued by the High Court of Uttarakhand, despite being served with a default notice which laid down the specific deviance on the part of the Bidder to comply with any stipulations or standards as laid down by the High Court of Uttarakhand ; or

(d) The Bidder's Team has failed to conform with any of the Service/ Facility Specifications/standards as set out in the scope of work of this Tender document or has failed to adhere to any amended direction, modification or clarification as issued by the High Court of Uttarakhand during the term of this Contract and which the High Court of Uttarakhand deems proper and necessary for the execution of the scope of work under this Contract.

3.25.2 The Bidder has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Bid, the Tender and this Contract.

3.25.3 There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to the Bidder.

3.25.4 The Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws.

3.25.5 Where there has been an occurrence of such defaults inter alia as stated above, the High Court of Uttarakhand shall issue a notice of default to the Bidder, setting out specific defaults/ deviances/ omissions and providing a notice of 15 days to enable such defaulting party to remedy the default committed.

3.25.6 Where despite the issuance of a default notice to the Bidder by the High Court of Uttarakhand the Bidder fails to remedy the default to the satisfaction of the Bidder, the High Court of Uttarakhand may, where it deems fit, issue to the defaulting party another default notice or proceed to adopt such remedies as may be available to the High Court of Uttarakhand.

3.26 Consequences of Event of Default:

3.26.1 Where an Event of Default subsists or remains uncured the High Court of Uttarakhand may/shall been titled to impose any such obligations and conditions and issue any clarifications as may be necessary to inter alia ensure smooth continuation of Services and the project which the Bidder shall be obliged to comply with which may include re-determination of the consideration payable to the Bidder as agreed mutually by the High Court of Uttarakhand and the Bidder or through a third party acceptable to both the parties. The Bidder shall in addition take all available steps to minimize loss resulting from such event of default.

3.26.2 The High Court of Uttarakhand may, by a written notice of suspension to the Bidder, suspend all payments to the Bidder under the Contract, provided that such notice of suspension:
(a) shall specify the nature of the failure; and
(b) shall request the Bidder to remedy such failure within a specified period from the date of receipt of such notice of suspension by the Bidder.

3.27 Terminate the Contract in Part of Full:

3.27.1 The High Court of Uttarakhand may, in case of default, retain such amounts from the payment due and payable by the High Court of Uttarakhand to the Bidder as may be required to offset any losses caused to the High Court of Uttarakhand as a result of such event of default and the Bidder shall compensate the High Court of Uttarakhandforany such loss, damages or other costs, incurred by the High Court of Uttarakhand in this regard. Nothing herein shall affect the continued obligation of the Bidder and Bidder's Team to perform all their obligations and responsibilities under this Contract in an identical manner as were being performed before the occurrence of the default.

3.27.2 Invoke the Performance Bank Guarantee and other Guarantees furnished hereunder, enforce the Deed of Indemnity, recover such other costs/losses and other amounts from the Bidder as may have resulted from such default and pursue such other rights and/or remedies that may be available to the High Court of Uttarakhand under law.

3.28 Termination:

The High Court of Uttarakhand may, terminate this Contract in whole or in part by giving the Bidder a prior and written notice in 15 days advance indicating its intention to terminate the Contract under the following circumstances:

3.28.1 Where the High Court of Uttarakhand is of the opinion that there has been such Event of Default on the part of the Bidder which would make it proper and necessary to terminate this Contract and may include failure on the part of the Bidder to respect any of its commitments with regard to any part of its obligations under its Bid, the Tender or under this Contract.

3.28.2 Where it comes to the High Court of Uttarakhand's attention that the Bidder (or the Bidder's Team) is in a position of actual conflict of interest with the interests of the High Court of Uttarakhand, in relation to any of terms of the Bidder's Bid, the Tender or this Contract.

3.28.3 Where the Bidder's ability to survive as an independent corporate entity is threatened or is lost owing to any reason whatsoever, including inter-alia the filing of any bankruptcy proceedings against the Bidder, any failure by the Bidder to pay any of its dues to its creditors, the institution of any winding up proceedings against the Bidder or the happening of any such events that are adverse to the commercial viability of the Bidder. In the event of the happening of any events of the above nature, the High Court of Uttarakhand shall reserve the right to take any steps as are necessary, to ensure the effective transition of the project to a successor Bidder/System Integrator, and to ensure business continuity.

3.29   Termination for Insolvency:

The High Court of Uttarakhand may at any time terminate the Contract by giving written notice to the Bidder, without compensation to the Bidder, if the Bidder becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the High Court of Uttarakhand.

3.30   Termination for Convenience:

3.30.1 The High Court of Uttarakhand, may, by prior written notice sent to the Bidder at least 6 months in advance, terminate the Contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the High Court of Uttarakhand's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

3.30.2 The Bidder may, subject to approval by the High Court of Uttarakhand, terminate this Contract before the expiry of the term by giving the High Court of Uttarakhand, a prior and written notice at least 12 months in advance indicating its intention to terminate the Contract.

3.31   Consequences of Termination:

3.31.1 In the event of termination of this contract due to any cause whatsoever, the Bidder shall be blacklisted and the engagement with stand cancelled effective from the date of termination of this contract.

3.31.2 In the event of termination of this Contract due to any cause whatsoever, [whether consequent to the stipulated Term of the Contract or otherwise] the High Court of Uttarakhand shall be titled to impose any such obligations and conditions and issue any clarifications as maybe necessary to ensure an efficient transition and effective business continuity of the project which the Bidder shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow and provide all such assistance to the High Court of Uttarakhand   and/or the successor Bidder/System Integrator, as may be required, to take over the obligations of the erstwhile Bidder in relation to the execution/continued execution of the scope of this Contract.

3.31.3 Where the termination of the Contract is prior to its stipulated term on account of a Default on the part of the Bidder or due to the fact that the survival of the Bidder as an independent corporate entity is threatened/has ceased, or for any other reason, whatsoever, the High Court of Uttarakhand through re-determination of the consideration payable to the Bidder as agreed mutually by the High Court of Uttarakhand   and the Bidder or through a third party acceptable to both theparties may pay the Bidder for that part of the Services which have been authorized by theHigh Court of Uttarakhand   and satisfactorily performed by the Bidder up to the date of termination. Without prejudice any other rights, the High Court of Uttarakhand may retain such amounts from the payment dueand payable by the High Court of Uttarakhand to the Bidder as may be required to offset any losses caused to the High Court of Uttarakhand as a result of any act/omissions of the Bidder. In case of any loss or damage due to default on the part of the Bidder in performing any of its obligations with regard to executing the scope of work under this Contract, the Bidder shall compensate the High Court of Uttarakhand   for any such loss, damages or other costs, incurred by the High Court of Uttarakhand   .Additionally, the subcontractor / other members of its team shall perform all its obligations and responsibilities under this Contract in an identical manner as were being performed before the collapse of the Bidder as described above in order to execute an effective transition and to maintain business continuity. All third parties shall continue to perform all/any functions as stipulated by the High Court of Uttarakhand and as may be proper and necessary to execute the scope of work under the Contract in terms of the Bidder's Bid, the Tender and this Contract.

3.31.4 Nothing herein shall restrict the right of the High Court of Uttarakhand to invoke the Bank Guarantee and other Guarantees furnished hereunder, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to the High Court of Uttarakhand under law.

3.31.5 The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of this Contract that are expressly or by implication intendedto come into or continue in force on or after such termination.

3.32   Penalty:

Ongoing performance and service levels shall be as per parameters stipulated by the High Court of Uttarakhand in this contract, failing which the High Court of Uttarakhand may, at its discretion, impose Penalties on the Bidder as defined in Service Level Agreement of the Tender document.

3.33   Liquidated Damages:

3.33.1 If the Bidder fails to complete the entire work before the scheduled completion date or the extended date or if the Bidder repudiates the Contract before completion of the Work, the High Court of Uttarakhand may without prejudice to any other right or remedy available to the High Court of Uttarakhand as under the Contract.

3.33.2 Terminate the contract or a portion or part of the work thereof. The High Court of Uttarakhand shall give 15 days notice to the Bidder of its intention to terminate the Contractand shall so terminate the Contract unless during the 15 days notice period, the Bidder initiates remedial action acceptable to the High Court of Uttarakhand.

3.33.3 The High Court of Uttarakhand may without prejudice to its right to effect recovery by any other method, deduct the amount of liquidated damages from any money belonging to the Bidder in its hands (which includes the High Court of Uttarakhand   's right to claim such amount against Bidder's Bank Guarantee) or which may become due to the Bidder. Any such recovery or liquidated damages shall not in any way relieve the Bidder from any of its obligations to complete the Works or from any other obligations and liabilities under the Contract.

3.33.4 Delay not attributable to the Bidder will be considered for exclusion for the purpose of computing liquidated damages.

3.34   Dispute Resolution:

3.34.1 The High Court of Uttarakhand and the Bidder shall make every effort to resolve amicably by direct informal negotiations, any disagreement or disputes, arising between them under or in connection with the Contract.

3.34.2 If, after 15 days from the commencement of such direct informal negotiations, the High Court of Uttarakhand and the Bidder have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for Arbitration.

3.34.3 That in case of any dispute arising between the parties with reference to the contract, interpretation of the terms or any claim whatsoever, any person appointed on mutual consent shall be the sole Arbitrator to decide the matter and the provisions of Arbitration and Conciliation Act 1996 shall be applicable. The firm shall have no objection to the Designated Arbitrator or other appointed person as Arbitrator by him. The place of Arbitration proceedings shall be at Nainital.

3.34.4 The Arbitration and Conciliation Act 1996, the rules hereunder and any statutory modification or re-enactments thereof, shall apply to the arbitration proceedings.

3.34.5 The Arbitration proceedings shall be held in Nainital, India.

3.34.6 The Arbitration proceeding shall be governed by the substantive laws of India.

3.34.7 The proceedings of Arbitration shall be in English language.

3.34.8 If any of the Arbitrators so appointed dies, resigns, incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/ arbitrator to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.

3.34.9 The Arbitral Tribunal shall give reasonable award and the same shall be final, conclusive and binding on the parties.

3.34.10   The fees of the arbitrator shall be borne by the parties nominating them and the fee of the Presiding Arbitrator, costs and other expenses incidental to the arbitration proceedings shall be borne equally by the parties.

3.35   Severance:

In the event any provision of this Contract is held to be invalid or unenforceable under the applicable law, the remaining provisions of this Contract shall remain in full force and effect.

3.36   Governing Language:

The Agreement shall be written in English language. Such language versions of the Agreement shall govern its interpretation. All correspondence and other documents pertaining to the Contract that are exchanged by parties shall be written in English/Hindi language only.

3.37   Publicity:

The Bidder shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the High Court of Uttarakhand first gives the Bidder its written consent.

3.38   ForceMajeure:

3.38.1 *Force Majeure* shall not include any events caused due to acts/omissions of such Party or result from a breach/contravention of any of the terms of the Contract, Bid and/or the Tender. It shall also not include any default on the part of a Party due to its negligence or failure to implement the stipulated/proposed precautions, as were required to be taken under the Contract.

3.38.2 The failure or occurrence of a delay in performance of any of the obligations of either party shall constitute a Force Majeure event only where such failure or delay could not have reasonably been foreseen, or where despite the presence of adequate and stipulated safeguards the failure to perform obligations has occurred. In such an event, the affected party shall inform the other party in writing within five days of the occurrence of such event. The High Court of Uttarakhand will make the payments due for Services rendered till the occurrence of *Force Majeure*. However, any failure or lapse on the part of the Bidder in performing any obligation as is necessary and proper, to negate the damage due to projected force majeure events or to mitigate the damage that may be caused due to the above mentioned events or the failure to provide adequate disaster management/recovery or any failure in setting up a contingency mechanism would not constitute force majeure, as set out above.

3.38.3 In case of a *Force Majeure*, all Parties will endeavor to agree on an alternate mode of performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of *Force Majeure*.

3.39   General:

3.39.1 No Assignment: The Bidder shall not transfer any interest, right, benefit or obligation, under this Contract without the prior written consent of the High Court of Uttarakhand.

3.39.2 Entire Contract: The terms and conditions laid down in the Tender and all annexure thereto as also the Bid and any attachments/annexes thereto shall be read in consonance with and form an integral part of this Contract. This Contract supersedes any prior Contract, understanding or representation of the Parties on the subject matter.

3.40   Governing Law:

This Contract shall be governed in accordance with the laws that are enforced in India.

3.41   Jurisdiction of Courts:

The Court situated in Nainital Shall have exclusive jurisdiction to determine any proceeding in relation to this Contract.

3.42   Compliance with Laws:

The Bidder shall comply with the laws in force in India in the course of performing this Contract.

3.43   Waiver:

3.43.1 Any waiver of any provision of this Contract is ineffective unless it is in writing and signed by the Party waiving its rights.

3.43.2 A waiver by either Party in respect of a breach of a provision of this Contract by the other Party is not a waiver in respect of any other breach of that or any other provision.

3.43.3 The failure of either Party to enforce at any time any of the provisions of this Contract shall not be interpreted as a waiver of such provision.

3.44   Modification:

Any modification of this Contract shall be after mutual agreement in writing and signed by authorized representatives of each Party.

3.45   Application:

These General Conditions shall apply to the extent that provisions in other parts of the Contract do not supersede them.

3.46   Procurement Rules and IT Act 2000 (As amended):
Besides the terms and conditions stated in this document, the contract shall also be governed by the overall acts and guidelines as mentioned in Uttarakhand Procurement Rules and IT Act 2000 and Amendment Act 2008 herein after referred to as ITAA 2008.

3.47   Responsibility of the Successful Bidder:
   a) Successful Bidder must execute the agreement within 15 days from the date of issuance of purchase order on behalf in the form approved by the High Court of Uttarakhand.
   b) The successful bidder shall supply solution and services as per functional and technical specifications provided in this RFP.

3.48   Termination of contract: High Court of Uttarakhand reserves the right to cancel the contract placed on the bidder if:
   a) The bidder commits a breach of any of the terms and conditions.
   b) The bidder goes into liquidation voluntarily or otherwise.
   c) The service is found unsatisfactory during the warranty period.
   d) If the bidder fails to attend the warranty calls in time as contemplated in SLA.
   e) The bidder fails to supply as per stipulated time period from the date of issuance of PO.

3.49   Variation in Quantity:

The quantity of items to be procured is indicative. If an additional requirement arises, the bidder isrequired to supply the same at the agreed/quoted rates during the period of one year from the date of agreement for the implementation of the future requirements in the Project. High Court also reserves the right of Price Variation, Scope Variation and Quantity Variation. The decision of High Court in this regard shall be final and binding.

3.50   PAYMENT AND TAX LIABILITY:

(a)   Payment: The payment terms shall be as follows:
   i. Payment shall be processed in full on receipt of the Supply, installation, and working satisfactory reports to be provided by competent authority. However, advance payment can also be made as per terms and conditions mentioned in the Relevant Procurement Rules and approval of competent authority.
   ii. High Court of Uttarakhand is entitled to make recoveries of GST, TDS, and penalties as per clause, excess payment, and applicable taxes from bidder's invoice, if lawfully needed.
   iii. High Court of Uttarakhand is not liable to pay additional Taxes in the event of a change in the Tax structure. In the event of raise in Tax structure, the bidder shall absolve all the applicable taxes.
   iv. The bidder shall submit the project completion certificate in the proper manner required by this office. Incomplete submission of the completion certificate will delay the payment.
   v. The bidder may be asked to submit separate or consolidated invoices/bills of different components/activities.
   vi. The payment can also be released in advance (subject to approval of Competent Authority) in case of year end exigency/financial year end/any unavoidable circumstances etc. In such cases the successful bidder has to submit unconditional Bank Guarantee of equal amount in this Hon'ble Court in favor of Competent Authority valid up to the contract period.
(b)   Taxes
   a. Income tax/GST/TDS as the case may be, shall be deducted at source by High Court of Uttarakhand from all the payments made to Bidder according to the Income Tax Act, unless valid and complete documents for IT exemption are submitted by the Bidder prior to release of payment. A certificate shall be provided by High Court of Uttarakhand to the Bidder for any tax deducted at source.
   b. The Bidder shall bear all taxes and duties etc. levied or imposed on the Bidder under the Contract including but not limited to GST and all Income Tax levied under Indian Income Tax Act –1961 or any amendment thereof during the entire contract period, i.e., on account of material supplied and services rendered and payments received by him from the High Court of Uttarakhand under the Contract. The amount of tax withheld by the High Court of Uttarakhand shall at all times be in accordance with Indian Tax Law and the High Court of Uttarakhand shall promptly furnish to the Bidder original certificates for tax deduction at source and paid to the Tax Authorities.
   c. If there is any reduction in taxes / duties/levies due to any reason whatsoever, after Notification of Award, the difference shall be passed on to the High Court of Uttarakhand. In case of increase in taxation, High Court of Uttarakhand shall pay the tax as applicable.
   d. The Bidder agrees that he and his Team shall comply with the Indian Income Tax act in force from time to time and pay Indian Income Tax, as may be imposed / levied on them by the Indian Income Tax Authorities, for the payments received by them for the works under the Contract.
   e. The High Court of Uttarakhand shall if so required by applicable laws in force, at the time of payment, deduct income tax payable by the Bidder at the rates in force, from the amount due to the Bidder and pay to the concerned tax authority directly.

3.51   Privacy & Confidentiality, Integrity Pact:

Bidder shall have to sign the Integrity Pact with the High Court of Uttarakhand.

3.52   Purchase Preference Policies of the Government:

As detailed in the Tender Document, the High Court of Uttarakhand reserves its right to grant preferences/concession/exemption to eligible Bidders under various Government Policies/ directives issued from time to time. However, bidder must submit **Valid Certificate** issued from **Competent Authority** in this regard.

3.53 Training and Capacity Building:

The training should be provided to officials at all levels of hierarchy, i.e. one person from each hierarchy and maximum number of persons may be capped at 20. The adoption of technology should be such that it requires the least training and IT support. Any technology adoption that creates a dependency on a skilled IT department will not be considered for this purpose.

SECTION-IV

SCOPE OF WORK AND SERVICE LEVEL AGREEMENT

4.1 SCOPE OF WORK:

This project is aimed at providing a solution for –

4.1.1 One Modern Classroom with Live Streaming Facilities- Classroom technologies have evolved significantly in the last several years, and it is easy to get misled by the glamour of technology. The adoption of technology should be such that it requires the least training and IT support. Any technology adoption that creates a dependency on a skilled IT department will fail in the long term. Instructor-led classrooms can be of all sizes based on the requirements. Labs are more expensive to set up and manage. Given the need for intense interactivity, the labs should ideally be sized for more than 30 students. Labs are fungible and can be used as classrooms. Modern classrooms should have digital audio systems, as analogue systems will cause significant interference in classrooms. A projection system can be a projector, screen, or TV, most offering wireless connectivity, allowing even the students to project from their devices if there is a good internet. A good smart board with low latency and no specific stylus requirement will work for smaller/medium rooms. Setting up a hybrid classroom will require a stable and high-quality internet. The hybrid classroom should have a single view as well as dual view High Definition camera. An integrated digital podium provides all ports in one place for the instructor to connect his own device (any device, any port). It elegantly allows an interface for users to access the classroom tech. AI powered digital classroom devices may be used as an alternative to the smart board and VC set-up. It is a wall-top computer with in-built projector, audio and video components. A few aspects of the ECT training, such as CIS, Layers etc. require intranet connectivity, and the same cannot be accessed through the regular wi-fi connection. In this scenario, E-Classrooms may be useful. The following components are required to maintain an E-classroom,

(a) Digital Podium for the Resource Person/Instructor, Computer Systems/Work-station for the participants,
(b) Projection System along with Wireless presenter/pointer, Audio System, Learning Software Integration
(c) The e-classroom can also be used for imparting hands-on training for other concepts, such as order writing workshops or for conducting live assessments.
(d) There is a need for upgradation of existing computer systems in the computer labs. This would also enable the labs to double up as e-classrooms.
(e) The computer systems would also have to be equipped with different software such as Speech Recognition Software; Virtual Interpreter; NVDA 1.0 and Braille Translator for effective training.
(f) The bidder has to create a dynamic, interconnected hub, prioritizing clear audio communication and easy content sharing between in-person and remote participants. This intuitively designed learning environment, utilizing the classroom AV solutions for learning spaces, facilitates smooth, inclusive collaborations and can be seamlessly navigated without requiring extensive tech knowledge in classroom audio visual equipment.
(g) The bidder has to create entire end to end setup to live stream the said classroom using streaming server (without using youtube/third party video sharing sites) which can be accessed though a portal/website or may be integrated in the exiting live streaming portal of Hon'ble High Court of Uttarakhand.

4.1.2 Cyber Forensic Laboratory/Specialized Centre: For setting up of a Cyber Forensic Laboratory in the State Judicial Academy the following digital components would be required: A cyber-workstation, along with different software. Apart from the ICT components set out above which are required for the purpose of conducting training programmes, other basic ICT infrastructure is also required at the back-end for actualization of the training programmes and also for undertaking day to day functioning of the Academy. The following components are recommended: Printer and Scanner, UPS, LAN/ Internet, Digital/Document Visualizer, Video Recorder, Storage Device, Licensed Software and Server.

4.1.3 Collaboration across Academies and District Court Dehradun: It include simultaneous sessions across more than one academy by a shared Expert Faculty or Conducting Joint exercises and projects across locations to enable cross fertilization of ideas across academies. Collaboration can be effectively enabled by a suitable collaboration suite which provides space, email id and a host of applications.

4.1.4 Immersive Experiences and Gamification: Across industry segments today there are several use cases where Augmented Reality (AR)/Virtual Reality (VR) are being used for creating immersive Training Content. The ability to simulate a court scenario (Moot Court) and record this and replay it to reinforcement learning AR/VR could be a good solution. The bidder has to create a virtual environment of Court for training purpose for the participants. The bidder has to create a 3D Virtual Court with avatars of all stakeholders i.e. Judge, Advocates, Accused, Bench Secretary etc. The bidder has to create such environment in which the participant can enter and join the predefined court hearing process. It will be responsibility of bidder to quote the price of VR headset inclusive of entire end-to-end solution.

4.1.5 Application of Emerging Technologies for Academic Administration: Low Code/No-Code development tools and robotic process automation tools (RPA) would enable the Academic Administration staff to build quick Web apps or mobile apps for situational requirements and automate several processes involved in managing the academy. The bidder has to provide tools for Low Code/No-Code development tools and robotic process automation tools (RPA) having features i.e. Simple and intuitive API, Low/No code platform, Custom Code Integration, Ease of Integration, Advanced user interface, Large community and support etc.

4.1.6 Displaying signage and important notifications: In reception areas, lobbies, waiting areas, and entrance areas. Furniture up-gradation and Interactive display solutions in the following areas in UJALA
1.   Training hall
2.   Reception area
3.   Lobby Area
4.   Classroom 1 (capacity 50 Persons)

4.1.7 Providing of Digital video display system and up gradation of Auditorium: Digital Video Display and Audio equipment system in the auditorium hall of UJALA. This includes Live streaming, bidirectional Video Conferencing facilities, simultaneous sessions across more than one destination by a shared Expert Faculty or Conducting Joint exercises and projects across locations to enable cross fertilization of ideas across academies. The bidder has to create a dynamic, interconnected hub, prioritizing clear audio communication and easy content sharing between in-person and remote participants. This intuitively designed learning environment, utilizing the classroom AV solutions for learning spaces, facilitates smooth, inclusive collaborations and can be seamlessly navigated without requiring extensive tech knowledge in classroom audio visual equipment. The bidder has to create entire end to end setup to live stream the said classroom using streaming server (without using youtube/third party video sharing sites) which can be accessed though a portal/website or may be integrated in the exiting live streaming portal of Hon'ble High Court of Uttarakhand.

4.1.8 Proving of LAN/WIFI: The Bidder is required to execute a LAN/Wi-Fi system in the following Premises of UJALA-
1.   Admin Building
2.   Hostels
3.   Auditoriums
4.   Classrooms
5.   Conference rooms

The Wi-Fi internet facility (secured role based) must be established in such a way that there should not be any black zone in the entire premises of UJALA (except staff residential quarters). Approx coverage area will be 30,000 sqm and perimeter will be 700 meter. The bidder has to propose access points and methodology accordingly. The count of Wi-Fi/Networking equipments mentioned in the BOQ is only indicative, which may be increased or decreased as per actual requirement.

4.1.9 Scope of Work will include but not limited to-
(a)   Displaying signage and important notifications

Sr.	Campus Area	Requirement	Use Case	Solution/Product
1	Reception Area	Interactive Screen for Guests	Display the following. 1. About Us 2. History of the Campus 3. Interactive Building Map 4. UJALA Website	Interactive Display Solution 75" inclined in 30 degrees on the table
2	Reception Area	Non-Interactive Display Signage	Display the following. 1. Information Display Regarding Training 2. Timetable 3. Schedule 4. List of Alumni/Directors with Logo	Non-Interactive Display Solution 75" wall-mounted
3	Lift Area	Showcase Photo Gallery	Display the following. 1. Photos of Directors/Alumni/Chief Guest 2. Information Display Regarding Training	Non-Interactive Display Solution 75" wall-mounted
4	LOOBY	Interactive News Paper Desk Display Signage	Reading News Information Display Regarding Training	1. 2 Nos of 43 inches interactive screen 2. 75" Non Interactive

		on the Trolley	Entertainment	display on Floor Mount (Safety)
5	Conference Room	Digital Kiosk - Floor Mount Outside Conference Room	Conference Session, & Timings General information Display Conference Details	43" inch Vertical
6	Director Room	Video Conferencing	For Video Conferencing	Display 65" with VC
7	Digital Kiosk - Floor	Mount Outside Classroom 2	Conference Session, & Timings General information Display Conference Details	43" inch Vertical

(b) **Providing of Digital video display system and upgradation of Audio equipment system in the auditorium hall**

Area	Major Product Components
Auditorium	1. Video Wall 2. Digital podium 3. Wireless presenter 4. 32-Channel Digital Mixer 5. Wireless microphone DSP 6. Live Streaming Setup 7. VC Setup with Displays at relevant Locations

(c) **Proving of role based secure LAN/WIFI system in the following Premises**

Area	Device	Qty
Ground Floor	Access point Indoor	6
First Floor	Access point Indoor	4
Basement	Access point Indoor	2
Auditorium	Access point Indoor	2
Auditorium	Access point Outdoor	2
Hostel SARYU	Access point Indoor	6
Mess Building	Access point Indoor	1
Kossi Old Hostel	Access point Indoor	3
New Hostel	Access point Indoor	3
VIP	Access point Indoor	5
TONS	Access point Indoor	3

(d) **E- Class Rooms:** Conduct training in a 50-seater (1 No.) training Hall on interactive display

Area	Major Product Components
Conduct training in a 50-seater training Hall on interactive display 1. Training Equipment for Trainer in Digital 2. Trainer 2 (Table with Chair) 3. Speakers 4. Digital Podium with LOGO in Front (Ujala) 5. Audience Microphones wireless Tabletop 6. Power Points in the Table for Laptop & Mobile phone Charging 7. Live Streaming Setup	1. 86"Interactive Screen 2. 70" Adjustable 3. Mounting -Normal Screens on (Left & Right of the center of Hall) 4. Microphones Tabletop - 2 Nos for Trainer 5. Laptop / Mobile /USB port for Charging flushed in the table. 6. Touchscreen with Windows /Apple connectivity with Microphone-2 7. Speakers 6 Nos (Left 3 Nos and Right 3 Nos in the Hall) 8. Speakers 2 Nos FOH (Left and right of interactive Screen) 9. 8 nos of Microphones 10. 12 Tables with 48 no's Occupancy 11. 48 Nos (1 USB & 1 Power 5pin) 12. 1 Nos (43" Display) 13. 2 nos in each classroom with Codec and Soft VC Compatibility 14. Necessary setup for bidirectional Broadcasting/Live Streaming including Cameras, Mike etc.

Note: Items mentioned in Scope of Work are only Major items. All accessories and items are required for end to end solutions as per scope of work.

4.2   SERVICE LEVEL AGREEMENT:

4.2.1   Delivery and Implementation SLA

ACTIVITY	TIMELINES FOR THE COMPLETION OF ACTIVITY	PENALTY FOR DELAY *
Delivery and Implementation as per Scope of work	90 days from the date of issue of work order	5% of the Bid Value cost and additional 2% later on for each week of delay subjecting to maximum 10% of penalty followed by forfeit of BG.

4.2.2 Service Hours and Preventive Maintenance: The Service window for the Live Streaming and ARV/VR Video Conferencing system would be 24x7x365.

4.2.3 Resident Engineer: The bidder shall depute one resident engineer exclusively for UJALA to look after the entire setup. The tenure of said manpower shall be initially for one year, which may be extended by UJALA as per mutual agreed terms between bidder and UJALA. For initial one year, there shall not be any amount paid by UJLA for said resident engineer separately.The bidder has to quote rates of setup inclusive of cost of said engineer. The engineer shall be responsible for the daily maintenance of the system. Any replacement (including packing, shipping, any required payments, etc.) shall be the bidder's responsibility without any financial commitments from High Court/UJALA. Confidentiality of the network, configurations, systems, administrative/other passwords, and other sensitive documents/drawings/layouts/reports shall be maintained.

4.2.4 Scheduled Downtime: Scheduled downtime is defined as the period of time when the Live Class in not functioning on account of Holidays. It will be expressed in Hours. The maximum scheduled downtime for any audio video unit would be 4 days every calendar month. The preventive maintenance would be carried out with a minimum advance notice of 24 hours in writing and subsequent acceptance of the same by Director UJALA/Registrar General, High Court of Uttarakhand.

4.2.5 Mean Time To Resolve (MTTR): MTTR is defined as the arithmetic average of the time taken to attend to resolve the issues logged over a defined period of time. The Severity Levels for measuring MTTR is-
a) Recording, transmitting and retrieval/downloading of data for all the system-High Severity
b) Other faults-Medium Severity
c) The various Service Level Requirements and related penalties for default are given below:
    (i) The Successful Bidder needs to maintain the Service Levels as follows:
    (ii) 99% of the times for the MTTR of High Severity Events
    (iii) 95% of the times for the MTTR of Medium Severity Events

4.2.6 The penalty will be applicable on per fault basis even if there is a commonality of fault at any point causing full or part failure of services. Penalty will be deducted from the performance guarantee submitted against due execution of the Contract or from the bill amount that is due for payment to the contractor.

4.2.7 After the expiry of Warranty, it shall be optional for Registrar General, High Court of Uttarakhand not to enter the contract further with the contractor. If Registrar General, High Court of Uttarakhand is not satisfied with the performance of the Contractor during Warranty it reserves the right to terminate the same during its currency, after giving notice to the Contractor.

4.2.8 The Contractor has to maintain adequate spares for maintaining the SLA (Service Level Agreement) parameters as mentioned below. Any cost involved to meet the service level requirements specified above is to be borne by the Bidder.

4.2.9 In case the Service Level Requirements are violated continuously for a period of one month, the Purchaser reserves the right to terminate the Contract by giving a written notice to the Successful Bidder.

PARAMETER	DETAILS	MEASUREMENT CRITERIA	PENALTIES PER DAY OF DELAY / PER FAULT / PER OCCASION
Mean time to resolve (MTTR)	Within 24 Hours from the call logging time – for all High Severity events Within 48 hours from the time of attending the problem for all Low severity events	Calculation of fault duration per instance based on complaint reported /logged	(i) For High Severity events, Rs. 10,000/-. (ii) For Medium Severity events, Rs. 1,000/-.

4.2.10 Issue Management Procedures:

Issue Management process provides for an appropriate management structure towards orderly consideration and resolution of business and operational issues in the event of a quick consensus not reached between High Court of Uttarakhand and Bidder. Implementing such a process at the commencement of services shall significantly improve the probability of successful issue resolution. It is expected that this pre-defined process will only be used on an exception basis if issues are not resolved at operational levels.

4.2.11 Either High Court of Uttarakhand or Bidder may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of view and identifies specific points of disagreement with possible solutions.

4.2.12 The High Court of Uttarakhand and the Bidder will determine which committee or executive level should logically be involved in resolution. A chain of management escalation is defined in the document.

4.2.13 A meeting or conference call will be conducted to resolve the issue in a timely manner. The documented issues will be distributed to the participants at least 24 hours prior to the discussion if the issue is not an emergency requiring immediate attention.

4.2.14 The High Court of Uttarakhand and the Bidder shall develop an interim solution, if required, and subsequently the permanent solution for the problem at hand. The Bidder will then communicate the resolution to all interested parties.

4.2.15 In case the issue is still unresolved, the arbitration procedures described in the Contract will be applicable.

4.3   Responsibilities of the Parties:
BIDDER Successful Bidder is responsible for executing this contract and delivering the services, while maintaining the specified performance targets.Additionally, the Bidder is responsible for:

- Reporting problems to High Court of Uttarakhand as soon as possible
- Assisting High Court of Uttarakhand
- Providing early warning of any organizational, functional or technical changes that might affect Bidder's ability to deliver the services.
- Assisting High Court of Uttarakhand to address and resolve issues from time to time.
- Bidder shall take immediate action to identify problems and follow up with appropriate action to fix them asquickly as possible

UJALA/HIGH COURT is responsible for:

- Reporting defects and problems to the Bidder as soon as possible
- Assisting Bidder for site clearance
- Providing early warning of any organizational, functional or technical changes that might affect Bidder's ability to deliver the services
- Assisting Bidder to address and resolve issues from time to time

4.4   Penalties
The total deduction should not exceed 10 % of the total contract value. Two consecutive deductions of more than 4% of the total contract value on account of any reasons, will be deemed to be an event of default and termination General Conditions of the Contract and the consequences shall follow.

4.4.1   Recovery mode of Penalties from the bidder: The penalties during the execution of the project shall be deducted from the payments to be released to the bidder and Performance Security.

4.5   Priority: Comprehensive maintenance contract of all the equipment commissioned would be awarded for five years. The importance and severity of ICT deployment is provided hereunder-

Feature	Priority
Live Streaming of Class-room and Auditorium/AR-VR Technology	High
Proceedings of the virtual Classroom system	High
Logging into the virtual Classroom system - joining the video conference and audio- video check	High
Screens visible to participants	Medium
Speaking during the hearings	High
Sharing documents and videos	High
Signage and Notifications	Medium
Transcript and recording of hearings	Medium
Wi-fi System	Medium

COMMERCIAL BID FORMAT

NAME OF THE BIDDER:_____

SN	ITEM	TOTAL QTY	UNIT RATE IN FIGURES INCLUSIVE OF ALL TAXES RS. P	TOTAL AMOUNT WITH TAXES IN RS. P
1	**RECEPTION AREA**			
	SITC OF INTERACTIVE DISPLAY			
1.01	75" Multi touch Interactive display with built in SOC with 1.9 Ghz Quad core processor, Android 13.0, 4 GB RAM,32GB Memory, 450 Cd/m2, 4 mm 7 MOHS tempered glass,5 GHz Wifi built in, 3 X HDMI Input, 1 X HDMI Out, 4 X USB A 3.0, 2 X USB 2.0, 1 X USB Type C 3.0, RJ45 X 1, RS232 X 1, Audio Out x 1, RJ12 X 1, 2 x 20W front facing speakers, 40 point touch for Windows, 10 point touch for Android, OPS Slot, Built- in white board, Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar. Supports 3rd party applications, recording feature, USB WEB Cam Compatible, Support PPT, Word, PDF, Image, Video Play 2 x touch pen, Compatible with Device Management Software, Third Party OPS with i5 10th Gen or more 8GB RAM/128Gb ROM/Window 10 pro	1		
1.02	Digital Signage Software 3 Year Cloud subscription to run images, text, video, PDF from one central location, divide screen into multiple areas, get multiple reports from single dashboard, manage screens as per 27ustomized regional geography.	1		
1.03	Customized Slanted Table to mount 75" Display made up of Sturdy Wooden Material with Laminate Finish and Display to be mounted at appox 30 Degrees to provide ease of use for user	1		
2	**SITC OF NON INTERACTIVE DISPLAY**			
2.01	75" 4K UHD(3840 X 2160) LED display, 500 Cd/m2, Android 11.0 based SOC with Quad Core Processor, ARM Mali G51 GUP, 4GB RAM, 32GB Memory, HDMI 2.0 X 2, DP1.2 IN(Shared with USB Type C) X 1, USB 3.0 X 1, USB 2.0 X 1, RJ45 X 1, RS232 X 1, Audio Out x 1, Digital Audio Out x 1, HDMI 2.0 Out x 1, 24W in built speaker, 24/7 operation, Wifi (Optional dongle), Bluetooth, No signal Power Off, RS232 and LAN Control, OSD and UI rotation, USB Auto play function, Multi screen support upto 3 x 3, Multi functional USB Type C(for Audio, Video, Network, Microphone, 65W charging, Camera connectivity), Wireless Screen sharing with Airplay, Miracast and Mirroring, PIP/PBP support, Landscape and Portrait mode, Instand mobile content ransfer, Multi mode play, Content scheduling and signage software. Device management system compatible, OPS Slot available Wall Mounted	1		
2.02	Digital Signage Software 3 Year Cloud subscription to run images, text, video, PDF from one central location, divide screen into multiple areas, get multiple reports from single dashboard, manage screens as per 27ustomized regional geography.	1		
3	**LIFT AREA**			
	SITC OF NON INTERACTIVE DISPLAY			
3.0	75" 4K UHD(3840 X 2160) LED display, 500 Cd/m2, Android 11.0 based SOC with Quad Core Processor, ARM Mali G51 GUP, 4GB RAM, 32GB Memory, HDMI 2.0 X 2, DP1.2 IN(Shared with USB Type C) X 1, USB 3.0 X 1, USB 2.0 X 1, RJ45 X 1, RS232 X 1, Audio Out x 1, Digital Audio Out x 1, HDMI 2.0 Out x 1, 24W in built speaker, 24/7 operation, Wifi(Optional dongle), Bluetooth, No signal Power Off, RS232 and LAN Control, OSD and UI rotation, USB Auto play function, Multi screen support upto 3 x 3, Multi functional USB Type C(for Audio, Video, Network, Microphone, 65W charging, Camera connectivity), Wireless Screen sharing with Airplay, Miracast and Mirroring, PIP/PBP support, Landscape and Portrait mode, Instand mobile content ransfer, Multi mode play, Content scheduling and signage software.Device management system compatible, OPS Slot available Wall Mounted	1		
3.1	Digital Signage Software 3 Year Cloud subscription to run images, text, video, PDF from one central location, divide screen into multiple areas, get multiple reports from single dashboard, manage screens	1		

	as per 28ustomized regional geography.			
4	**CLASSROOM -1 TRAINING ROOM**			
	SITC OF DISPLAY			
4.1	86" Multi touch Interactive display with built in SOC with 1.9 Ghz Quad core processor, Android 11.0, 8 GB RAM,128 GB Memory, 450 Cd/m2, 4 mm 7 MOHS tempered glass, 5 GHz Wifi built in, 3 X HDMI Input, 1 X HDMI Out, 4 X USB A 3.0, 2 X USB 2.0, 1 X USB Type C 3.0, RJ45 X 1, RS232 X 1, Audio Out x 1, RJ12 X 1, 2 x 20W front facing speakers, 40 point touch for Windows, 10 point touch for Android, OPS Slot, Built- in white board, Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar. Supports 3rd party applications, recording feature, USB WEB Cam Compatible, Support PPT, Word, PDF, Image, Video Play 2 x touch pen, Compatible with Device Management Software, Inbuilt Camera and MIC.Third Party OPS with i5 10th Gen or more 8GB RAM/128Gb ROM/Window 10 pro Wall Mounted	1		
4.2	65" Display 65" 4K UHD(3840 X 2160) resolution 500 Cd/m2, 28% Haze Level, Android 9 OS based LED display with built in 5 Ghz/ 2.4 GhzWifi, Built in Quad core processor, 2 GB RAM, 8 GB Memory, Built in Wifi and mirroring with support for Windows/Android/Ios/Mac OS, Landscape/Portrait installation, File manager built in, Auto wakeup on HDMI, Auto switching and Auto standby, Bootlogo setting, Boot video setting, PIN based authentication, Built-in Bluetooth 5.0, 20W built in speakers, HDMI 2.0 X 3, RS232 X 1, USB 2.0 X 2, RJ45 X 1 Line Audio Out x 1, Support BLE and Beacon, HDMI Input Lock, Menu lock, App lock, remote lock, Wireless lock	2		
4.3	TV Wall Mount Bracket for 55 to 85 Inch LED/HD/Smart TV's, 180 Degrees Swivel Full Motion TV Mount Universal Heavy Duty TV Wall Mount Stand with Tilt Adjustment	2		
4.4	43" Display 4K UHD(3840 X 2160) resolution 500 Cd/m2, 28% Haze Level, Android 9 OS based LED display with built in 5 Ghz/ 2.4 GhzWifi, Built in Quad core processor, 2 GB RAM, 8 GB Memory, Built in Wifi and mirroring with support for Windows/Android/Ios/Mac OS, Landscape/Portrait installation, File manager built in, Auto wakeup on HDMI, Auto switching and Auto standby, Bootlogo setting, Boot video setting, PIN based authentication, Built-in Bluetooth 5.0, 20W built in speakers, HDMI 2.0 X 3, RS232 X 1, USB 2.0 X 2, RJ45 X 1 Line Audio Out x 1, Support BLE and Beacon, HDMI Input Lock, Menu lock, App lock, remote lock, Wireless lock	1		
4.5	Slanted Floor Mount for Display 40" 55" Low Height Director Trolly Monitor Cart with Wheels for 32-65 inch Flat Curved Screen TV, LED LCD, Height Adjustable, 90°Adjustable Viewing Angle	1		
5	**SITC OF AUDIO- MICS, DSP, AMP, SPEAKERS**			
5.1	Boundary layer table Microphone, it should be pre-polarised condenser microphone having Cardioid or better polar pattern, shall have frequency response of 42Hz to 20kHz, Should have Max SPL Level of 135dB or more, it should support phantom power from 12v to 48v, Should have sensitivity of 10mV/PA or better and dynamic range of 111db(A), Should come with mute/unmute button, Should be RF interference free from other wireless devices, should have muted/28ustomi status LED Indication and Logic output for third party integration for control camera etc complete required as per the specifications.	12		
5.2	Digital Wireless Headworn microphone with 28ustomize or better polarity pattern, Frequency range: 471 – 797 MHz or better, THD total harmonic distortion ≤ -60 db for 1kHz @ -3 dBfs input level or better ; Switching bandwidth up to 56 MHz or better; up to 2240 selectable Frequencies for allow fine tuning, equidistant tuning grid of 600kHz to enable up to 90 simultaneous channels . Sensitivity in free field 1.6 mV/Pa or better, Sound pressure level 145 dB SPL or more. RF output 10mW or more, up to 8 hours of operating time or better, Audio Frequency Response of 20Hz 20kHz (-3db) @ 3dbfs, Frequency Response: 50-18000Hz, Bluetooth connectivity with mobile devices for basic setup and control of the receiver complete with standard accessories	2		
5.3	Motorized directional Ceiling Speaker Two-way full range passive loudspeaker, One powerful 5.5" LF driver with 1" HF. It is a high-performance, Frequency Response 65 Hz – 19 kHz, Program Power 60W, Peak Power 120W, Sensitivity 1W/1m) 88 dB, Max SPL (Continuous/1m) 109 dB, Max SPL (Peak) 112 dB, Nominal Impedance 8 Ohms, Crossover Mode Passive, Dispersion 115° (H) x 90° (V),	6		

5.4	Full range column speaker, eight full range 1.75" (44 mm) Faital pro driver. Designed from high quality aluminium alloy, applications are Public address systems, Lecture theatres, etc. frequency Response 150 Hz – 18 kHz, Program Power 320W, Peak Power 640W, Sensitivity (1W/1m) 91 dB, Max SPL (Continuous/1m) 116 dB, Max SPL (Peak/1m) 119 dB, Nominal Impedance 8 Ohms, Crossover Mode Full range driver, Dispersion 90° (H) x 60° (V), Cabinet Material Aluminium alloy.	2		
5.5	Four multi-channel professional Class-D amplifier, with output power@ 8Ω /Ch 200W×4, Output power@ 4Ω /Ch 350W×4, Bridge@8Ω 650W×2, Bridge@4Ω (not recommended), Frequency Response 20Hz – 20kHz (±0.5dB), THD+N 98dB (A-weighted), Damping Factor >500 (1kHz @ 8Ω), Input Sensitivity 0.775V / 1.44V, Input Impedance 20kΩ/10kΩ, Clip limiters, Over temperature protections, Short circuit protection.	1		
5.6	Digital Signal Processor with 8 Mic/Line inputs, 8 Line outputs and 8 software assignable channels, configurable as Mic/Line Inputs or Line outputs. The processor shall have minimum 16 assignable & routable AEC channels. The processor shall have minimum 8x8 Dante channels and shall also support up to 128x128 Network audio channels via Dante or AES67. It shall also support POTS and SIP Softphone integration for Audio conferencing and configurable 16x16 USB Audio channels via USB-B ports supporting AV USB Bridging for software or web based conferencing applications. The processor shall also have minimum 24 bit-A/D-D/A converters, 48 kHz Sample rate, Input frequency response of 20 Hz to 20 kHz @ +21dBu, Input dynamic range > 109.5 dB at @ +24 dBu sensitivity. The processor shall support third party device control via Ethernet, RS232 and GPIO with licesne	1		
6	**SITC OF VIDEO**			
6.1	4K NDI PTZ Camera with 20x Zoom Capture up to UHD 4K30 / 1080p60 Video 8.29MP 1/2.3" CMOS Sensor with Hybrid AF HDMI, IP & USB-C Video Output 20x Optical, 20x Digital Zoom, AWB Optical Image Stabilization Built-In NDI|HX, SRT, PoE+ Support 3.5mm Audio Input, AC Adapter Included Canon DIG!C DV6 Processor IP, RS-422, IR, and Wi-Fi Control Works with Software & Controllers	2		
6.2	Camera Mount Wall / Ceiling	2		
6.3	SPDIF ports provide de-embedded HDMI audio output Transmits 4K x 2K at 60 Hz 4:4:4 signal up to 16.4-ft via HDMI port Provides powerful EDID management, built-in EDID can be invoked via DIP switch on rear panel, RS-232 common or web based GUI Controllable via front panel button, IR, RS232 or web-based GUI LCD screen shows real-time I/O connection status Convenient firmware upgrade through micro USB port Easy installation with rackmounting design	1		
6.4	Captures 4 channels of 4K @ 60 HDMI, mixes and switches the streams while providing audio mixer functionalities and seamless transition for pro-level broadcasting Multiple output options:– HDMI PGM / Loop-through at 4K @ 60 for preview and monitoring purposes– USB-C output 4K @ 30 for live broadcast on the Internet Versatile control methods via the front panel pushbuttons, RJ-45 port for serial control via Control System, and OEM app OEM app – users can remotely control device settings in real time, including multiple AV source switching / mixing, content cropping / resizing, layout options (full screen / PiP / PbP / PoP), transitions, Chroma Key, and logo adding	1		
6.5	HDMI HDBaseT Extender (4K@100m) Supports resolutions of up to Ultra HD 4kx2k and 1080p Full HD Supports up to 340MHz bandwidth for high performance video Supports Dolby True HD and DTS HD Master Audio Built-in 8KV / 15KV ESD protection	6		
6.6	4 x 4 USB 3.2 Gen 1 Industrial Hub Switch Enables four Systems to share USB peripheral up to four devices USB 3.2 Gen 1 compatibility with maximum data transfer rates up to 5 Gbps Multiplatform support – Windows, Mac and Linux Displays port focus via LED indicators Metal mechanical cassis with wall mountable design Supports aftermarket USB M2 screw locking cable Supports port selection via remote controller or RS-422 / RS-485 link through 5-pin terminal block Supports hot plugging	1		
6.7	10 m Active USB cable Type A male to Type A female for BYOD	1		
6.8	10 m High Speed HDMI cable for BYOD	6		
6.9	Popup Box – Tabletop Socket Material: Aluminum Alloy 3* Universal Power 2* USB Charger A+C 5V2.1A Round Corner	12		

7	**FIRST FLOOR CLASSROOM -2 TRAINING ROOM**			
	SITC OF DISPLAYS			
7.1	86" Multi touch Interactive display with built in SOC with 1.9 Ghz Quad core processor, Android 11.0, 8 GB RAM,128 GB Memory, 450 Cd/m2, 4 mm 7 MOHS tempered glass, 5 GHz Wifi built in, 3 X HDMI Input, 1 X HDMI Out, 4 X USB A 3.0, 2 X USB 2.0, 1 X USB Type C 3.0, RJ45 X 1, RS232 X 1, Audio Out x 1, RJ12 X 1, 2 x 20W front facing speakers, 40 point touch for Windows, 10 point touch for Android, OPS Slot, Built- in white board, Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar. Supports 3rd party applications, recording feature, USB WEB Cam Compatible, Support PPT, Word, PDF, Image, Video Play 2 x touch pen, Compatible with Device Management Software, Inbuilt Camera and MIC.Third Party OPS with i5 10th Gen or more 8GB RAM/128Gb ROM/Window 10 pro Wall Mounted	1		
7.2	65" 4K UHD(3840 X 2160) resolution 500 Cd/m2, 28% Haze Level, Android 9 OS based LED display with built in 5 Ghz/ 2.4 GhzWifi, Built in Quad core processor, 2 GB RAM, 8 GB Memory, Built in Wifi and mirroring with support for Windows/Android/Ios/Mac OS, Landscape/Portrait installation, File manager built in, Auto wakeup on HDMI, Auto switching and Auto standby, Bootlogo setting, Boot video setting, PIN based authentication, Built-in Bluetooth 5.0, 20W built in speakers, HDMI 2.0 X 3, RS232 X 1, USB 2.0 X 2, RJ45 X 1 Line Audio Out x 1, Support BLE and Beacon, HDMI Input Lock, Menu lock, App lock, remote lock, Wireless lock	2		
7.3	43" 4K UHD(3840 X 2160) resolution 500 Cd/m2, 28% Haze Level, Android 9 OS based LED display with built in 5 Ghz/ 2.4 GhzWifi, Built in Quad core processor, 2 GB RAM, 8 GB Memory, Built in Wifi and mirroring with support for Windows/Android/Ios/Mac OS, Landscape/Portrait installation, File manager built in, Auto wakeup on HDMI, Auto switching and Auto standby, Bootlogo setting, Boot video setting, PIN based authentication, Built-in Bluetooth 5.0, 20W built in speakers, HDMI 2.0 X 3, RS232 X 1, USB 2.0 X 2, RJ45 X 1 Line Audio Out x 1, Support BLE and Beacon, HDMI Input Lock, Menu lock, App lock, remote lock, Wireless lock	1		
7.4	TV Wall Mount Bracket for 55 to 85 Inch LED/HD/Smart TV's, 180 Degrees Swivel Full Motion TV Mount Universal Heavy Duty TV Wall Mount Stand with Tilt Adjustment	2		
7.5	Slanted Floor Mount for Display 40" 55" Low Height Director Trolly Monitor Cart with Wheels for 32-65 inch Flat Curved Screen TV, LED LCD, Height Adjustable, 90°Adjustable Viewing Angle	1		
8	**SITC OF AUDIO- MICS, DSP, AMP, SPEAKERS**			
8.1	Boundary layer table Microphone, it should be pre-polarised condenser microphone having Cardioid or better polar pattern, shall have frequency response of 42Hz to 20kHz, Should have Max SPL Level of 135dB or more, it should support phantom power from 12v to 48v, Should have sensitivity of 10mV/PA or better and dynamic range of 111db(A), Should come with mute/unmute button, Should be RF interference free from other wireless devices, should have muted/30ustomi status LED Indication and Logic output for third party integration for control camera etc complete required as per the specifications.	12		
8.2	Digital Wireless Headworn microphone with 30ustomize or better polarity pattern, Frequency range: 471 – 797 MHz or better, THD total harmonic distortion ≤ -60 db for 1kHz @ -3 dBfs input level or better ; Switching bandwidth up to 56 MHz or better; up to 2240 selectable Frequencies for allow fine tuning, equidistant tuning grid of 600kHz to enable up to 90 simultaneous channels . Sensitivity in free field 1.6 mV/Pa or better, Sound pressure level 145 dB SPL or more. RF output 10mW or more, up to 8 hours of operating time or better, Audio Frequency Response of 20Hz 20kHz (-3db) @ 3dbfs, Frequency Response: 50-18000Hz, Bluetooth connectivity with mobile devices for basic setup and control of the receiver complete with standard accessories	2		
8.3	Motorized directional Ceiling Speaker Two-way full range passive loudspeaker, One powerful 5.5" LF driver with 1" HF. It is a high-performance, Frequency Response 65 Hz – 19 kHz, Program Power 60W, Peak Power 120W, Sensitivity 1W/1m) 88 dB, Max SPL (Continuous/1m) 109 dB, Max SPL (Peak) 112 dB, Nominal Impedance 8 Ohms, Crossover Mode Passive, Dispersion 115° (H) x 90° (V),	6		
8.4	Full range column speaker, eight full range 1.75" (44 mm) Faital pro driver. Designed from high quality aluminium alloy, applications are Public address systems, Lecture theatres, etc. frequency Response 150 Hz – 18 kHz, Program Power 320W, Peak Power 640W, Sensitivity (1W/1m) 91 dB, Max SPL (Continuous/1m) 116 dB, Max	2		

	SPL (Peak/1m) 119 dB, Nominal Impedance 8 Ohms, Crossover Mode Full range driver, Dispersion 90° (H) x 60° (V), Cabinet Material Aluminium alloy.			
8.5	Four multi-channel professional Class-D amplifier, with output power@ 8Ω /Ch 200W×4, Output power@ 4Ω /Ch 350W×4, Bridge@8Ω 650W×2, Bridge@4Ω (not recommended), Frequency Response 20Hz – 20kHz (±0.5dB), THD+N 98dB (A-weighted), Damping Factor >500 (1kHz @ 8Ω), Input Sensitivity 0.775V / 1.44V, Input Impedance 20kΩ/10kΩ, Clip limiters, Over temperature protections, Short circuit protection.	1		
8.6	Digital Signal Processor with 8 Mic/Line inputs, 8 Line outputs and 8 software assignable channels, configurable as Mic/Line Inputs or Line outputs. The processor shall have minimum 16 assignable & routable AEC channels. The processor shall have minimum 8x8 Dante channels and shall also support up to 128x128 Network audio channels via Dante or AES67. It shall also support POTS and SIP Softphone integration for Audio conferencing and configurable 16x16 USB Audio channels via USB-B ports supporting AV USB Bridging for software or web based conferencing applications. The processor shall also have minimum 24 bit-A/D-D/A converters, 48 kHz Sample rate, Input frequency response of 20 Hz to 20 kHz @ +21dBu, Input dynamic range > 109.5 dB at @ +24 dBu sensitivity. The processor shall support third party device control via Ethernet, RS232 and GPIO with licesne	1		
9	**SITC OF VIDEO**			
9.1	4K NDI PTZ Camera with 20x Zoom Capture up to UHD 4K30 / 1080p60 Video 8.29MP ½.3" CMOS Sensor with Hybrid AF HDMI, IP & USB-C Video Output 20x Optical, 20x Digital Zoom, AWB Optical Image Stabilization Built-In NDI|HX, SRT, PoE+ Support 3.5mm Audio Input, AC Adapter Included Canon DIG!C DV6 Processor IP, RS-422, IR, and Wi-Fi Control Works with Software & Controllers	2		
9.2	Camera Mount Wall / Ceiling	2		
9.3	SPDIF ports provide de-embedded HDMI audio output Transmits 4K x 2K at 60 Hz 4:4:4 signal up to 16.4-ft via HDMI port Provides powerful EDID management, built-in EDID can be invoked via DIP switch on rear panel, RS-232 common or web based GUI Controllable via front panel button, IR, RS232 or web-based GUI LCD screen shows real-time I/O connection status Convenient firmware upgrade through micro USB port Easy installation with rackmounting design	1		
9.4	Captures 4 channels of 4K @ 60 HDMI, mixes and switches the streams while providing audio mixer functionalities and seamless transition for pro-level broadcasting Multiple output options:– HDMI PGM / Loop-through at 4K @ 60 for preview and monitoring purposes– USB-C output 4K @ 30 for live broadcast on the Internet Versatile control methods via the front panel pushbuttons, RJ-45 port for serial control via Control System, and OEM app OEM app – users can remotely control device settings in real time, including multiple AV source switching / mixing, content cropping / resizing, layout options (full screen / PiP / PbP / PoP), transitions, Chroma Key, and logo adding	1		
9.5	HDMI HDBaseT Extender (4K@100m) Supports resolutions of up to Ultra HD 4kx2k and 1080p Full HD Supports up to 340MHz bandwidth for high performance video Supports Dolby True HD and DTS HD Master Audio Built-in 8KV / 15KV ESD protection	6		
9.6	4 x 4 USB 3.2 Gen 1 Industrial Hub Switch Enables four Systems to share USB peripheral up to four devices USB 3.2 Gen 1 compatibility with maximum data transfer rates up to 5 Gbps Multiplatform support – Windows, Mac and Linux Displays port focus via LED indicators Metal mechanical cassis with wall mountable design Supports aftermarket USB M2 screw locking cable Supports port selection via remote controller or RS-422 / RS-485 link through 5-pin terminal block Supports hot plugging	1		
9.7	10 m Active USB cable Type A male to Type A female for BYOD	1		
9.8	10 m High Speed HDMI cable for BYOD	6		
9.9	Product: Tabletop Socket Material: Aluminum Alloy 3* Universal Power 2* USB Charger A+C 5V2.1A Round Corner	12		
10	**DIGITAL PODIUM**			
10.1	Supply of Digital Interactive Podium in Metallic Frame and Wooden Top with 21.5 inch Full HD (Electromagnetic + Capacitive) Interactive Display with Electromagnetic Pen, with Motorized Tilting of the Interactive Panel, with provision to install Gooseneck Microphone, Interactive panel, Keyboard Tray and space to store AV	2		

	equipment, Interactive display with full HD resolution of 1920x1080, Technology IPS LCD, Aspect ratio16:9, Brightness 250 cd/m2, Contrast ratio1000:1, Pen Type shall be Pressure-sensitive and cordless. Top connectivity plate with HDMI, USB x 2 and Power socket for external Laptop connectivity, built-in 4 x 2 HDMI Matrix Switcher with 4K@60Hz (4:4:4, 8- bit) as well as support for 16-bit Deep Colour, HDR (High Dynamic Range), 3D content, HD audio and other features defined by HDMI 2.0 specification and Audio De-embedder for internal connectivity			
10.2	Gooseneck Microphone, it should be pre-polarised condenser microphone having Cardioid or better polar pattern, shall have frequency response of 50Hz to 20kHz, length of the gooseneck shall be more than 420mm, Should have Max SPL Level of 125dB or more, it should support phantom power from 12v to 48v, Should come with base having programmable mute/unmute button, Should be RF interference free from other wireless devices, should have muted/32ustomi status LED Indication etc complete required as per the specifications.	2		
11	**LOBBY AREA**			
	SITC OF DISPLAYS			
11.1	55" Multi touch Interactive display with built in SOC with 1.9 Ghz Quad core processor, Android 11.0, 4 GB RAM,32GB Memory, 450 Cd/m2, 4 mm 7 MOHS tempered glass,5 GHz Wifi built in, 3 X HDMI Input, 1 X HDMI Out, 4 X USB A 3.0, 2 X USB 2.0, 1 X USB Type C 3.0, RJ45 X 1, RS232 X 1, Audio Out x 1, RJ12 X 1, 2 x 20W front facing speakers, 40 point touch for Windows, 10 point touch for Android, OPS Slot, Built- in white board, Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar. Supports 3rd party applications, recording feature, USB WEB Cam Compatible, Support PPT, Word, PDF, Image, Video Play 2 x touch pen, Compatible with Device Management Software, Third Party OPS with i5 10th Gen or more 8GB RAM/128Gb ROM/Window 10 pro	2		
11.2	TV Stand with Wheels for 32-70 Inch TV Display Stand Rolling Matel TV Cart Trolley Mobile Movable TV Bracket Strong heavy duty model to make sure your LED TV lies in safe hands with no risk of falling breaking at the same remaining portable Plush looks 480 mm (W) x 295 mm (B) Tray for keeping projector , laptop , accessories , catalog , dvd player or set top box Load Capacity 27.3kgs/60lbs Suits LED TVs upto 70 inch LED TVs can be comfortably mounted Thickness 1.5mm Tilt angle -15° to +15° Swivel angle 360°, VESA 100×100,200×100,200×200,300×300, 400×400,600×400mm	2		
12	**CONFERENCE ROOM**			
	SITC OF DISPLAYS			
12.1	Digital Standee of 43" Ultra Slim DLED display, 500 Cd/m2 brightness, Android operating system, , 2GB DDR4 memory, 16 GB storage, HDMI , USB Port, RJ45 , RS232, 20W in built speaker, 24/7 operation. Standee Die casteAluminium on edge with carbon steel structure, 5 MM toughened edge to edge glass and Frame Thickness: 50 MM.	1		
12.2	Digital Signage Software 3 Year Cloud subscription to run images, text, video, PDF from one central location, divide screen into multiple areas, get multiple reports from single dashboard, manage screens as per 32ustomized regional geography.	1		
13	**DIRECTOR ROOM**			
	SITC OF DISPLAYS AND CAMERA WITH SPEAKER			
13.1	65" 4K UHD(3840 X 2160) resolution 500 Cd/m2, 28% Haze Level, Android 9 OS based LED display with built in 5 Ghz/ 2.4 GhzWifi, Built in Quad core processor, 2 GB RAM, 8 GB Memory, Built in Wifi and mirroring with support for Windows/Android/Ios/Mac OS, Landscape/Portrait installation, File manager built in, Auto wakeup on HDMI, Auto switching and Auto standby, Bootlogo setting, Boot video setting, PIN based authentication, Built-in Bluetooth 5.0, 20W built in speakers, HDMI 2.0 X 3, RS232 X 1, USB 2.0 X 2, RJ45 X 1 Line Audio Out x 1, Support BLE and Beacon, HDMI Input Lock, Menu lock, App lock, remote lock, Wireless lock	1		
13.2	Supply, installation, testing & commissioning of Unified Communication Bar (All in One) with BYOD Type 1, Built-in dante integration, Should have Built-In DSP which automatically optimizes room acoustics, Integrated Beam forming microphone, 6 Nos. of MEMS capsules with pickup range of 4.5 m or more, Should have 4K e-PTZ camera, 5x digital zoom with automatic framing and person tiling feature, Built-in Class D amplifier with 4 Nos. of 40 W full range speaker, Should have 2 HDMI, 1 USB Type-C (3.1), 1 USB Type-A (3.1), Dual Ethernet ports, Bluetooth 5.1 and IEEE 802.11a /	1		

	b / g / n / ac Wi-fi standard, Zooms and Teams certified, High-precision audio settings for maximum control, setting to exclude (min 3) and prioritize the areas of the room, which automatically focus on the person speaking in the room, One Priority Zone and up to three Exclusion Zones shall be adjustable, should be controlled through centralized monitoring software along with IR remote control and mounting kit etc all complete as required.			
14	**AUDITORIUM**			
	SITC OF VIDEO WALL Diagonal Size 361 inches Display Dimensions (W x H) 8.00m x 4.50m 26.2 ft x 14.8 ft			
14.1	Pixel Pitch 2.50 mm Pixel Density 160000 Pix / Sq – Mtr Bonding Wire Copper Wire Cabinet Type Die CastAl Service Access Front Ingress Protection Front IP20 / Back IP20 Key Features Slim and Lightweight, No Structure, Fanless Display Dimensions (W x H) 8.00m x 4.50m 26.2 ft x 14.8 ft Display Area 36.00 sq m 387.8 sq ft Pixel Matrix (W x H) 3200 x 1800 No. of Tiles (W x H) 144 (16 x 9) Diagonal Size 361 inches Aspect Ratio 16:9 Cabinet Dimensions 500mm x 500mm x 33.4mm Max Brightness 1100 nits (cd/m2) Calibrated Brightness 1000 nits (cd/m2) Viewing Angle 160x160 Data Processing 14-16 Bit Colours Up to 281 Trillion HDR10 No Refresh >= 3840 Contrast 8000:1	1		
14.2	LED Controller – AIO Controller Standard Inputs DP×1, HDMI×1, 4×DVI Standard Outputs LED Out × 16, HDMI Out × 1 (Monitor), Fiber out × 2 Ethernet, USB Type B, RS232 PIP (Picture in Picture) 3	1		
14.3	Wall mount Structure fabrication and Installation & Commission	1		
15	**AUDIO AND VIDEO PART FOR AUDITORIUM**			
	SITC OF SPEAKER, SOUND SYSTEM With Mick			
15.1	32 Channel Audio Mixer	1		
15.2	Wireless Mics	10		
15.3	Collar Mic	2		
15.4	Hand Mic	3		
15.5	Podium Mic	2		
15.6	DSP	1		
15.7	Speakers according to the auditorium	5		
15.8	Other accessories as required for Sound System	5		
15.9	Installation & Commission	5		
16	**SITC OF CYBER WORKSTATION/LAB**			
16.1	Cyber Workstation	1		
16.2	Multi Function Color Printer	1		
16.3	Digital/Document Visualizer	1		
16.4	Video Recorder	1		
16.5	Storage Device	1		
17	**WI-FI NETWORKING**			
	SITC OF WI-FI/NETWORKING			
17.1	Network Firewall with 5 Years Subscription Appliance with 8 GE + 2 SFP ports, 1 expansion bay for optional Flexi Port module, SSD + Base License (incl. FW, VPN & Wireless) for unlimited users + power cable +Standard Protection	1		
17.2	10G Core Networking Switch 24-port SFP+ and 4-port SFP56 Switch with power supply & cord	1		
17.3	Networking Wireless Access Point Controller with minimum 4 x Gigabit Ethernet interfaces (100/1000BASE-T)	1		
17.4	Wireless Access Point 2x2 MIMO 2.4Ghz & 4x4 MIMO 5Ghz with mounting bracket	37		

17.5	Wireless Outdoor Access Point 2x2 MIMO 2.4Ghz & 4x4 MIMO 5Ghz with mounting bracket	2			
17.6	Networking LIC-AP Controller per AP Capacity License	39			
17.7	24 Port Networking Gigabit CL4 POE Switch 4P SFP+ 370W	5			
17.8	Networking 10G SFP+ LC LR 10km SMF Transceiver	8			
17.9	Networking 10G SFP+ LC SR 300m OM3 MMF Transceiver	2			
18	12 Core Optical Fiber	2000 Mtr			
18.1	UTP CAT-6 Cable (305 Mtr.)	8			
18.2	12U Networking Rack with accessories	4			
18.3	24U Networking Rack with accessories	1			
18.4	24 Port Patch Panel Loaded	4			
18.5	Installation, Integration & Configuration with civil work	1			
	Tables and Occupancy				
18.6	SITC of Furniture				
18.7	12 Tables	12			
18.8	52 Chairs	52			
19	**Application of Emerging Technologies**				
19.1	Application of Emerging Technologies for Academic Administrationi.e.Low Code/No-Code development tools and robotic process automation tools (RPA)	1			
20	Virtual Reality (VR) Headset with controller and end to solution to create Virtual Court Environment				
20.1	Virtual Reality (VR) Headset with controller and end to solution to create Virtual Court Environment	1			

NOTE:- The items mentioned above are only indicative. The bidder must quote price of items keeping in mind all the necessary accessories and in anticipation of relevant required items for creation of end to end setup to fulfill the scope of project.

CHECK LIST

Bidders kindly notice that the documents/certificates/declarations and lists etc. related to the tender should be clear and legible. All the relevant documents must be submitted in the following order as shown in the check list below and should be properly marked with core responding page number thereof. Non-compliance of the same will lead to disqualification and participation will be rejected out rightly and no correspondence will be entertained in this regard.

SN	PARAMETERS	COMPLIANCE (YES/NO)	EVIDENCE (PAGE NO.)
1.	Tender cost as mentioned in the tender		
2.	EMD as mentioned in the tender		
3.	A duly stamped Power of Attorney in the name of the Authorized Signatory for this tender		
4.	The Bidder should be a Registered Company under the Companies Act or A Partnership Firm or Trust or Society having registered offices in India and should be in existence for at least last 5 years		
5.	Bidder should have a minimum average annual turnover of Rs. 2 CR. during the last three financial years.		
6.	Bidder must have PAN card and GST Registration Certificate		
7.	Bidder should have GST registration Certificate		
8.	Declaration regarding Non-Blacklisting		
9.	Declaration of Acceptance of Terms and Conditions in RFP		
10.	Checklist for Technical Bid duly filled in along with details of all the submitted documents as part of technical bid		
11.	Supplier's minimum 5 year onsite warranty and service support. At least one visit to the customer premises every month during warranty period is required (Declaration for the same should be submitted along with technical bid).		
12.	Single Work order should be of similar work (INR 1 Cr or above). i.e Contract should have experience in setup audio visual setup for broadcasting in court premises or related to judicial premises/Experience of having successfully completed similar works towards supplies and installation of Multi-Cam Studio / Recording Studio / Production Studio Setups / Universities/ Reputed Higher Educational Institution		
13.	Bidder must be the manufacturer (OEM)/authorized dealer. Hard copy of the Bid Specific MAF with Ink signed stamped on OEM letter head should be submitted for all the Major Components i.e. Video Wall, LED Boards, Interactive /Display, Cameras, Wi-Fi Access Points, Firewall etc., failing which bidder will be disqualified.		
14.	OEM should be a registered company in India under the Indian Companies Act 1956 / Partnership Act and should be in existence for a minimum period of Ten (10) years as on the date of RFP.		
15.	The OEM should have a minimum average annual turnover of Rs. Fifty-(50) Crore in LED Video wall work during last three financial years.		
16.	OEM/Bidder should have Audited profit and loss statement and balance sheet last three financial years.		
17.	The OEM should have experience of 1 Nos of OPS Room / Auditorium Indoor LED screens of pixel pitch 2.5mm or less having min size of 50sqmtr in a single project in any Government / State Government / PSU / Defense sector of India directly during last 3 (three) Years as of the bid submission date		
18.	CE (EN55035 -2017/ EN61000-3-3-2013), FCC (CFR47 FCC part 15-B ANSI C63.4:2014), & BIS Certificate for proposed solution should be on Indian OEM name.		
19.	ETL Certificate of Offered Product certified from NABL Lab.		
20.	LED Display & Controller & Software should be from same OEM.		
21.	OEM should have Direct registered own Service Centers in Metro Cities like Delhi/NCR, Mumbai, Bangalore in India at least form last 2 year.		
22.	Test Report: Material Test Certificate Should Be Sent Along with The Supply. The Material may Be Checked by Buyer's Lab & the Results of the Lab will be the Sole Criteria for Acceptance of the Item.		
23.	Bidder shall take note of Rule 144 (xi) of GFR 2017 which selecting the OEM and proposing the make and model. The OEM / manufacturing plant shall not be from country sharing land border with India highlighted in the Rule 144 (xi) of GFR 2017 and subsequent clarification.		

24.	Preference to be given to Make in India (MII) as per amended Public Procurement policy dated 16.09.2020. Authority will deploy agency to verify the factory/ manufacturing facility of OEM in India before releasing the final order. In-case any discrepancy Authority may blacklist the bidder to participate in upcoming tenders for the period of one year.		
25.	Certifications required of OEM/OEM subsidiary in India (Copy to be submitted along with the bid)		
26.	Brightness Measurement Tool: The Bidder/OEM of LED Display in India should have a luminance meter for brightness measurement of the offered LED screen.)		
27.	OEM shall be ISO 9001, ISO 14001, OHSAS 45001 & ISO 27001:1 certified with the scope to include visual displays as well. Certificates to be submitted		
28.	OEM Should have Valid GST Number in India		
29.	OEM's for Interactive /Display should have valid BIS and ROHS certificate.		
30.	OEM quoted model should be in public domain with all technical specifications.		

SPECIFICATIONS

DESCRIPTION OF ITEMS	COMPLIANCE YES/NO	REMARKS
4K 75 Inch Interactive Display ✓ Diagonal Size 75 Inch ✓ Operating System Android 13.0 ✓ Resolution 3840 x 2160 or Better ✓ Brightness 450cd/m2 or Higher ✓ Panel Technology IPS / VA ✓ Viewing Angle 178 x 178 ✓ Response Time 8 ms or less ✓ RAM 4 GB or Higher ✓ ROM 32 GB or Higher ✓ Input Ports 3 x HDMI (4K upto 60Hz), HDCP 2.1, CEC, ARC (HDMI1), ✓ 1 x VGA (Optional), 1 x USB 2.0, 3 x USB 3.0 (2 Front, 1 Rear) with autoswitching function, 1 x USB (C Type) Touch, PD65W & LAN network sharing, 1 x Audio IN, 1 x DP In, Built IN 1 x Micro SD (128 GB) ✓ Output Port Audio Port -1 (SPDIF), 1 x HDMI Out 2 x Touch Out ✓ External Control RS-232, RJ 45 ✓ Life Min 30000 Hrs or More ✓ Wi-Fi Wi-Fi& Bluetooth to be enabled & provided ✓ Speaker Built-in 20W x 2 or Higher ✓ Detection Method IR ✓ Plug in USB WEB Cam Compatibility ✓ Pen 2 Nos of Touch Pens ✓ Certifications BIS & RoHS (Declaration of Conformity of RoHS with ✓ testing report) ✓ Warranty OEM - 5 Years ✓ Accuracy ±2 mm or Better ✓ Multi Touch Points Min 40 Points or Higher ✓ Embedded Interactive White Board Software Interactive White Board for both Android and Windows with complete features and gestures. Should have the interactive tools/features like Pen, Eraser, Shape recognition (in android), infinite color options for annotation, color bucket, background pattern, lines & arrows, screen capture tools etc. ✓ Interactive & Important Features Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar. Should be capable to annotate on any 3rd party applications. Should have recording feature. ✓ Built in System Processor Quad Core Processor with 1.5 GHz or Higher. ✓ Power Consumption Typically 250 W ✓ Operating Temperature 00~45 Degree ✓ Operating Humidity 10~80% ✓ Accessories 2 Pens, Power Cables & Wall Mount Kit ✓ Installation Wall mount ✓ IFP Should Support PPT, Word, PDF, Image, Video Play ✓ Surface Hardness Toughened Glass with Level 7 of MOHS Standard		
4K 75 Inch Non-Interactive Display ✓ 75" 4K UHD(3840 X 2160) LED display, 500 Cd/m2, ✓ Android 11.0 based SOC with Quad Core Processor, ARM Mali G51 GUP, 4GB RAM, 32GB Memory, ✓ HDMI 2.0 X 2, DP1.2 IN(Shared with USB Type C) X 1, USB 3.0 X 1, USB 2.0 X 1, RJ45 X 1, RS232 X 1, Audio Out x 1, Digital Audio Out x 1, HDMI 2.0 Out x 1, ✓ 24W in built speaker, 24/7 operation, ✓ Wifi(Optional dongle), Bluetooth, ✓ No signal Power Off, RS232 and LAN Control, OSD and UI rotation, USB Auto play function, ✓ Multi screen support upto 3 x 3, ✓ Multi functional USB Type C(for Audio, Video, Network, Microphone, 65W charging, Camera connectivity), ✓ Wireless Screen sharing with Airplay, Miracast and Mirroring, PIP/PBP support, Landscape and Portrait mode, Instand mobile content ransfer, Multi mode play, Content scheduling and signage software. Device management system compatible, OPS Slot available		
4K 86 Inch Interactive Display ✓ 86" Multi touch Interactive display with built in SOC with ✓ 1.9 Ghz Quad core processor, ✓ Android 11.0, 8 GB RAM,128 GB Memory, ✓ 450 Cd/m2, 4 mm 7 MOHS tempered glass, ✓ 5 GHz Wifi built in, ✓ 3 X HDMI Input, 1 X HDMI Out, 4 X USB A 3.0, 2 X USB 2.0, 1 X USB Type C 3.0, RJ45 X 1, RS232 X 1, Audio Out x 1, RJ12 X 1, ✓ 2 x 20W front facing speakers, ✓ 40-point touch for Windows, 10-point touch for Android, ✓ OPS Slot, Built- in white board, Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar. Supports 3rd party applications, recording feature, USB WEB Cam Compatible, Support PPT, Word, PDF, Image, Video Play ✓ 2 x touch pen, Compatible with Device Management Software, ✓ Inbuilt Camera and MIC. ✓ Third Party OPS with i5 10th Gen or more 8GB RAM/128Gb ROM/Window 10 pro		
65 Inch Display ✓ 65" 4K UHD(3840 X 2160) resolution ✓ 500 Cd/m2, 28% Haze Level, ✓ Android 9 OS based LED display with built in 5 Ghz/ 2.4 GhzWifi, ✓ Built in Quad core processor, 2 GB RAM, 8 GB Memory, ✓ Built in Wifi and mirroring with support for Windows/Android/Ios/Mac OS, Landscape/Portrait installation, File manager built in, Auto wakeup on HDMI, Auto switching and Auto standby, Boot logo setting, Boot video setting, PIN based		

authentication,		
✓ Built-in Bluetooth 5.0,		
✓ 20W built in speakers,		
✓ HDMI 2.0 X 3, RS232 X 1, USB 2.0 X 2, RJ45 X 1 Line Audio Out x 1, Support BLE and Beacon, HDMI Input Lock, Menu lock, App lock, remote lock, Wireless lock		
55 Inch Interactive Display		
✓ 55" Multi touch Interactive display with built in SOC with		
✓ 1.9 Ghz Quad core processor,		
✓ Android 11.0, 4 GB RAM, 32GB Memory, 450 Cd/m2,		
✓ 4 mm 7 MOHS tempered glass,		
✓ 5 GHz Wifi built in,		
✓ 3 X HDMI Input, 1 X HDMI Out, 4 X USB A 3.0, 2 USB 2.0, 1 X USB Type C 3.0, RJ45 X 1, RS232 X 1, Audio Out x 1, RJ12 X 1, 2 x 20W front facing speakers,		
✓ 40-point touch for Windows, 10 point touch for Android, OPS Slot, Built- in white board, Writing, Pen, Palm Eraser, Save, Screen Capture, Storage and Tool Bar. Supports 3rd party applications, recording feature, USB WEB Cam Compatible, Support PPT, Word, PDF, Image, Video Play 2 x touch pen, Compatible with Device Management Software,		
✓ Third Party OPS with i5 10th Gen or more 8GB RAM/128Gb ROM/Window 10 pro		
43 Inch Display		
✓ 43" 4K UHD(3840 X 2160) resolution		
✓ 500 Cd/m2, 28% Haze Level, Android 9 OS based LED display with built in 5 Ghz/ 2.4 GhzWifi,		
✓ Built in Quad core processor, 2 GB RAM, 8 GB Memory,		
✓ Built in Wifi and mirroring with support for Windows/Android/Ios/Mac OS, Landscape/Portrait installation, File manager built in, Auto wakeup on HDMI,		
✓ Auto switching and Auto standby, Boot logo setting, Boot video setting, PIN based authentication,		
✓ Built-in Bluetooth 5.0, 20W built in speakers,		
✓ HDMI 2.0 X 3, RS232 X 1, USB 2.0 X 2, RJ45 X 1 Line Audio Out x 1, Support BLE and Beacon, HDMI Input Lock, Menu lock, App lock, remote lock, Wireless lock		
43" Digital Standee		
✓ Digital Standee of 43" Ultra Slim DLED display,		
✓ 500 Cd/m2 brightness,		
✓ Android operating system,		
✓ 2GB DDR4 memory, 16 GB storage,		
✓ HDMI , USB Port, RJ45 , RS232, 20W in built speaker,		
✓ 24/7 operation. Standee Die caste Aluminium on edge with carbon steel structure,		
✓ 5 MM toughened edge to edge glass and Frame Thickness: 50 MM.		
Digital Signage Software		
✓ Digital Signage Software 5 Year Cloud subscription to run images, text, video, PDF from one central location, divide screen into multiple areas, get multiple reports from single dashboard, manage screens as per customised regional geography.		
✓ Should be from Same OEM as of Quoted Displays		
TV Wall Mount		
✓ TV Wall Mount Bracket for 55 to 85 Inch LED/HD/Smart TV's,		
✓ 180 Degrees Swivel Full Motion TV Mount		
✓ Universal Heavy Duty TV Wall Mount Stand with Tilt Adjustment		
Slanted Floor Mount for Display 40" 55"		
✓ Universal Heavy Duty TV Wall Mount Bracket for 40" to 55 Inch LED/HD/Smart TV's,		
✓ Slanted Floor Mounted		
Slanted Table for 75" Display		
✓ Slated Custom table for 75" Display with heavy duty structure		
✓ Wooden finish		
✓ Approx 30 Degree Tilted		
✓ Proper Space to Run Cable and power and should not be visible from outside		
TV Stand with Wheels for 32-70 Inch TV Display Stand Rolling Matel TV Cart Trolley Mobile Movable TV Bracket		
Microphone		
✓ Boundary layer table Microphone, it should be		
✓ Pre-polarised condenser microphone having Cardioid or better polar pattern,		
✓ shall have frequency response of 42Hz to 20kHz,		
✓ Should have Max SPL Level of 135dB or more,		
✓ it should support phantom power from 12v to 48v,		
✓ Should have sensitivity of 10mV/PA or better and dynamic range of 111db(A),		
✓ Should come with mute/unmute button,		
✓ Should be RF interference free from other wireless devices,		
✓ Should have muted/unmuted status LED Indication and Logic output for third party integration for control camera etc complete required as per the specifications.		
Microphone		
✓ Digital Wireless Headworn microphone with cardioid or better polarity pattern,		
✓ Frequency range: 471 - 797 MHz or better,		
✓ THD total harmonic distortion ≤ -60 db for 1kHz @ -3 dBfs input level or better ;		
✓ Switching bandwidth up to 56 MHz or better;		
✓ up to 2240 selectable Frequencies for allow fine tuning, equidistant tuning grid of 600kHz to enable up to 90 simultaneous channels . Sensitivity in free field 1.6 mV/Pa or better,		
✓ Sound pressure level 145 dB SPL or more.		
✓ RF output 10mW or more, up to 8 hours of operating time or better,		
✓ Audio Frequency Response of 20Hz-20kHz (-3db) @ 3dbfs,		
✓ Frequency Response: 50-18000Hz,		
✓ Bluetooth connectivity with mobile devices for basic setup and control of the receiver complete with standard accessories		
Gooseneck Microphone		
✓ Gooseneck Microphone, it should be pre-polarised condenser microphone having Cardioid or better polar pattern,		
✓ shall have frequency response of 50Hz to 20kHz,		
✓ length of the gooseneck shall be more than 420mm,		
✓ Should have Max SPL Level of 125dB or more,		
✓ it should support phantom power from 12v to 48v,		

- ✓ Should come with base having programmable mute/unmute button,
- ✓ Should be RF interference free from other wireless devices,
- ✓ should have muted/unmuted status LED Indication etc

Ceiling Speaker
- ✓ Motorized directional Ceiling Speaker Two-way full range passive loudspeaker,
- ✓ One powerful 5.5" LF driver with 1" HF. It is a high-performance,
- ✓ Frequency Response 65 Hz – 19 kHz,
- ✓ Program Power 60W,
- ✓ Peak Power 120W,
- ✓ Sensitivity 1W/1m) 88 dB,
- ✓ Max SPL (Continuous/1m) 109 dB,
- ✓ Max SPL (Peak) 112 dB,
- ✓ Nominal Impedance 8 Ohms, Crossover Mode Passive,
- ✓ Dispersion 115° (H) x 90° (V),

Column speaker
- ✓ Full range column speaker, eight full range 1.75" (44 mm) Faital pro driver.
- ✓ Designed from high quality aluminium alloy, applications are Public address systems, Lecture theatres, etc.
- ✓ frequency Response 150 Hz – 18 kHz,
- ✓ Program Power 320W,
- ✓ Peak Power 640W, Sensitivity(1W/1m) 91 dB,
- ✓ Max SPL (Continuous/1m) 116 dB, Max SPL (Peak/1m) 119 dB,
- ✓ Nominal Impedance 8 Ohms,
- ✓ Crossover Mode Full range driver,
- ✓ Dispersion 90° (H) x 60° (V),
- ✓ Cabinet Material Aluminium alloy

Amplifier
- ✓ Four multi-channel professional Class-D amplifier, with
- ✓ output power@ 8Ω /Ch 200W×4, Output power@ 4Ω /Ch 350W×4,
- ✓ Bridge@8Ω 650W×2, Bridge@4Ω (not recommended),
- ✓ Frequency Response 20Hz – 20kHz (±0.5dB),
- ✓ THD+N <0.05% @ 8Ω 1kHz,
- ✓ S/N Ratio >98dB (A-weighted),
- ✓ Damping Factor >500 (1kHz @ 8Ω),
- ✓ Input Sensitivity 0.775V / 1.44V,
- ✓ Input Impedance 20kΩ/10kΩ, Clip limiters, Over temperature protections, Short circuit protection.

Digital Signal Processor
- ✓ Digital Signal Processor with 8 Mic/Line inputs, 8 Line outputs and 8 software assignable channels, configurable as Mic/Line Inputs or Line outputs.
- ✓ The processor shall have minimum 16 assignable & routable AEC channels.
- ✓ The processor shall have minimum 8x8 Dante channels and shall also support up to 128x128 Network audio channels via Dante or AES67.
- ✓ It shall also support POTS and SIP Softphone integration for Audio conferencing and configurable 16x16 USB Audio channels via USB-B ports supporting AV USB Bridging for software or web-based conferencing applications.
- ✓ The processor shall also have minimum 24 bit-A/D-D/A converters, 48 kHz Sample rate, Input frequency response of 20 Hz to 20 kHz @ +21dBu, Input dynamic range > 109.5 dB at @ +24 dBu sensitivity. The processor shall support third party device control via Ethernet, RS232 and GPIO with licesne

PTZ Camera
- ✓ Image Sensor - Type 1/2.3 Inch CMOS sensor
- ✓ Effective Pixels - approx. 8.29 megapixels (3840 x 2160)
- ✓ With Auto Tracking
- ✓ Lens - f=3.67 – 73.4 mm, F/1.8 – 2.8, 20x optical zoom, 8-bladed circular aperture
- ✓ Optical Zoom- 20x optical zoom
- ✓ Digital Zoom - 20x digital zoom
- ✓ Focal Length - 3.67 – 73.4 mm, f/1.8 – 2.8, 35mm equivalent focal length
- ✓ Angle of View – UHD - Horizontal: 65.6 (W) – 3.6° (T)
- o Vertical: 39.8° (W) – 2.0° (T)
- ✓ Min. Illumination - Approx. 1.5 lux
- ✓ Shutter Speed- 1/6 – 1/2000 sec
- ✓ Iris - Manual/Automatic aperture
- ✓ Gain - 0.0 dB – 36 dB
- ✓ ND Filter - Built-in (1/8 at maximum, gradation ND), motor operated
- ✓ White Balance - AUTO (AWB), Set A, Set B, preset settings (daylight: 5,600 K1, tungsten lamp: 3,200 K2),
- o color temperature setting (2,000 K – 15,000 K), Manual
- ✓ Focus - Focus mode: Manual, Continuous AF, Face AF, Tracking
- o AF type: Hybrid AF, Contrast AF
- ✓ Pan and Tilt
- o Pan operation range: Horizontal ±170°
- o Pan operation speed: 0.2° – 300°/sec.
- o Tilt operation range: Vertical -30° – +100°
- o Tilt operation speed: 0.2° – 180°/sec.
- ✓ Video Output Format: HDMI
- ✓ 2160: 29.97P, 25.00P, 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P, 720: 59.94P, 50.00P (4:2:2 10 bit)
- ✓ Video Output Format: IP
- ✓ Video Output Format: USB
- ✓ Video Transmission Protocol
- ✓ Protocol: XC, RTSP/RTP, NDI|HX, RTMP/RTMPS, Standard Communication (Serial), Standard Communication (IP), SRT.
- ✓ Preset - 100
- ✓ Interface - Communication Control, LAN, Serial, IR
- o Network Terminal, LAN x 1, RJ45, 1000Base-T
- ✓ HDMI OUT Terminal
- ✓ HDMI connector x 1, output only
- ✓ RS-422 Terminal
- ✓ RJ45 connector x 1
- ✓ MIC Terminal - φ3.5 mm stereo mini jack
- ✓ USB Terminal
- ✓ Type-C (USB 3.1) x 1
- ✓ One camera shall track the presenter

	✓ Wall / Ceiling Mount to be provided with PTZ camera		

HDMI Matrix
- ✓ Professional-grade 4x4 HDMI 2.0 matrix switcher
- ✓ Transmits 4K x 2K at 60 Hz 4:4:4 signal up to 16.4-ft via HDMI port
- ✓ Provides powerful EDID management, built-in EDID can be invoked via DIP switch on rear panel, RS-232 common or web-based GUI
- ✓ Controllable via front panel button, IR, RS232 or web-based GUI
- ✓ LCD screen shows real-time I/O connection status
- ✓ Convenient firmware upgrade through micro USB port
- ✓ Easy installation with rackmounting design
- ✓ SPDIF ports provide de-embedded HDMI audio output

Video Switcher
- ✓ Captures 4 channels of 4K @ 60 HDMI, mixes and switches the streams while providing audio mixer functionalities and seamless transition for pro-level broadcasting
- ✓ Multiple output options:
- ✓ – HDMI PGM / Loop-through at 4K @ 60 for preview and monitoring purposes
- ✓ – USB-C output 4K @ 30 for live broadcast on the Internet
- ✓ Versatile control methods via the front panel pushbuttons, RJ-45 port for serial control via Control System, and OEM app
- ✓ OEM app – users can remotely control device settings in real-time, including multiple AV source switching / mixing, content cropping / resizing, layout options (full screen / PiP / PbP / PoP), transitions, Chroma Key, and logo adding

HDMI Extender
- ✓ HDMI HDBaseT Extender (4K@100m)
- ✓ Supports resolutions of up to Ultra HD 4kx2k and 1080p Full HD
- ✓ Supports up to 340MHz bandwidth for high performance video
- ✓ Supports Dolby True HD and DTS HD Master Audio
- ✓ Built-in 8KV / 15KV ESD protection

USB Industrial Hub Switch
- ✓ 4 x 4 USB 3.2 Gen 1 Industrial Hub Switch
- ✓ Enables four Systems to share USB peripheral up to four devices
- ✓ USB 3.2 Gen 1 compatibility with maximum data transfer rates up to 5 Gbps
- ✓ Multiplatform support - Windows, Mac and Linux
- ✓ Displays port focus via LED indicators
- ✓ Metal mechanical cassis with wall mountable design
- ✓ Supports aftermarket USB M2 screw locking cable
- ✓ Supports port selection via remote controller or RS-422 / RS-485 link through 5-pin terminal block
- ✓ Supports hot plugging

10 m Active USB cable Type A male to Type A female for BYOD

10 m High Speed HDMI cable for BYOD

Popup Box - Tabletop Socket Material: Aluminum Alloy
3* Universal Power
2* USB Charger A+C 5V2.1A Round Corner

Unified Communication Bar
- ✓ Unified Communication Bar (All in One) with BYOD
- ✓ Built-in dante integration, Should have Built-In DSP which automatically optimizes room acoustics,
- ✓ Integrated Beamforming microphone, 6 Nos. of MEMS capsules with pickup range of 4.5 m or more,
- ✓ Should have 4K ePTZ camera, 5x digital zoom with automatic framing and person tiling feature,
- ✓ Built-in Class D amplifier with 4 Nos. of 40 W full range speaker,
- ✓ Should have 2 HDMI, 1 USB Type-C (3.1), 1 USB Type-A (3.1), Dual Ethernet ports, Bluetooth 5.1 and IEEE 802.11a / b / g / n / ac Wi-fi standard, Zooms and Teams certified, High-precision audio settings for maximum control, setting to exclude (min 3) and prioritize the areas of the room, which automatically focus on the person speaking in the room, One Priority Zone and up to three Exclusion Zones shall be adjustable, should be controlled through centralized monitoring software along with
- ✓ IR remote control and mounting kit etc all complete as required.

Video Wall Technical Specifications of Screen
- ✓ LED Screen Size   8000mm x 4500mm or higher
- ✓ Pixel Pitch 2.5 mm or lower
- ✓ LED type   SMD 3 in 1
- ✓ Aspect Ratio   16:9
- ✓ Resolution As per LED size
- ✓ LED Configuration 1 Red, 1 Green, 1 Blue
- ✓ Pixel Density   160000 Pixel / Sq.mtr More
- ✓ Half Gain Horizontal / Vertical Viewing
- ✓ Angle   H 160 deg / V 160 deg or better
- ✓ Refresh Rate   ≥3840 Hz or better
- ✓ Gray Scale Processing   16 Bit or higher
- ✓ Cabinet Material   Die-cast aluminum/ carbon magnesium alloy
- ✓ Cabinet design   Fan-less and Cable less
- ✓ Cabinet Depth   35 mm or less
- ✓ Brightness   1000 Nits or higher
- ✓ Maximum Power Consumption (during
- ✓ LED start-up)   450 w/sqm or lower
- ✓ Average Power Consumption 200 w/sqm or lower
- ✓ Dimming Capability 256 levels
- ✓ Operation Temperature   0°c ~45°c
- ✓ Working Humidity   10% RH to 90% RH, non-condensing
- ✓ Rated Voltage   AC220V±10% @ 50/60Hz
- ✓ Contrast Ratio   8000:1 or better
- ✓ Access For Maintenance   Front
- ✓ IP Level   IP 20 (Front & Back) or better
- ✓ Life Span (Hours)   100000 or more
- ✓ Maintenance Features   Quick swap features with Auto Calibration
- ✓ Spare part 5% spare of total LED

- ✓ Mandatory Certifications   CE, FCC, BIS, UL/ETL or more, BIS of the controller is also required
- ✓ Mounting Structure MS/Aluminum structure as per site requirement, 100% maintenance free, design flexibility, no effect by humidity & water durable to impact, no polishing required, including fastener/clamp etc.
- ✓ Brightness Measurement   The brightness of active LED wall of 1000 nits must be measured by the OEM in presence of Engineer-In-Charge at site using luminance meter which gives output in cd/sqm or nits and not in Lux. Purchase proof and calibration certificate of luminance meter to be submitted. Calibration certificates should be certified from the National Physical Laboratory Lab.

LED Controller
- ✓ Control port   RJ45 / USB
- ✓ Video input type   DP x 1, HDMI x 1 or more
- ✓ LED Output   16 or more
- ✓ Support PIP   3 or more
- ✓ Certification   BIS
- ✓ Additional LED & Controller should be from same OEM for the ease of Integration

Supply of Digital Interactive Podium
- ✓ Metallic Frame and Wooden Top with
- ✓ 21.5 inch Full HD (Electromagnetic + Capacitive) Interactive Display with Electromagnetic Pen, with
- ✓ Motorized Tilting of the Interactive Panel, with
- ✓ Provision to install Gooseneck Microphone, Interactive panel, Keyboard Tray and space to store AV equipment,
- ✓ Interactive display with full HD resolution of 1920x1080, Technology IPS LCD, Aspect ratio16:9, Brightness 250 cd/m2, Contrast ratio1000:1, Pen Type shall be Pressure-sensitive and cordless.
- ✓ Top connectivity plate with HDMI, USB x 2 and Power socket for external Laptop connectivity, built-in 4 x 2 HDMI Matrix Switcher with 4K@60Hz (4:4:4, 8- bit) as well as support for 16-bit Deep Colour, HDR (High Dynamic Range), 3D content, HD audio and other features defined by HDMI 2.0 specification and Audio De-embedder for internal connectivity.

Technical Specification for (Network Firewall			
Mounting Type	1U Rack Mountable		
Power supply	Internal auto-ranging AC-DC 100-240VAC, 3-6A@50-60 Hz External Redundant PSU Option		
Power consumption	45 W/153.7 BTU/hr (idle) 167 W/570.74 BTU/hr (max.)		
PoE addition enabled	76 W/260 BTU/hr (max.)		
Operating temperature	0°C to 40°C (operating) -20°C to +70°C (storage)		
Humidity	10% to 90%, non-condensing		
Storage (local quarantine/logs)	Integrated min. 120 GB SATA-III SSD		
Ethernet interfaces(fixed)	8 x GbE copper 2 x SFP fiber		
Bypass port pairs	1		
Management ports	1 x RJ45 MGMT 1 x COM RJ45 1 x Micro-USB (cable incl.)		
Other I/O ports	2 x USB 3.0 (front) 1 x USB 2.0 (rear)		
Number of Flexi Port slots	1		
Flexi Port modules(optional)	8 port GbE copper 8 port GbE SFP fiber 4 port 10GE SFP+ fiber 4 port GbE copper bypass (2 pairs) 4 port GbE copper PoE + 4 port GbE copper 4 port 2.5 GbE copper PoE 2 port GbEFiber (LC) bypass + 4 port GbE SFP Fiber		
Max. total port density (incl. use of modules)	18		
Max. Power-over-Ethernet (using Flexi Port module)	1 module: 4 ports, 60W max.		
Optional add-on connectivity	SFP DSL module (VDSL2) SFP/SFP+ Transceivers		
Display	Multi-function LCD module		
Firewall throughput	39,000 Mbps		
Firewall IMIX	20,000 Mbps		
Firewall Latency (64-byte UDP)	4 µs		
IPS throughput	7,000 Mbps		
Threat Protection throughput	1,500 Mbps		
NGFW	6,300 Mbps		
Concurrent connections	6,500,000		
New connections/sec	148,000		
IPsec VPN throughput	20,500 Mbps		
IPsec VPN concurrent tunnels	5,000		
SSL VPN concurrent tunnels	2,500		
SSL/TLS Inspection	1,450 Mbps		
SSL/TLS Concurrent connections	18,432		
Standard Protection	Base Firewall, Network Protection, Web Protection & Enhanced Support		
Certifications	CB, CE, UKCA, UL, FCC, ISED, VCCI, KC, RCM, NOM, Anatel, CCC, BSMI, TEC, SDPPI		
Technical Specification for 10G Core Switch			
Physical Characteristics and Port Requirements			
The switch should be 1U 19" Rack Mountable			
The switch should have dual, redundant, field-replaceable, hot-swappable power supplies			
The switch should have 24 ports of 1GbE/10GbE SFP+ Interfaces. Should be populated with two numbers of 10G SFP+ LR Singlemode Transceivers			
The switch should have four uplink ports of 10GbE/25GbE (SFP+/SFP28). Cables/Transceivers shall be populated as per the design			
The uplink ports should be upgradeable to 50 GbE (SFP56) or 40 GbE (QSFP+) interfaces			
The switch should have RJ-45 serial or USB-C console port, RJ-45 Ethernet Management port			

Specification		
and USB Interface		
The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software to optimize performance and capacity		
Performance Requirements		
The switch should have multi-core CPU/processor		
The proposed switch should have minimum 8GB DRAM, 8GB Flash Memory and 8MB Packet buffer		
The proposed switch should have minimum 680 Gbps switching capacity		
The switch should support switch virtualization feature for combining multiple switches into single logical unit and providing Multi-chassis Link aggregation (MC-LAG) for uplink/downlink connectivity		
The switch ports should support Jumbo frames with maximum frame size of 9K bytes		
The switch should have minimum 32,000 MAC Address Table size		
The switch should support minimum 60K IPv4 routes, 30K IPv6 Routes and 4K IPv4/IPv6 Multicast Routes		
The switch should support minimum 10K IPv4 ACLs and 5K IPv6 ACLs		
Operating System Capabilities		
The switch should have modular operating system with micro-services or equivalent architecture providing superior fault tolerance and high availability		
The switch OS should support programmability through REST APIs and Python scripting or equivalent		
All the features mentioned in the specifications shall be enabled/activated. Any licenses required shall be included from Day 1		
Layer-2, QoS and Security Features		
The switch should support Spanning Tree Protocol (STP/RSTP/MSTP) and Ethernet Ring Protection Switching (ERPS) for rapid protection and recovery		
The switch should support Link Aggregation Control Protocol (LACP)		
The switch should support IEEE 802.1Q VLANs (4000 VLANs)		
The switch should support Private VLAN for traffic isolation for users on the same VLAN		
The switch should provide storm protection to limit unknown broadcast, multicast, or unicast storms with user-defined thresholds		
The switch should support concurrent IEEE 802.1X, Web, and MAC authentication schemes and each switch port should accept up to 24 sessions		
The switch should support Strict priority (SP) queuing, graceful congestion management and Access control lists (ACLs) for both IPv4 and IPv6 traffic		
The switch should support Internet Group Management Protocol (IGMPv1, v2, and v3) and Multicast Listener Discovery (MLDv1 and v2)		
The switch should support VXLAN to connect two or more VXLAN tunnel endpoints (VTEP)		
Layer-3 Routing and Services Features		
The switch should support IPv4 and IPv6 Static Routing		
The switch should support Open shortest path first (OSPF) for IPv4 and IPv6		
The switch should support Border Gateway Protocol 4 (BGP) for IPv4 and IPv6		
The switch should support Policy Based Routing (PBR)		
The switch should support Multicast Routing using PIM-SM/SSM and Multicast Service Delivery Protocol (MSDP)		
The switch should suppor dynamic VXLAN with BGP-EVPN supporting Multicast and IPv6 over VXLAN/EVPN Overlay		
The switch should support DHCP Server providing DHCP services (for IPv4 and IPv6)		
The switch should support Equal-Cost Multipath (ECMP), Generic Routing Encapsulation (GRE) and Virtual routing and forwarding (VRF-Lite)		
Management Features		
The switch should support SNMP and Remote monitoring (RMON)		
The switch should support sFlow or equivalent for traffic analysis		
The switch should provide advanced telemetry and automation features for monitoring, troubleshooting and improving network operations		
The switch should support RADIUS and TACACS+ for securing administrative access		
The switch should have Command Line Interface (CLI) with a hierarchical structure and SSH, Secure FTP/TFTP support		
The switch should support Precision Time Protocol (PTP)		
The switch should supportPort mirroring		
The switch should be manageable from cloud NMS or On-premises NMS solution offered		
The switch should support TPM & Zero-Touch Provisioning (ZTP). The switch shall support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests		
Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source		
Certifications and Industry Recognition		
The switch should be Common Criteria Certified (EAL or NDPP)		
The switch should have RoHS compliance		
The switch should have safety/emissions certifications including UL/CUL 69050, EN 55024, VCCI Class A		
All Switches, Transceivers, Wireless APs and NMS shall be from the same OEM. The OEM shall be present in Leaders or Challengers quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure consistently in last five years		
Support and Warranty		
The switch shall be offered with minimum five years hardware warranty with 24x7 Technical support from OEM directly		
Switch or Switch's Operating System on different hardware platform should be tested for EAL 2/NDPP or above under Common Criteria Certification.		
The OEM shall be in Leaders Quadrant of Gartner report for Wired & Wireless LAN Infrastructure for minimum 5 Consecutive Years.		
Technical Specification for On-Premises Wireless LAN Controller		
Physical Characteristics and Port Requirements		
The controller appliance should be 1U 19" Rack Mountable, mounting kit should be included		
The controller appliance should have minimum 4 x Gigabit Ethernet interfaces (100/1000BASE-T)		
The controller appliance should support up to 64 wireless access points and up to 2,048 concurrent users/devices		
The controller appliance should have RJ-45 serial or USB-C console port and USB Interface		
The controller appliance should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source		
The controller appliance should be fan less with a maximum power consumption of 25 Watts (with USB)		
The controller should be deployed in high availability - Active/Active (1:1) or Active/Standby (1+1). The wireless APs should establish simultaneous communication channel with both active and standby controller to provide instantaneous failover		
The controller should support L2/L3 features including Rapid spanning tree protocol, Link		

Aggregation Control Protocol (LACP), Virtual Router Redundancy Protocol (VRRP), OSPF.		
Wireless Features		
Wireless AP configuration and management should be done from the Mobility Controller		
The solution should support flexible traffic forwarding, including centralized mode in which all user traffic flows to the controller, locally bridged mode in which all user traffic bridged by access device to local LAN segment and policy-routed mode in which user traffic is selectively forwarded to controller or bridged locally, depending on traffic type/policy		
The solution should support the below RF Optimization Features. **a.** Client band steering which keeps dual-band clients on optimal RF band **b.** Sticky client mitigation to ensure client devices are associated with the best-performing AP in the neighborhood to improve client performance and overall network health **c.** Self-healing around failed APs to automatically adjust power levels to compensate for failed APs. **d.** Airtime fairness to provide fair access or to deliver preferred access to clients that connect using the latest 802.11 standard. **e.** RF spectrum load-balancing to evenly distribute clients across available channels. **f.** Single-channel coordinated access to ensure optimal performance even with nearby APs on the same channel **g.** Coverage hole and interference detection to identify clients that cannot associate due to coverage gaps.		
The controller should provide extensive visibility and control into over 3,000 applications to configure security policies and bandwidth controls based on applications and application categories		
The solution should support WPA3 in the Wi-Fi 6 standard brings stronger encryption and authentication methods		
The solution should support IPv6 environments as well as dual-stack interoperability of IPv6 within an IPv4 network		
Security Features		
The controller should have integrated stateful firewall with minimum 4 Gbps firewall throughput and 64K active firewall sessions		
The controller should support IPsec tunnel between controller and IPsec devices		
The controller should support authentication using internal database, LDAP/SSL secure LDAP, Microsoft Active Directory (AD), RADIUS and TACACS+		
The controller should support authentication framework including IEEE 802.1X (EAP, LEAP, PEAP, EAP-TLS, EAP-TTLS, EAP-FAST, EAP-SIM, EAP-POTP, EAP-GTC, EAP-TLV, EAP-AKA, EAP-Experimental, EAP-MD5), MAC address authentication and Web-based captive portal authentication		
The controller should support configuration and enforcement of role-based policies that define proper access privileges for different user groups like employees, guests, contractors etc. across wired and WLANs		
The controller should support Unified Communications and Collaboration (UCC) visibility, reporting and call quality metrics for latency, jitter, and packet loss		
The controller should support Wireless Intrusion Detection/Prevention capabilities as mentioned below. **a.** Simultaneous RF spectrum analysis, client serving and security scanning, across 2.4- and 5-GHz bands. **b.** Classification of interference in multiple categories including Bluetooth devices, Cordless phone, Microwaves, fixed-frequency video and audio devices. **c.** Visualization through spectrum analysis charts including FFT Duty Cycle, real-time FFT and swept Spectrogram. **d.** Automatic rule-based classification and wireless tarpitting to provide an efficient method of containing rogues over the air without impacting neighboring devices. **e.** Impersonation detection and prevention including hotspotter attack detection, MAC address spoofing, AP impersonations, man-in-the-middle attacks and sequence number anomaly detection. **f.** Client intrusion prevention features including honeypot AP protection and valid station protection. **g.** DoS attack detection including management frame floods, de-authentication attacks, probe request floods, fake AP floods, EAP handshake floods etc.		
The controller should support integration with Wireless NMS to display, aggregate and display interferer classification, location and RF information		
Management Features		
The controller should support Web-based configuration through a standard web browser to manage the system		
The controller should support Command line interface through Console and SSH		
The controller should support Syslog, SNMPv2c/v3, Remote Network Monitoring (RMON) and RADIUS Accounting		
The controller should support REST-based APIs allow for integration with third-party solutions		
The controller should support Simple Network Time Protocol v4 or equivalent		
Certifications and Industry Recognition		
Wi-Fi Alliance certified (802.11a/b/g/n/d/h/ac/ad/ax), Enterprise, WPA3™ Enterprise, WPA3™ Personal, Enhanced Open™, WMM™, WMM Power Save		
FIPS 140-2 validated		
Common Criteria certified (EAL/NDPP)		
RoHS compliance		
Safety/emissions certifications including UL/CUL 60950, EN55032, VCCI Class B or equivalent		
All Switches, Transceivers, Wireless Controllers and APs shall be from the same OEM. The OEM shall be consistently present in Leader's quadrant in Gartner's Magic Quadrant for Wired and Wireless LAN Access Infrastructure for last five years		
Support and Warranty		
The controller shall be offered with three years hardware warranty with Next Business Day shipment, 24x7 technical support and access to all generally available software/OS releases		
Technical Specification for Indoor Access Point		
Access Point radio should be minimum 2x2 MIMO with 2 special streams on 2.4Ghz and minimum 4x4 MIMO with 4 special stream 5ghz. The AP should have Dual Radio 802.11ax access point with OFDMA and Multi-User MIMO (MU-MIMO)		
Access Point should be 802.11ax ready from day one and support WPA3 and Enhanced Open security from day one		
AP should have one Smart Rate port (RJ-45, maximum negotiated speed 2.5Gbps) Auto-sensing link speed (100/1000/2500BASE-T) and one 10/100/1000 Mbps speed LAN port. Shall support Link Aggregation (LACP) support between both network ports for redundancy and increased capacity		
Access point should support Built-in technology that resolves sticky client issues for Wi-Fi 6 and Wi-Fi 5 devices		
Access point should support OFDMA and MU-MIMO for enhanced multi-user efficiency		

Access point should IoT-ready Bluetooth 5 and Zigbee support		
Minimum aggregate data rate of 3 Gbps (HE80/HE40)		
Access Point can have integrated internal antenna		
The Max transit power of the AP + Antenna should be as per WPC norms for indoor Access Points. OEM to give a undertaking letter stating that the AP will configured as per WPC guidelines for indoor AP and also submit the WPC certificate showing approval		
Access point should have Interna/External Bluetooth Low energy beacon to support advance location-based services for Mobile engagement solutions and Applications.		
Should support 16x BSSID per AP radio.		
The access point should be capable of performing security scanning and serving clients on the same radio. It should be also capable of performing spectrum analysis and security scanning using same radio.		
Should support BPSK, QPSK, 16-QAM, 64-QAM, 256 QAM and 1024 QAM modulation types		
Access point should support 802.3af/at POE standard.		
Intelligent Power Monitoring (IPM) to continuously monitor and report hardware energy consumption. AP can also be configured to enable or disable capabilities based on available PoE power – ideal when wired switches have exhausted their power budget.		
Access point should have option of external power adaptor as well		
Access point should have console port.		
Must operate as a sensor for wireless IPS		
AP model proposed must be able to be both a client-serving AP and a monitor-only AP for Intrusion Prevention services		
The Access Point should have the technology to improve downlink performance to all mobile devices.		
Access point must incorporate radio resource management for power, channel, coverage hole detection and performance optimization		
AP mounting kit should be with locking mechanism so that AP cannot be removed without using special tools.		
AP should have Kensington security slot		
AP should support standalone mode/ Inbuilt Virtual controller mode for specific requirements.		
The AP should support Advanced Cellular Coexistence (ACC) to minimizes interference from 3G/4G cellular networks, distributed antenna systems and commercial small cell/femtocell equipment		
The AP should support Supports priority handling and policy enforcement for unified communication apps, including Skype for Business with encrypted videoconferencing, voice, chat and desktop sharing		
The AP should support deep packet inspection to classify and block, prioritize, or limit bandwidth for thousands of applications in a range of categories		
Pass point Wi-Fi (Hotspot 2.0) offers seamless cellular-to-Wi-Fi carryover for guests		
The Access point should support maximum ratio combining (MRC) for improved receiver performance		
The Access point should support cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance		
The Access point should support Space-time block coding (STBC) for increased range and improved reception		
The Access point should support Low-density parity check (LDPC) for high-efficiency error correction and increased throughput		
The Access point should support Transmit beam-forming (TxBF) for increased signal reliability and range		
The Access point should support 802.11ax Target Wait Time (TWT) to support low-power client devices		
AP should be UL 2043 certified.		
Regulatory Compliance FCC/ISED CE Marked RED Directive 2014/53/EU EMC Directive 2014/30/EU Low Voltage Directive 2014/35/EU UL/IEC/EN 60950 EN 60601-1-1, EN60601-1-2		
Certifications UL2043 plenum rating Wi-Fi Alliance: Wi-Fi CERTIFIED a, b, g, n, ac Wi-Fi CERTIFIED ax WPA, WPA2 and WPA3 - Enterprise, Personal WMM, WMM-PS, Wi-Fi Vantage, W-Fi Agile Multiband Passpoint (release 2) Bluetooth SIG Ethernet Alliance (POE, PD device, class 4)		
Technical Specification for Outdoor Access Point		
Outdoor Access Point should be Weatherproof and temperature-hardened and should be minimum 2x2 MIMO with 2 special stream on 2.4Ghz and minimum 4x4 MIMO with 4 special stream 5ghz . The AP should have Dual Radio 802.11ax access point with OFDMA technology.		
Access Point should be 802.11ax ready from day one and support WPA3 and Enhanced Open security from day one and support Multi-User MIMO (MU-MIMO)		
AP should have one Smart Rate port (RJ-45, maximum negotiated speed 2.5Gbps) Auto-sensing link speed (100/1000/2500BASE-T) and one 10/100/1000BASE-T (RJ-45) LAN port from day one. Shall support Link Aggregation (LACP) support between both network ports for redundancy and increased capacity		
Access point should support Built-in technology that resolves sticky client issues for Wi-Fi 6 and Wi-Fi 5 devices		
Access point should support OFDMA and MU-MIMO for enhanced multi-user efficiency		
Access point should support IoT-ready Bluetooth 5 and 802.15.4 radio (for Zigbee support) to simplify deploying and managing IoT-based location services		
Minimum aggregate data rate of 3 Gbps		
Access Point can have integrated internal antenna		
The Max transit power of the AP + Antenna should be as per WPC norms for indoor Access Points. OEM to give a undertaking letter stating that the AP will configured as per WPC guidelines for indoor AP and also submit the WPC certificate showing approval.		
Should support 16x BSSID per AP radio.		
The access point should be capable of performing security scanning and serving clients on the same radio. It should be also capable of performing spectrum analysis and security scanning using same radio.		
Should support BPSK, QPSK, 16-QAM, 64-QAM, 256 QAM and 1024 QAM modulation types		
Access point should support 802.3af/at POE standard.		
Access point should have console port.		
AP model proposed must be able to be both a client-serving AP and a monitor-only AP for		

Intrusion Prevention services			
The Access Point should have the technology to improve downlink performance to all mobile devices.			
Access point must incorporate radio resource management for power, channel, coverage hole detection and performance optimization			
AP should support standalone mode/ Inbuilt Virtual controller mode for specific requirements.			
The AP should support Supports priority handling and policy enforcement for unified communication apps, including Skype for Business with encrypted videoconferencing, voice, chat and desktop sharing			
The AP should support deep packet inspection to classify and block, prioritize, or limit bandwidth for thousands of applications in a range of categories			
The Access point should support 802.11ax Target Wait Time (TWT) to support low-power client devices			
Same Access point should work in either Remote AP mode or IPsec VPN mode to allow the corporate user or remote worker to access the corporate network or in case of pandemic situation. Access point should be used to establish a secure SSL/IPsec VPN tunnel to a Controller that is acting as a VPN concentrator.			
AP should be UL 2043 certified.			
Regulatory Compliance FCC/ISED CE Marked RED Directive 2014/53/EU EMC Directive 2014/30/EU Low Voltage Directive 2014/35/EU UL/IEC/EN 60950 EN 60601-1-1, EN60601-1-2			
Certifications Wi-Fi Alliance certified 802.11a/b/g/n Wi-Fi CERTIFIEDTM 6 (802.11ax) Wi-Fi CERTIFIEDTM ac (with Wave 2 features) Passpoint (Release 2)			
Environmental Operating Temperature: -40° C to +65° C (-40° F to +149° F) Humidity: 5% to 95% non-condensing internal to chassis. Storage and transportation: Temperature: -40° C to +70° C (-40° F to +158° F) Operating altitude: 3,000 m Water and dust: IP66/67 Salt tolerance: tested to ASTM B117-07A salt spray 200hrs Wind survival: up to 165 Mph Shock and vibration: ETSI 300-19-2-4			

Technical Specification for Network Switch

I/O Ports and Slots	24 RJ-45 autosensing 10/100/1000 Class 4 PoE ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE- TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP+ 1/10GbE ports		
Processor and Memory	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB		
Memory And Flash	512 MB SDRAM 256 MB flash		
Packet Buffer	1.5 MB		
Performance	100 Mb latency: < 4.7 uSec 1000 Mb latency: <2.4 uSec 10000 Mb latency: <1.3 uSec Throughput (Mpps): 95.23 Mpps Capacity 128 Gbps Routing table size (# of static entries):32 MAC address table size (# of entries):16,000 Reliability MTBF (years): 71		
Environment	Operating temperature: 32°F to 104°F (0°C to 40°C) Operating relative humidity: 15% to 95% @ 104°F (40°C) non-operating temperature: -40°F to 158°F (-40°C to 70°C) non-operating relative humidity: 15% to 95% @ 140°F (60°C) Altitude: Up to 10,000ft (3.048 Km) Acoustic: LWAd = 4.0 Bel LpAm (Bystander) = 24 dB		
Electrical Characteristics	Frequency: 50-60 Hz AC voltage: 100 - 127 / 200 - 240 VAC Current: 4.9 A/2.4 A Maximum power rating: 440.4W Idle power: 20.3W PoE power: 370 W Class 4 PoE Power supply: Internal power supply		
Safety	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014		
Emissions	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016 / CISPR-32, Class A		

Configurations of the Cyber Workstation

Processor	Intel®Xeon®w5-3435XProcessor,45MCache,3.10 GHz		
Processor Heat sink	Premium Air-cooled		
Chipset	W790		
RAM	64GBDDR5-4800ECCRDIMM(Expandable Upto 2 TB)		
Graphic Card	RTX3060,3584CudaCores,12GB GDDR6		
Optical Drive	DVD Burner Drive		
Network Adapter	Intel®DualIntel10GbEthernet&Realtek1GB Ethernet		
Operating System	Windows1164-BitProfessional		
Power Supply	1300W80PlusGoldCertified;FullyModularPower Supply		
Write Blocker	Integrated write protection for IDE/SATA/SAS/FireWire/USB3.0/PCIe ports.		

Cable & Adapter Set	Should have Adapters/Cables for write protected ports: IDE Cable Micro SATA Drive Adapter Apple Blade-Type SSD Adapter mSATA/M.2SATASSDAdapter SATA LIF Drive Adapter 1.8"IDEDriveAdapter 2.5" IDE Drive Adapter IDE ZIF Drive Adapter PCIe card SSD adapter PCIe M.2 SSD adapter PC Ieadapter for Apple SSD PCIeU.2SSDadaptercable PCIeadapterforAppleSSD2016+		
HDD Cooling	1xInserting/Extendable type integrated Drive Cooling Bay with SATA Write block function		
SSD & HDD Drives	1x1TBSATA6Gb/sSSD Drive for OS 1 x 1TB M.2 NVMe SSD for Temp 1x1TBSATA6Gb/sSSD for Cache 1x4TB7200RPMSATA6Gb/sHard Disk Drive for Data		
Multi Card Reader	1xWriteBlockedMulti-CardReader Easy Accessible Read/Write Switching must be avoided to protect the accidental loss of Data Integrity of Evidence Flashcards.		
Front Mounted Drive Bays	OpticalDiskDrive-1xDVDBurnerDrive 2 x SATA SSD for OS & Cache drives 1xSATAforDataDrive; 3xHotSwapSAS/SATA3.5"Bays		
I/O Ports	Front Ports:Hub1=4xUSB Rear Ports: 4 x USB		
Audio	7.1HDAudiowithopticalS/PDIF		
Peripherals	24"LEDmonitor,WiredKeyboard&Mouse		
Toolkit	Multi-Piece Security Toolkit to assist in Digital Evidence Gathering, CD containing system estore media.		
Product Repute	The product should be from a Reputed Brand.		
Configurations of the MFP			
• **Core Functions:** Print, Scan, Copy • **Ink System:** Color, Refillable tanks. • **Print Resolution**: Up to 4800 x 1200 dpi • **Print Speed** (ISO): Black: ~8–12 ppm (pages per minute), Color: ~5–10 ppm • **Duplex Printing**: Yes • **Paper Sizes Supported**: A4, A5, A6, B5, Letter, Legal, envelopes • **Paper Tray Capacity**: ~100–150 sheets • **Output Tray**: ~30–50 sheets • **Media Types**: Plain paper, photo paper, envelopes, labels • **Scanner Type**: Flatbed and ADF • **Scan Resolution**: Up to 1200 x 2400 dpi • **Scan Size**: Up to Legal/A4/Letter • **Copy Speed**: Similar to print speed • **Connectivity**: USB 2.0 or above, Wi-Fi / Wi-Fi Direct, Apple AirPrint, Google Cloud Print (discontinued but replaced by native mobile print), Mopria, and brand-specific apps	1		
Configurations of the Visualizer			
• Camera Specifications • **Sensor Type**: CMOS or better • **Resolution**:Full HD (1920 × 1080) or above • **Zoom**: **Optical Zoom**: 5x or above, **Digital Zoom**: Up to 16x–30x • Lighting • **Built-in LED Lights**: Adjustable brightness • Display & Output • **Frame Rate**: 30 fps (for smooth motion display) • **Output Ports**:HDMI, VGA, USB, LAN • **Live Output**: Project live feed to monitor or projector • Document/Scan Area • **Max Capture Area**: Legal, A4 • **Focus**: Auto and Manual • **Image Rotation**: 0°, 90°, 180°, 270° • **Annotation Support**: Via bundled software • **Storage & Connectivity** • **Internal Storage**: Minimum 8 GB • **Memory Card Slot**: SD/USB drive support • **Connectivity**:USB 2.0 / 3.0 OR Wi-Fi • Software Features: Live annotation, Image capture & recording, Split screen and picture-in-picture, Compatible with Zoom, Teams, Google Meet	1		
Configurations of the Video Recorder			
• **Sensor Type**: CMOS (1/2.3" or larger) • **Video Resolution**: 4K UHD (2160p) • **Frame Rate**: 30, 60, 120 fps (with slow-motion options) • **Zoom**:Optical Zoom: 10x–20x (higher is better), Digital Zoom: Up to 300x • **Storage**: SD/SDHC/SDXC card (up to 512 GB+) • **Audio**:Built-in mic with External mic input • **Display**: Flip-out LCD touchscreen • **Battery Life**: minimum 4 hours per charge • **Connectivity**: USB, HDMI, AV out, Wi-Fi	1		
Configurations of the Storage			
• Type: External SSD • **Capacity**: 2 TB • **Speed**: 400 MB/s – 1050 MB/s (USB 3.2 Gen 2) • **Interface**: USB-C/Thunderbolt-3 • **Use Case**: Fast portable storage, video editing	1		
Cost of Resident Engineer			
Cost of Resident Engineer (after 1 year) *(Please quote rate for one year)*	1		
Virtual Reality (VR) Headset with controller and end to solution to create Virtual Court Environment			
1. Display • **Type:** LCD/OLED/Micro-OLED • **Resolution:** Minimum 2064 x 2208 per eye • **Refresh Rate:** 72Hz to 144Hz or higher • **Field of View (FOV):** ~90° to 130°	1		

- **IPD Adjustment:** Interpupillary distance adjustment, mechanical or software-based

2. Audio

- **Built-in Audio:** Integrated speakers or headphones
- **3D Spatial Audio:** For immersive directional sound
- **Mic:** Built-in microphone

3. Tracking & Sensors

- **Inside-Out Tracking:** Cameras on the headset track movement
- **Outside-In Tracking:** External sensors like base stations
- **Sensors:** Gyroscope, Accelerometer, Magnetometer

4. Controllers

- **Tracking Type:** Optical or infrared
- **Haptics:** Basic rumble to advanced haptic feedback
- **Input:** Joysticks, triggers, capacitive touch sensors
- **Battery:** Rechargeable or AA batteries

5. Connectivity

- **Standalone:** Built-in processor and storage
- **PC VR:** Requires tethering via USB-C or DisplayPort
- **Wireless Options:** Wi-Fi 6E, proprietary wireless streaming

6. Performance

- **Processor (Standalone):** Qualcomm Snapdragon XR2 (or newer)
- **RAM (Standalone):** 6 GB to 12 GB
- **Storage:** 64 GB to 512 GB

7. Comfort & Design

- **Face Padding:** Replaceable, foam, or silicone
- **Adjustability:** Head strap, top strap, counterweights
- **Ventilation:** To reduce fogging

<div align="right">

Sd/-
Registrar General
High Court of Uttarakhand,
Nainital–263001.

</div>

****

Form 1: Covering Letter

(To be submitted on the Bidder letterhead)

To,

    The Registrar General,

    High Court of Uttarakhand.

Sir,

Sub: Submission of proposal in response to eTender for Modern E-Classroom With Live Streaming Facility, Lecture Theater Technology Intervention Through Augmented Reality (AR) And Virtual Reality (VR), Establishment Of Cyber Forensic Specialized Centre, AI Tools To Enhance The Digital Library And Application Of Emerging Technologies For Academic Administration And Low Code/No-Code Development Tools-RPA Along WithDigital Infrastructure, Like Signage Etc. andA Wifi Enabled CampusOn Turn-Key Mode

1 Having examined the eTender, we, the undersigned, hereby submit our proposal in response to your eTender notification for above project proposal; in full conformity with the said eTender document.

2 We agree to abide by this Proposal, consisting of this letter, the Qualification Criteria forms and the Technical Proposal form, the duly notarized Board Resolution/ Power of Attorney, and all attachments, for a period of 180 days from the date fixed for submission of Proposals as stipulated in the eTender modification resulting from contract negotiations, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

3 If we are entrusted this project, we undertake to provide Performance Bank Guarantee in the form and amount prescribed.

4 We hereby declare that all the information and statements in this proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

5 If negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in the eTender, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

6 We understand you are not bound to accept any proposal you receive

Dated this (date / month / year)

Authorized Signature [in full and initials]

Name of Authorized Signatory

Designation of Authorized Signatory

Name of Bidder

Address

Form 2: General Information

SN	Particulars	Details to be Furnished
1.	Details of responding Bidder	
a)	Name	
b)	Address	
c)	Telephone No.	
d)	Fax No.	
e)	Website	
2.	Details of Contact Person	
a)	Name	
b)	Designation	
c)	Address	
d)	Telephone No.	
e)	Mobile No.	
f)	Fax No.	
g)	Email	
3.	Details of Authorized Signatory (please attach proof)	
a)	Name	
b)	Designation	
c)	Address	
d)	Telephone No.	
e)	Mobile No.	
f)	Fax No.	
g)	Email	

Form 3: Performa of Compliance letter/Authenticity of Information Provided

(Shall be submitted as scanned copy on Bidder's letterhead duly signed by Authorized signatory)

Date:

To,

     The Registrar General,

     High Court of Uttarakhand.

Sub: Compliance with the tender terms and conditions, requirements and Eligibility Criteria

Ref: "Submission of proposal in response to eTender for Modern E-Classroom With Live Streaming Facility, Lecture Theater Technology Intervention Through Augmented Reality (AR) And Virtual Reality (VR), Establishment Of Cyber Forensic Specialized Centre, AI Tools To Enhance The Digital Library And Application Of Emerging Technologies For Academic Administration And Low Code/No-Code Development Tools-RPA Along WithDigital Infrastructure, Like Signage Etc. andA Wifi Enabled CampusOn Turn-Key Mode

Dear Sir,

1   With reference to above referred tender, I, undersigned <<Name of Signatory>>, in the capacity of <<Designation of Signatory>>, is authorized to give the undertaking on behalf of <<Name of the bidder>>.

2   We wish to inform you that we have read and understood the technical specification and total requirement of the above-mentioned bid submitted by us on DD.MM.YYYY.

3   We hereby confirm that all our quoted items meet or exceed the requirement and are absolutely compliant with specifications mentioned in the bid document.

4   We also explicitly understand that all quoted items meet technical specification of the bid & that such technical specification overrides the brochures/standard literature if the same contradicts or is absent in brochures.

5   In case of breach of any tender terms and conditions or deviation from bid specification other than already specified as mentioned above, the decision of HIGH COURT OF UTTARAKHAND   Tender Committee for disqualification will be accepted by us.

6   The Information provided in our submitted bid is correct. In case any information provided by us are found to be false or incorrect, you have right to reject our bid at any stage including forfeiture of our EMD/ PBG/cancel the award of contract. In this event, HIGH COURT OF UTTARAKHAND   reserves the right to take legal action on us.

Thanking you,

Dated this _____ day of_____YYYY

Signature: _____

(In the Capacity of): _____

Duly authorized to sign bid for and on behalf of

_____

Note: This form should be signed by authorized signatory of bidder

Form 4: Bid Processing Fees & Earnest Money Deposit Details

Bid Processing Fees & Earnest Money Deposit Details

SN	Item	Amount (In Rs.)	Name of the Bank & Branch	Demand Draft/ Bankers Cheque/ Bank Guarantee/ FDR Details
1	Bid Processing Fees (Tender Fee)			
2	Earnest Money Deposit (E.M.D.)			

Form 5: Format of Performance Bank Guarantee

Performance Bank Guarantee

(To be stamped in accordance with Stamp Act)

Ref:

Bank Guarantee No

                                                                Date:

To

        Registrar General,

        High Court of Uttarakhand.

Dear Sir,

WHEREAS...................... (Name of Bidder) hereinafter called "the Bidder" has undertaken, in pursuance of Contract dated, 2019 (hereinafter referred to as "the Contract") to implement for HIGH COURT.

AND WHEREAS it has been stipulated in the said Contract that the Bidder shall furnish a Bank Guarantee ("the Guarantee") from a scheduled bank or the sum specified therein as security for Selection of vendor for establishment of Modern E-Classroom With Live Streaming Facility, Lecture Theater Technology Intervention Through Augmented Reality (AR) And Virtual Reality (VR), Establishment Of Cyber Forensic Specialized Centre, AI Tools To Enhance The Digital Library And Application Of Emerging Technologies For Academic Administration And Low Code/No-Code Development Tools-RPA Along WithDigital Infrastructure, Like Signage Etc. andA Wifi Enabled CampusOn Turn-Key Mode

WHEREAS we_____ ("the Bank", which expression shall be deemed to include it successors and permitted assigns) have agreed to give HIGH COURT) the Guarantee:

THEREFORE, the Bank hereby agrees and affirms as follows:

1 The Bank hereby irrevocably and unconditionally guarantees the payment of all sums due and payable by the BIDDER to HIGH COURT OF UTTARAKHAND   under the terms of their Agreement dated _____ on account of full or partial non-implementation and/or delayed and/or defective supply of video conferencing equipment's to shared Locations. Provided, however, that the maximum liability of the Bank towards HIGH COURT OF UTTARAKHAND   under this Guarantee shall not, under any circumstances, exceed _____in aggregate.

2 In pursuance of this Guarantee, the Bank shall, immediately upon the receipt of a written notice from HIGH COURT OF UTTARAKHAND   stating full or partial non-implementation and/or delayed and/ or defective implementation, which shall not be called in question, in that behalf and without delay/demur or set off, pay to HIGH COURT OF UTTARAKHAND   any and all sums demanded by HIGH COURT OF UTTARAKHAND   under the said demand notice, subject to the maximum limits specified in Clause 1 above. A notice from HIGH COURT OF UTTARAKHAND   to the Bank shall be sent by Registered Post (Acknowledgement Due) at the following address:

_____

_____

Attention Mr._____

3 This Guarantee shall come into effect immediately upon execution and shall remain in force for a period of contract plus three additional months from the date of its execution.

4 The liability of the Bank under the terms of this Guarantee shall not, in any manner whatsoever, be modified, discharged or otherwise affected by:

i any change or amendment to the terms and conditions of the Contract or the execution of any further Agreements.

ii any breach or non-compliance by the Operator with any of the terms and conditions of any Agreements/credit arrangement, present or future, between Operator and the Bank.

5 The Bank also agrees that HIGH COURT OF UTTARAKHAND at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance without proceeding against BIDDER and not withstanding any security or other guarantee that HIGH COURT OF UTTARAKHAND may have in relation to the BIDDER's liabilities.

6 The BANK shall not be released of its obligations under these presents by reason of any act of omission or commission on the part of HIGH COURT OF UTTARAKHAND or any other indulgence shown by HIGH COURT OF UTTARAKHAND or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the BANK.

7 This Guarantee shall be governed by the laws of India and only the courts of State Capital shall have exclusive jurisdiction in the adjudication of any dispute, which may arise hereunder.

Dated this the ....Day of ....

Witness

(Signature)   (Signature)

(Name)   Bank Rubber Stamp

                                                    (Name)

(Official Address)   Designation with Bank

                                    Stamp Plus Attorney as per

                                    Power of Attorney No

                                    Dated:

Form 6: Manufacturer's Authorization Form (MAF)

(To be submitted on OEM Letter Head)

Dated:

To,

....

....

....

Sub: Manufacturer's Authorization Form (MAF) For Submission Of Proposal In Response To Etender For Modern E-Classroom With Live Streaming Facility, Lecture Theater Technology Intervention Through Augmented Reality (AR) And Virtual Reality (VR), Establishment Of Cyber Forensic Specialized Centre, AI Tools To Enhance The Digital Library And Application Of Emerging Technologies For Academic Administration And Low Code/No-Code Development Tools-RPA Along With Digital Infrastructure, Like Signage Etc. And A Wifi Enabled Campus On Turn-Key Mode

Tender Enquiry No.- Dated

Dear Sir,

We [insert: name of OEM] who are established and reputable manufacturers of [insert: name and/or description of the equipment or other goods / services] having production facilities at [insert: address of factory] do hereby authorize BIDDER NAME &ADDRESS to submit a bid, and subsequently sign the Contract with you for Tender No dated including the above equipment quoted to PRIME BIDDER against this NIT.

We hereby extend our full Technical Support, Guarantee and Warranty on a back to back basis as per the original Tender Specification for the above specified equipment/ materials offered supporting the supply, installation and achieving of Operational Acceptance of the System by the Bidder against these Bidding Documents, and duly authorize said Bidder to act on our behalf in fulfilling the contractual obligations.

For and on behalf of the Manufacturer

(Signature)..

(Place): ....

(Printed Name)...

(Designation)..

(Common Seal)…………………………………….....

--------------------END OF DOCUMENT--------------------