

**Board Of Revenue, Uttarakhand,  
Mussoorie Bypass, Ring Road Ladpur,  
Dehradun-248008**

Letter/Tender No. 4345 /IV-149/2017-18

Dated: 01-01-2019

**E-tender**

<b>Nature of the Project</b>	E-tender Documents for Supply & Installation of "Servers and its related items" for Department of Stamp And Registration of Uttarakhand.
<b>Tendering Authority</b>	Commissioner cum Secretary, Board of Revenue Uttarakhand, Dehradun
<b>Date of Bid Publishing</b>	<b>01-01-2019, 05.00 PM</b>
<b>Start Date of Bid Download/submission</b>	<b>02-01-2019, 10.00 AM</b>
<b>Last date of Bid Download</b>	<b>23-01-2019, 01.00 PM</b>
<b>Last Date &amp; Time of Submission of Bid</b>	<b>23-01-2019, 05.00 PM</b>
<b>Last Date &amp; Time of Submission of Hard copy bid</b>	<b>24-01-2019, 01.00 PM</b>
<b>Technical Bid Opening Date &amp; Time</b>	<b>24-01-2019, 03.00 PM</b>
<b>Financial Bid Opening Date &amp; Time</b>	<b>25-01-2019, 11.00 AM</b>
<b>Websites for downloading Bid Document</b>	<a href="https://uktenders.gov.in">https://uktenders.gov.in</a>
<b>Non refundable Cost of the Tender</b>	Rs. 10,000.00+18%GST=11,800.00 is payable through Demand Draft / Banker's Pay Order from a Nationalized / Schedule Bank, drawn in favor of "Commissioner cum Secretary, Board of Revenue, Dehradun, Uttarakhand." payable at Dehradun.
<b>Earnest Money Deposit</b>	Rs.4,60,000-00 (Rs. Four Lakh Sixty Thousand Only) in the form of DD/FD/Bank Guarantee from a Nationalized/Scheduled bank in favor of "Commissioner cum Secretary, Board of Revenue, Dehradun, Uttarakhand." payable at Dehradun.
<b>Address for Submission of Bid in Hard Copy</b>	Commissioner cum Secretary, Board of Revenue, Uttarakhand, Mussorrie Bypass, Ring Road, Ladpur, Dehradun-248008
<b>Address for all communication &amp; Bid Opening Venue</b>	Commissioner cum Secretary, Board of Revenue, Uttarakhand, Mussorrie Bypass, Ring Road, Ladpur, Dehradun-248008 Website: <a href="http://www.revenue.uk.gov.in">www.revenue.uk.gov.in</a> <b>EMAIL:</b> <a href="mailto:boardofrevenue-uk@gov.in">boardofrevenue-uk@gov.in</a>

*Note : If any date mentioned above is declared as Holiday, that date will be shifted to next working day without any change in other parameters such as venue, etc.*

# **TENDER DOCUMENT – “Servers and its related items ” for Department of Stamp And Registration of Uttarakhand.**

Letter/Tender No. 4345 /IV-149/2017-18

Dated: 01-01-2019

E-tenders are invited for Supply and Installation of “Servers and its related items ” for sub registrar offices of Department of Stamp And Registration of Uttarakhand, in the state under the DILRMP Project.

E-tenders are invited for the above mentioned items for sub registrar offices of Department of Stamp And Registration of Uttarakhand, in the state under the DILRMP Project as per the specification and terms & conditions listed in the enclosed Annexure.

1. The e-tender are invited under two bid system. Technical bid as per eligibility criteria specified under clause 2 and the Financial bid containing rates and commercial terms to be submitted online on <http://uktender.gov.in> only. Financial bid of only those bidders will be opened who will be declared successful in technical bid.
2. Board of Revenue Uttarakhand, PMU, DILRMP invites e-tenders from the Original Equipment Manufacturers (OEM) or its authorized dealer/s with tender specific authorization addressed to us to participate in this tender for supply.
- 3. THE QUOTE FROM VENDORS OTHER THAN ABOVE WILL NOT BE ACCEPTED.**
4. The necessary Tender Documents are attached in the form of Annexure as detailed below:
  - I. **ANNEXURE – ‘I’** contains instructions to the vendors for the tender. The Terms & Conditions (**Annexure I**) is to be signed on each page by the authorized signatory of the company under the company seal and submit the filled-in ANNEXURE – I format (with enclosures, if any).
  - II. **ANNEXURE - ‘II’** is Technical bid document which will contain eligibility criteria for participation in the Tender.
  - III. **ANNEXURE - ‘III’** is financial bid document. Vender has to quote item wise rate of equipments of FOR destination basis inclusive of GST, transportation, transit insurance, installation etc. The Financial bid containing above item wise rates and commercial terms to be submitted online on <http://uktender.gov.in> only.
  - IV. **ANNEXURE – ‘IV’** is a composite format, which, besides detailing the technical specifications of the items, also provides space to indicate/ record your response in an unambiguous manner. The response / offer should be indicated with ‘Y’ for Yes or ‘N’ for No in the appropriate column. For any other supplementary information a separate sheet should be used. On completion, you should sign on each page under your company seal.

V. **ANNEXURE – 'V'** contains specimen of the Performance Bank Guarantee.

5. All the Annexure should be properly filled-in wherever necessary and to be submitted duly signed by the Authorized Signatory(ies) of the Company along with the Company Seal in all the pages.
6. The Technical bids will be examined by technical evaluation committee which may call for clarifications/ additional information from the vendors which must be furnished to the committee in the time stipulated. The prices quoted should be F.O.R. destination inclusive of GST, transportation, transit insurance, loading-unloading, installation charges etc.
7. To ensure uniformity at the time of evaluation and finalization of offers you should ***strictly follow the format & procedure*** indicated in the Annexure and also adhere strictly to the indicated configuration while submitting the offer.
8. All technical bids should be accompanied by:
  - I. A Pay order/demand Draft of nationalized bank **Rs. 10,000.00+18%GST=11,800.00** favoring "**Commissioner cum Secretary, Board of Revenue Uttarakhand**" payable at Dehradun" towards cost of the tender documents.
  - II. A DD/FD/Bank Guarantee from a Nationalized/Scheduled bank (not less than six months) of **Rs. 4,60,000-00 (Rs. Four lakhs sixty thousand Only)** in favoring of "**Commissioner Cum Secretary, Board of Revenue Uttarakhand**" payable at Dehradun towards EMD.
- III. Technical bids not accompanied with the above Pay order/Demand Drafts/F.D.R are liable to be rejected.

**IV. Turnover :**

The bidder's average yearly turnover for IT Hardware / IT related Hardware for the last three years should be over Rs 4.5 crores each year (enclose CA certificate/ balance sheet for the same )

**V. Standards :**

The Goods supplied under this Contract shall confirm to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

**VI. Experience:**

The firm should have at least 03 years of experience of supplying IT hardware to Government of Uttarakhand or Central Government offices working in Uttarakhand. Including Semi Government Organization of Uttarakhand or Central Government. The TIN registration in Uttarakhand should be for more than 03 years.

## **VII. Eligibility Criteria:**

### **1. The eligibility criteria for the Server OEM are as under:**

- A company registered under company act 1956
- Should have all the valid registration for all statutory requirements namely PAN, GST etc.
- All the items should be from one single OEM only.
- Should be ISO Certified.

*(Submit relevant documents for all above)*

### **2. The eligibility criteria for the Bidder are as under:**

- The bidder's average yearly turnover for IT Hardware / IT related Hardware for the last three years should be over Rs 4.5 crores each year ( enclose CA certificate/ balance sheet for the same )
  - In order to provide efficient after sales support it is mandatory that the bidder should have their presence (Working office with service center) in Uttarakhand.
  - The bidder should have Uttarakhand TIN No. for over 3 years (Please submit TIN Certificate)
  - The bidder should have received and executed IT Hardware / IT Related Hardware orders for Government organizations/PSUs based in Uttarakhand in the last 3 years as follows (order copies to be enclosed) : Either three orders of over Rs 1 crore each or five orders of over Rs 50 lacs each.
  - The bidder should submit notarized affidavit of no blacklisting by any State or Central Government Organization.  
*( all relevant documents to be submitted )*
9. The bidder has to submit original copies of EMD, Tender document fees and Technical Bid before **24-01-2019**, till 1.00 PM, at **Board of Revenue Uttarakhand**, Dehradun. Otherwise bid will not be considered.

## **10. Exclusive Clauses For E-Tendering**

### **10.1. GUIDE LINES REGARDING PARTICIPATION IN E-Tendering:**

- a. **PORAL REGISTRATION:** The bidder/firms intending to participate in the bid is required to register in the portal using his/ her active personal/ official email id as his/ her Login id and attach his/ her valid digital signature certificate(DSC) to his/ her unique Login id. He/ She will enter relevant information as asked for about the bidder/ firms. This is a onetime activity for registering in the portal.
- b. **LOGIN TO THE PORTAL:** The bidder/ firms is required to type his/ her Log-In id and password. The system will again ask to select DSC and confirm it with the password of DSC as a second stage authentication. For each Login, a user's DSC will be validated against its date of validity and also against the Certification Revocation List (CRL) of respective CA stored in system database. The system checks the unique Login ID, password & DSC combination and authentication the login process for use of the portal.
- c. **DOWNLOADING OF BID:** The bidder can download the tender of his choice and save it in his system to undertake necessary preparatory work off-line and upload the complete tender at his convenience before the closing date and time of submission.
- d. **PAYMENT OF EMD/ BID SECURITY AND COST OF BID DOCUMENTS:**
  - i. The bidder shall furnish, as part of his Bid, a Bid Security (Earnest Money Deposit) for the amount mentioned under NIT. The bidder shall scan all the written/ printed pages of the Bid Security (EMD) and upload the same in portable document format (PDF) to the system in designated place of the technical bid. Furnishing scanned copy of such documents is mandatory otherwise his/ her bid shall be declared as non responsive and will be rejected.
  - ii. The fixed Deposit/ Bank Guarantee or any other form as mentioned in detailed NIT in respect of EMD/ Bid Security and the Bank Draft in respect of Cost of Tender are to be scanned and uploaded in PDF format along with the bid.
  - iii. The bidder shall provide the cost of bid and the Bid security in sealed cover superscripting the name of the work/ Supply for which the instruments are intended and the Officer Inviting the Bid.

- iv. The original FD's & BD's towards EMD & Tender cost respectively shall be physically produced before the Officer Inviting the Bid or the concerned authorized officer of the department by Registered Post/ Speed Post or any other delivery system up to last date and time of submission of bid.
  
- v. Officer Inviting the Tender or other concerned officer authorized to receive the original Bid Security/ EMD and Bid Cost shall not be responsible for any postal delay and/ or non receipt of the original copy of the Bid Security on or before specified date and time. Non submission of Bid Security and Bid Cost within the designated period will sufficient to declare the bid as nonresponsive and liable to rejection.

## **10.2 SUBMISSION OF BID:**

- a. The bidder shall carefully go through the tender condition and prepare the required documents accordingly.
- b. The Protected Bill of Quantities (BOQ) uploaded by Officer Inviting the Tender is the authentic BOQ. Any alteration/ deletion/ manipulation in BOQ shall lead to cancellation Bid.
- c. The Bidder shall upload the scanned copy/ copies of document in support of eligibility criteria and qualification information in prescribed format in PDF to the portal in the designated locations of Technical Bid.
- d. The Bidder shall write his name in the space provided in the specified location in the Protected Bill of Quantities (BOQ) published by the Officer Inviting Tender. The Bidder shall type rates in figure only in rate column of respective items without leaving any blank cell in the rate column in case of item rate tender and type percentage excess or less up to one decimal place only in case of percentage rate tender.
- e. The Bidder shall log on to the portal with his/ her DSC and move to the desired tender for uploading the documents in appropriate place one by one simultaneously checking the documents.
  - (i) Bids cannot be submitted after due date and time. The Bids once submitted cannot be viewed, retrieve or corrected. The bidder should ensure the correctness of the bid prior to uploading and take printout of the system generated summary of submission to confirm successful uploading of bid. The bids cannot be opened even by the OIT/ Opener before the due date & time of opening.
  - (ii) Each process in the e-Procurement is time stamped and the system detect the time of login of each user including the Bidder.

- (iii) The bidder should ensure clarity/ legibility of the document updated by him to the portal.
- (iv) The system shall require all the mandatory forms and fields filled up by the bidder/ firms during the process of submission of the bid/ tender.
- (v) The bidder should check the system generated confirmation statement on the status of the submission.
- (vi) The bidder should upload sufficiently ahead of the bid closure time to avoid traffic rush and failure in the network.
- (vii) The Tender Inviting Officer is not responsible for any failure malfunction, or breakdown of the electronic system used during the e-procurement process.
- (viii) The bidder is required to upload documents and Bill of Quantities duly filled in. It is not necessary on the part of the bidder to upload the bid documents (after signing) while uploading his bid. It is assumed that the bidder has referred all the documents upload by the Officer Inviting the Bid.
- (ix) Seeking any revision of rates or backing out of the bid claiming for not having referred to any or all the documents provided in the Bid by the Officer Inviting the Bid will be construed as plea to disrupt the bidding process and in such cases the Bid Security shall be forfeited.
- (x) The bidder will not be able to submit his bid after expiry of the date & time of submission of Bid (server time). The date & time of Bid Submission shall remain unaltered even if the specified date of submission of bids declared as a holiday for the Officer Inviting the Bid.
- (xi) All Items in the tender document are to be bided. Evaluation will be based on rates on individual items quoted including Taxes.

#### **10.3 SECURITY OF BID SUBMISSION:**

- a. All bid uploaded by the bidder to the portal will be encrypted.
- b. The encrypted bid can only be decrypted/ opened by the authorized openers after the due date & time.

#### **10.4 RESUBMISSION AND WITHDRAWAL OF BIDS:**

- a. Resubmission of bid the bidders for any number of times before the final date and time of submission are allowed.

- b. Resubmission of bid shall require uploading of all documents including price bid afresh.
- c. Bid submitted after the predefined times of receipt will not be considered, which is inbuilt in the system.
- d. The bidder should avoid submission of bid at the last moment to avoid system failure or malfunction of internet or traffic or power failure etc.
- e. The bidder can withdraw his bid before the closure date & time of receipt of the bid by uploading scanned copy of a letter addressing to the Officer Inviting Tender citing reasons for withdrawal. Bids once submitted not be allowed to withdraw after the closing date & time.

#### **10.5 OPENING OF THE BID:**

- a. Bid opening date & time is specified during tender creation or can be extended through corrigendum. Bids cannot be opened before the specified date & time.
- b. All bid openers have to log on to the portal to decrypt the bid submitted by the bidders.
- c. The bidders and guest users can view the summary of opening of bids from any system. Bidders are not required to be present during the bid opening at the opening location if they so desire.
- d. In the event of the specified date of bid opening being declared a holiday for the Officer Inviting the Bid, the bids will be opened at the appointed time on the next working day.
- e. In case bids are invited for more than one package the order for opening of the “Bid” shall be that in which they appear in the “Invitation for Bid”.
- f. During bid opening the covers containing original financial instruments towards Cost of Bid Security in the form specified in the NIT/ ITT valid for the period stated in the bid, received after last date of receipt of bid and before opening of the bids shall be opened and declared. The OIT/Opener shall continue opening of other documents if he is satisfied about the appropriateness of the Cost of Bid and Bid Security.

#### **11- EVALUATION OF BIDS:**

- a. All the opened bids shall be downloaded and printed for taking up evaluation. The OIT/Openers shall on each page of the documents downloaded and furnish a certificate that the documents as available in the portal for the tender have been downloaded.
- b. The OIT/Evaluators shall take up evaluation of bids with respect to the qualification information and other information furnished subject to confirmation of the Bid Security, the issuing institutions.

- c. After receipt of confirmation of the Bid Security, the bidder may be asked in writing to clarify on the document provided in the Technical Bid, if necessary, with respect to any doubts or illegible documents. The Officer Inviting Tender may ask for any other document of historical nature during Technical evaluation of the tender. Provided in all such cases, furnishing of any documents in no way alters the Bidder's price Bid. Non submission of legible documents may render the bid nonresponsive.
- d. The bidders will respond in not more than seven days of issue of the clarification letter, failing which the bid of the bidder will be evaluated on its own merit.
- e. Technical evaluation of all bids shall be carried out as per information furnished by bidders. But evaluation of Bids does not exonerate bidders from checking their original documents at later date. If the bidder is found to have misled the evaluation through wrong information, action as per relevant clause of NIT/ITT shall be taken against the Bidder/firms.
- f. The OIT/Evaluators will evaluate bids and finalize list of responsive bidders.
- g. The Financial bids of the technically qualified bidders shall be opened on the due date of opening. The OIT/Openers shall log on to the system in sequence and open the financial bids
  - i) The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorized representative who wish to be present.
  - ii) At the time of opening of "Financial Bid", bidders whose technical bids were found responsive will be opened.
  - iii) The qualified bidder's name, bid prices, item wise rates, total amount of each item in case of item rate and percentage above or less in case of percentage rate tenders will be announced.
  - iv) Procurement Officer-Openers shall sign on each page of the downloaded BOQ and the Comparative Statement and furnish a certificate to that respect.
  - v) Bidder can witness principal activities and view the documents/summary reports for that particular work by logging on to the portal with the DSC from anywhere.

Commissioner cum Secretary,  
Board of Revenue, Uttarakhand  
Dehradun

**Supply and Installation of “Severs and its related items ” for sub registrar offices of Department of Stamp And Registration of Uttarakhand, in the state under the DILRMP Project**  
**Terms & Condition of the Tender**

**1. GENERAL**

- 1.1** The response to the present tender will be submitted by way of two stage bidding process. The technical details with the relevant information/ documents/ acceptance of all terms and conditions strictly as described in this tender document should be submitted online.
- 1.2** Tender should strictly conform to the specifications. Tenders not conforming to the specifications will be rejected summarily.
- 1.3** Any incomplete or ambiguous terms/conditions/quotes will disqualify the offer.
- 1.4** **All Items in ANNEXURE – III BOQ, the L1 rate and L1 vendor will be decided on total Bid Value basis only.**
- 1.5** The Department reserves the right to accept/reject any or all tenders without assigning any reasons therefore.
- 1.6** Any set of terms and conditions from the Vendors are not acceptable to the Department.
- 1.7** The Department reserves the right to stop the tender process at any stage and go in for fresh tendering without assigning any reasons.
- 1.8** **The L1 rates finalized in the tender will be valid for 1 Year and L1 vendor is bound to execute the orders placed at L1 rates during the currency of the tender.**
- 1.9** **The Department reserves the right to impose and recover penalty from the vendors who violate the terms & conditions of the tender including refusal to execute the order placed on them for any reasons.**
- 1.10** **The vendor(s) who do not qualify in the technical bid will not be considered for financial bidding.**

Should you require any further clarification, please get in touch through E-Mail with the following officers of this Department within five days (**till 06-01-2019, 05.00 PM**) of tender notification date, after which no such communication will be entertained:

**STAFF OFFICER / PROJECT DIRECTOR,  
PMU, DILRMP  
Board of Revenue Uttarakhand,  
Ring Road, Ladpur, Dehradun.  
+91-94105-10500  
E-Mail: [boardofrevenue-uk@gov.in](mailto:boardofrevenue-uk@gov.in)**

## **2. INSTRUCTIONS TO THE VENDORS:**

- 1) NAME OF WORK:** Supply and Installation of “Servers and its related items ” for sub registrar offices of Department of Stamp And Registration of Uttarakhand, in the state under the DILRMP Project.
- 2) Please read the terms & conditions governing the tender carefully.
- 3) Please fill in the relevant information in the blanks provided.
- 4) Please sign in full by the Authorized Signatory (ies) with Company Seal in all the relevant Annexure return the complete set in sealed cover.
- 5) Please also note that:
  - a) The Department reserves the right to cancel the tender without quoting any reason.
  - b) No consideration will be given to tenders received after the time stipulated above and no extension of time will be permitted for submission of tender.
  - c) The vendor will submit his tender after carefully examining the document/ conditions and the items covered under the tender.
  - d) Tenders not fulfilling any or all of the conditions prescribed or which are incomplete are liable to be rejected.
  - e) No amount should be quoted as charges during warranty period or violation of these instructions would entail disqualification.
  - f) **All prices should be quoted F.O.R. destination (Office of Inspector General, Stamp and Registration Department of Uttarakhand or as per the order of Inspector General, Stamp and Registration Department of Uttarakhand) including GST, packing & forwarding, transportation, insurance, handling and installation etc.,** Tenders offering any discounts may be disqualified.
  - g) During the validity period of tender quotes, any upward change in the exchange rate/excise duty and customs duty are to be borne by the vendor. In the event of any downward revision of levies/duties etc., the same should be passed on to the Department, notwithstanding what has been stated in the tender or in the Letter of Intent/Purchase Order.
  - h) No price escalation adjustment or any other escalation will be payable.
  - i) The vendor should obtain requisite road permit wherever applicable.
  - j) Canvassing in connection with tenders is strictly prohibited and tenders submitted by vendors who resort to canvassing are liable to be rejected.
  - k) Tenders received through e-tendering process will only be accepted. Tenders delivered manually/By post will be rejected at once.
  - l) Unconditional confirmation from the lowest tender that they agree to supply the items covered under the tender at the finalized rate must be furnished by 5.00 P.M. of the succeeding day on which commercial quotes are finalized.

### **3. CONDITIONS GOVERNING THE TENDER:**

1. **Signature:** The authorized person(s) should sign the Tender Document and related Annexure only. A copy of the letter issued by competent authority authorizing the person(s) to sign on behalf of the company should be enclosed.
2. **Equipment:** The vendor should Supply the equipment to Department and carry out their installation at SITE (as per Annexure-VI) as per the requirement of the Department.
3. **Installation:** The Supply and Installation of “Servers and its related items” at the Department of Stamp And Registration of Uttarakhand, or as per the order of Inspector General, Stamp and Registration Department of Uttarakhand, which shall be referred to as SITE in this document. This would include installation of the **all items**, whether supplied by the vendor or provided by the Department.

### **4. Delivery:**

- 4.1. The equipment should be delivered within **8 -12 weeks from** the date of placing the letter of Intent/Purchase order . The list of final location where goods are to be delivered across the State of Uttarakhand may vary, will be finalized at the time of placing the order but once formally issued with the order, it would not change . In case any vendor awarded the contract is unable to deliver the equipment by the stipulated delivery date, Department will charge a **penalty of 0.5%** of order value for every week of delay, subject to a **maximum of 5%** of the order value or will cancel the purchase order. The amount of penalty so calculated shall be deducted at the time of making payment. In the event of cancellation of the order, the vendor shall not be entitled to any compensation. Time shall be the essence of the contract.
  - 4.2. After the delivery of all items mentioned in name of work, the installation needs to be completed in 6 weeks. The installation and testing should be done to the satisfaction of the Department.
  - 4.3. The Department reserves the full right to take any action as it deems fit in case the vendor does not make delivery by the stipulated delivery dates including invoking of the Performance Guarantee held with the Department.
  - 4.4. All items mentioned in name of work should be supplied in full, part shipment is not acceptable unless otherwise mentioned in the letter of intent / purchase order or with the prior permission of the Department.
  - 4.5. All items mentioned in name of work should be valid components of that brand.
1. **Quantities liable to vary:** The quantities are liable to alteration by omission, deduction or addition.
  6. **Vendor not to make any alteration in document:** No alterations, which are made, by the vendor in the specifications or probable quantities accompanying this notice shall be recognized, and if any such alterations are made, the tender shall be invalid. Any tender, who purports to alter, vary or omit any of the conditions herein, is liable to be rejected.

- 7. Vendor to gather all information for/bear cost for submitting tenders:**
  - a. The vendor must obtain for himself on his own responsibility and at his own expenses all the information necessary including risks, contingencies and other circumstances to enable him to prepare a proper tender and to enter into a contract with the Department.
  - b. The vendor should also bear all the expenses in connection with the preparation and submission of his tender.
  - c. The vendor whose tender is accepted shall not be entitled to make any claim for increase in the rates quoted and accepted.
- 8. Tender to be complete, adequate and cover all taxes, contingent costs :** - The tender must be complete in itself, properly worked out to cover all the vendor's obligations under the contract and all matters and things necessary for the proper completion of the work, and the rates quoted therein must be correct and sufficient to cover the vendor's costs, overheads and profits etc., completely for the individual items of work including cost for all necessary materials and labor, taxes, excise or any other such tax or duty levied by Govt., Central or State or Local Authority as on the date of submitting tenders, if and as applicable.
- 9. Quoted rates not subject to escalation:** The rates should not be subject to any escalation in prices of components, basic material, exchange rate, taxes, duties, railway/freight and the like, labor rates, octroi (where applicable) etc.
- 10.** The rate should be firm for a period of one Year from the date of opening of tender.
- 11. Rights of Department:**
  - i) The Department does not bind itself to accept the lowest quote and reserves the right to reject any or all the quotes received, without assigning any reason therefore.
  - ii) While placing the Purchase Order, the Department further reserves the right to delete or reduce any item without assigning any reason therefore.
- 12. Assigning Work:** The work or any part of it should not be transferred, assigned or sub-let without the written consent of the Department.
- 13. Other agencies at work:** The vendor shall be required to co-operate and work in co-ordination with and afford reasonable facilities for such other agencies/specialists as are/may be employed by the Department on other works/sub-works in connection with the project/scheme of which this work forms part and in this connection it shall be deemed that the vendor has prior to submitting the tender inspected the premises and taken all circumstances into consideration.
- 14. Acceptance Testing (At the discretion of the Department):**
  - i) Inspection/Acceptance test may be carried out to the satisfaction of the Department at bidder premises before dispatch of the goods .

- ii) The Inspection/Acceptance Test if required shall be designed by the department and conducted by the Department's officials/or any other agency to their satisfaction. The vendor shall provide/extend necessary assistance to the Department in the conduct of the acceptance tests/inspection.
- 15. Release of Shipment from the Check Post:** It is to be clearly understood that the equipments and other accessories shipped from factory, will be got cleared from Check post by the vendor.
- 16. Payment Terms:** Payment schedule to the selected vendor will be as follows on the recommendation of Inspector General, Stamp & Registration, Uttarakhand :-

S.No.	Description	% of Total Agreement Cost
1	Delivery of all items mentioned in name of work	90%
2	After Installation	10%

- 16.1 DOCUMENTS TO BE ENCLOSED:** Invoice(s) reflecting taxes and duties, delivery challan duly acknowledged by the consignee, Installation Report covering all the items supplied and duly signed by the consignee office evidencing satisfactory installation of the items supplied etc., The Invoice and Delivery Challan should indicate the Part Numbers of the OEM. A copy of the Purchase Order should also be submitted along with your claim. Any change in the parts other than those quoted in the tender is not acceptable and may lead to cancellation of order.
- 17. Transfer of Ownership:** Transfer of ownership of the property shall be effective as soon as the equipment is delivered after conducting acceptance tests if any as specified in clause 14.
- 18. Warranty:**
- 19.1.** All the equipments supplied under this tender as per **Annexure-V** should comprehensive warranty provided by the OEM as mentioned in the technical specifications( except consumables ).
- 19.2.** Vendor shall provide to the Department as detailed above, free warranty services from the date of installation of equipment or 01 months beyond from the date of delivery whichever is earlier, which shall repair/replacement of all items by the vendor .
- 19.3. Repair and Maintenance Services:** The Vendor shall arrange for services of qualified service engineers having sufficient knowledge of all items mentioned in name of work and accessories at the time of installation and during warranty period for trouble shooting, repair and replacement of all kits or parts and spare parts and to render such other support services, as may be necessary for satisfactory functioning of the delivered items . No charges, fees, accommodation, boarding etc. shall be paid or provided by the Department to the service engineer or his assistants, if any. Warranty call logging mechanism with toll free nos / phone nos of OEM or the vendor shall be duly submitted to the Department for smooth functioning.

- 20.** **Subcontracting:** The vendor shall not, without the prior written consent of Department, sub-contract or permit anyone other than the vendor's own personnel to perform any of the work, services or other performance required of the vendor.
- 21.** **Earnest Money Deposit:** The vendor shall have to deposit with the Department an amount (Rs. 4,60,000-00) as Earnest Money Deposit along with the Technical Bid. The deposit so collected will be refunded to all the bidders except L1 Vendor upon finalization of the Tender. The deposit will be refunded to the L1 Vendor after supply of the goods.
- 22.** **Performance Guarantee:** The successful bidder shall furnish a performance guarantee at his own expense equal to 5% of the total contract value in Indian Rupees before the final payment of 10% is released. The performance guarantee shall be in the form of a Fixed Deposit/bank guarantee from a nationalized/schedule bank in favour of “**Commissioner cum Secretary**, Board of Revenue, Dehradun, Uttarakhand” valid upto the warranty period.
- 23.** **Others:**
- 23.1. The vendor shall warrant that the repair and for enhance service/ products offered for sale do not violate or infringe upon any patent, copyright, trade secret or other property right of any other person or other entity. The vendor shall indemnify Department from any claim, directly or indirectly resulting from or arising out of any breach or claimed breach of this warranty.
- 23.2. All disputes and differences of any kind whatsoever arising out of or in connection with this purchase order shall be referred to arbitration. The arbitrator may be appointed by both the parties or in case of disagreement; each party may appoint an arbitrator and the decision of the arbitrator(s) shall be final. Such arbitration shall be governed by the provisions of the Indian Arbitration Act.
- 24** **CONDITIONS GOVERNING REPAIR AND MAINTENANCE SERVICES (DURING WARRANTY PERIOD)**
- 24.1. The Vendor should undertake to provide the Department as per the warranty period free repair of all kits or parts and spare parts of the all mentioned item in name of work for the entire warranty period . The vendor / OEM shall keep spares of essential & critical kits or parts of the equipment , as may be required to ensure that related problems are solved at the earliest from the time of reporting of the call and to keep the down time minimal.
- 24.2. The vendor shall agree to maintain the all mentioned item in name of work in good working order and shall ensure that faults and failures intimated by Department as above are diagnosed within 48 hours and repaired within 96 hrs.

## **25. CERTIFICATION AND AUTHORISATION**

- 25.1** The vendor should be an Original Equipment Manufacturer OR should be in a position to supply the EQUIPMENT manufactured by reputed and empanelled vendors only. The vendor should have manufacturing unit with ISO certifications. The tenders for the products without these certifications shall be rejected.
- 25.2** In case any vendor (an authorized dealer) offers to supply the brands of the OEMs, the vendor shall produce a Tender Specific Authorization from the OEMs addressed to us , extending full guarantee and warranty as per our bid and the OEM/Industry standards for the offered products . Submission of the Authorization signed by the OEMs is compulsory, otherwise the bids will not be considered.
- 25.3** The vendor shall undertake that all the components/parts shall be original new components/parts from the respective OEMs of the products and that no refurbished/ duplicate/second hand components/parts are being used or shall be used.

**ACCEPTED THE ABOVE CONDITIONS  
SIGNATURE OF THE VENDOR**

**ANNEXURE-II**

**Technical Bid**

1. Name of Firm/OEM: .....  
.....
2. Registered Address :.....  
.....
3. Phone No: .....
4. GST No: .....
5. PAN No: .....
6. Turnover for last 3 year certified by Chartered Accountant / Balance Sheet for last 3 years  
.....  
.....  
.....
7. The bidder should submit notarized affidavit of no blacklisting by any State or Central Government Organization.  
.....  
.....
8. Details of Earnest Money Deposit:  
No:..... Date: .....,  
Amount Rs: .....,  
Name of Bank & Branch: .....,  
.....
9. Details of Tender Document Cost:  
DD No: ..... DD Date: .....,  
Amount Rs: .....,  
Name of Bank & Branch: .....

- 10.** Previous Experiences: IT Hardware / IT Related Hardware orders received and executed for Government organizations/ PSUs based in Uttarakhand in the last 3 years : Either three orders of over Rs 1 crore each or five orders of over Rs 50 lacs each (order copies to be enclosed)

Sl.	Government Organization based in Uttarakhand	Description of IT Hardware / IT Related Hardware	Work Order No. & Date	Amount in INR

- 11.** Other document as per tender Document.

Signature of Bidder with Seal

## ANNEXURE – III

### Financial Bid

#### Format of Bill of Quantities (BOQ)

BOQ for Supply of “ Servers and its related items”for Department of Stamp And Registration of Uttarakhand sub registrar offices in entire districts located in the state manner as specified in Specifications and Bidding documents.

Validate	Print	Help	<b>Item Rate BoQ</b>																
Tender Inviting Authority: Commissioner cum Secretary, Board of Revenue Uttarakhand, Dehradun																			
Name of Work: Supply & Installation of “Servers and its related items” for Department of Stamp And Registration of Uttarakhand.																			
Contract No: 4345/IV-149/2017-18 (18-19)/01-01-2019																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Name of the Bidder/ Bidding Firm / Company :</td> <td colspan="9"></td> </tr> </table>										Name of the Bidder/ Bidding Firm / Company :									
Name of the Bidder/ Bidding Firm / Company :																			
<b>PRICE SCHEDULE</b>																			
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )																			
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER	NUMBER #	NUMBER #	NUMBER #	TEXT #											
Sl. No.	Item Description	Quantity	Units	Estimated Rate in Rs. P	BASIC RATE In <b>Figures</b> To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words												
1	2	4	5	6	13	53	55												
1	Supply & Installation of Servers																		
1.01	Servers and its all related items	1	item	0.00		0.00	INR Zero Only												
Total in Figures							Rate Entry Please enter Basic Rate in Rupees for this item.	0.00 INR Zero Only											
Quoted Rate in Words							nly												

#### Note:

1. All prices should be quoted F.O.R. destination including GST, packing & forwarding, transportation, insurance, handling and installation etc.

**ANNEXURE-IV**

**TECHNICAL SPECIFICATION OF SUPPLY & INSTALLATION of  
“Servers and its related items”**

Sl.No.	Item	Quantity	Technical compliance of all items	
			Y	N
1	Servers and its related items consisting of	1 lot		
1 a	Rack Servers	4		
1 b	Rack mountable 24 ports switch	1		
1 c	Rack	1		
1 d	KVM	1		
1 e	SAN 80 TB	1		
1 f	SAN Switch	2		

## Rack Server

- 2U rack mount server with rack mount kit
- 2 nos Eight Core Intel XEON 4110 2.1Ghz GHz or Higher clock speed
- 512 GB of DDR-4 2666 MHz Fully Buffered memory with ECC expandable to 3TB (or 24 DIMS).
- Intel C621 Series Chipset or better
- Internal/ external DVD
- Dual 10/ 100/1000 BaseT ports WOL in a redundant configuration
- Dual 10 Gbps ports with copper modules with WOL in a redundant configuration
- Hardware management adapter for remote access to server for deployment, management
- Dual port FC HBA (8/16 Gbps) to be provided along with all the necessary components and cables for redundant connections to the FC SAN switch
- 8 PCIe expansion slots with minimum two x8 and two x16 slots
- 16 internal drive bays with capability to support SSD, SAS and NL-SAS drives
- 8 X SFF hot plug 1.2TB SAS 12 G (10K RPM) in RAID 5 configuration
- 2X Hot plug 1.6TB 12G MU SSD in Raid 1 (mirroring) configuration
- Server should have capabilities to boot from SAN
- Redundant hot swappable power supplies
- Redundant hot swappable auto sensing FAN
- Rack installation kit with sliding rails for tool less installation in standard 19 " Rack
- OEM Advance server management solution
- Servers to be certified on Windows 2012 or latest and Linux RHEL 5 and above
- OEM warranty Certificate
- Escalation: L1: Supplier L2: OEM.
- HDD Controller:- Integrated RAID controller 12Gbps or better with minimum 8 GB Memory cache and to support Raid 0,1,5
- ENERGY STAR, US Federal Energy Management Program (FEMP), IT ECO declaration., ROHS Compliance, ACPI 2.0b Compliant, PCIe 3.0 Compliant, PXE Support, WOL Support, Microsoft ® Logo certifications, ASHRAE A3/A4
- Operating Systems and Virtualization Software Support And certification , Microsoft Windows Server, Canonical Ubuntu, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), Oracle Solaris, VMware, Citrix Xen Server,
- **Manageability Software:-** Embedded Self- Management, Diagnostic & Alert Feature, Embedded Remote Support Feature, UEFI, Built-in Interface Tool for Management.
- Warranty: 3 years onsite OEM warranty

OEM Certification:- The OEM of the server should be listed at least two times in last three published reports in the leader quadrant of Gartner reports for blade server/ modular server.

### **Rack Mountable 24 port switch with of c port (Full Layer 3 Core Switch)**

- a. Switch should be 19'' rack mountable with maximum height
- b. Should have internal redundant power supplies from day one.
- c. Switch should be minimum 24 port 10/1000 Mbps full duplex auto sensing copper ports
- d. Switch should have minimum 2 nos. 10G Fiber Port with 10G fiber Modules for multimode fibers.
- e. Switching Fabric/ Backplane Bandwidth: Minimum 88 Gbps& through put more than 60 Mpps for IPv4
- f. Media Interface 10BaseT/100BaseT/1000Baset with RJ 45 connectors, 1000 Base X.
- g. Should support full layer 2,3 & 4 features Like: SNMP, RMON, VLAN, RIPv1, RIPv2, Static Routes, BGP, IGMP, ICMP, OSPF, RIPng / OSPFv3, MAC address, Qos, VLAN on all ports.
- h. OSPF and RIP should be supported and configured on all ports.
- i. Compatible with all Ethernet IEEE 802 standards Like IEEE 802.3x, iEEE802.3ad, iEEE802.1d, IEEE802.1w, IEEE802.1x etc.
- j. Inbuilt SNMP Module with Full v1, v2 & v3 compliance for Networking Management.
- k. Port / Link Aggregation upto 8 ports, Port Mirroring, 802.1X Port-Based Authentication, Load Balancing, DHCP Support, ACLs, Hardware Multicast Management.
- l. VLAN support: minimum 1K VLAN should have inbuilt management; MSTP/PVST+ support for Multiple Spanning tree instances or equivalent support for Multiple Spanning tree instances.
- m. IPv6 ready (H/W & S/W) for all layers 2, 3 & 4 from day one
- n. Console Port for Management
- o. Latest OS to support Layer 2, 3 & 4 features (Modular / Latest Enterprise Class)
- p. Maximum supported Flash & SDRAM installed
- q. Automatic QoS / EZ QoS / Equivalent
- r. Stacking ready with stack module and cable for stack bandwidth 40 Gbps or higher
- s. EAL3 / CDPP or Higher Certification.
- t. Minimum 6 nos. 10 meters fiber patch chords for 10G connectivity
- u. **Warranty: 3 years onsite OEM warranty**

#### **Additional features:**

- a. Switches, Copper & Fiber ports and modules should be from the same OEM for perfect interoperability and support.
- b. Port based ACL for L2/L3 interface to allow application of security policies on individual switch ports.
- c. Switches should LLDP & LLDP-MED including client Location information.
- d. Should exchange Link & device information multi vendor network.
- e. Compatible and Latest OS on switches, inbuilt support for Cisco IOS type command Line interface / work on same command Line / user interface. GUI user interface preferred.
- f. 802.1p (QoS), 802.1q (VLAN), 802.1d (Spanning Tree), 802.1w (Rapid spanning tree), 802.1s (Multiple Spanning tree) capabilities.
- g. Should support QoS configuration & debugging.
- h. Should support central management of all the VLANs on the switching networking.
- i. The switch should support central management of all the VLANs on the switching network through NMS
- j. Any configuration change should not result in reboot of the switch
- k. Dynamic Arp and DHCP snooping support for mapping IP to Mac addresses
- l. Capabilities for real time performance monitoring
- m. Capabilities to protect source IP being used by malicious or unintended user.
- n. Port capability to detect and configure plug and play devices Like IP phone etc.
- o. Capabilities to protect business critical data from network congestion.
- p. Capabilities to protect and disable unidirectional Links.
- q. Capabilities to support Network Time Protocol (NTP).
- r. Capabilities to prevent outside devices from becoming spanning tree root nodes.

## Rack

Description	Requirement
Maximum Height	2100mm , 210.0cm
Maximum Width	600mm , 60.0cm
Maximum Depth	1000mm , 100.0cm
Rack Height	42U
Net Weight	100kg ± 5%
Maximum Mounting Depth	780mm , 78.0cm
Minimum Mounting Depth	200mm , 20.0cm
Front Door	1.2mm ( 18 gauge )
Vertical Posts	Aluminum extrusion
Rear Door	1.2mm ( 18 gauge )
Roof	1.0mm ( 19 gauge )
Side Panels	1.0mm ( 19 gauge )
Units per Pallet	1
Rack Width	19"
Weight Capacity (dynamic load)	450 Kg ± 5%
Weight Capacity (static load)	1000 kg ± 5%
<i>Environmental</i>	
Protection Class	IP 20
<i>Conformance</i>	
Standards	DIN 41494
Warranty	3 years
<i>Sustainable Offer Status</i>	
RoHS	Compliant
REACH	Compliant

## KVM

Description
PDU should have thirty-six (36) IEC-320-C13 and six (6) IEC-320-C19 locking outlets
The Rack PDU should have two (2) 16 A, 1-pole hydraulic-magnetic circuit breakers for overload protection
Should have liquid crystal display (LCD) and input buttons allow you to monitor current, power, and voltage measurements of the Rack PDU. Local communication can be established through the serial port, and remote communication through the network port . The USB and CAN ports enable data transfer for future expansion options. The environmental sensor port allows for monitoring of the temperature and humidity of the room or enclosure
The PDU should have 3.0-m (10-ft) power cord terminates with a 32 A, 3-pin IEC-309 connector.
The PDU should provide Volts, Amps, total Power- kilowatt and Total Energy- kWh both locally and over IP. Locally it should be able to display the same on the LCD display affixed on the Power strip itself.
The Rack PDU should have two toolless mounting pegs for 0 U mounting capability in a rack or enclosure
Rack-Mountable with 1U / 0U mounting options
Local Current Monitoring Display for real-time metering and load balancing guidance
Sequential power-up protects against inrush current
Ability to define alarm thresholds in order to avoid overloaded circuits
Network and visual alarms inform the user of possible threshold breaches
Load indicator LED to alerts users of potential overloaded circuits
Power strip should have Outlet Status LED- Indicate on/off status of each individual outlet
Local USB port for easy local firmware upgrades
Flash Upgradeable via network download for future product enhancements
Maximum Line Current per phase : 16A/ 32A
Maximum Input Current per phase : 16A/ 32A
SNMP monitoring & management for multiple trap receivers when events occur
Current Monitoring at bank level /strip level over IP
Integrates with Centralized management software providing a unified view of complex physical infrastructure
Locking IEC receptacle and locking power cord compatibility
Field replaceable Network Management module
Temperature/humidity sensor port to integrate environment and power management in a single appliance
Compliance (EMC Verification) - EN 55022 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3
Warranty: 3 Years

## SAN 80 TB

### SAN Controller & SAN Storage with SAN Management Software

Converge / Unified Storage	1.Offered Storage array shall be a true converge / unified storage with a single Microcode / operating system instead of running different Microcode / Operating system / Controllers for File, block and object service respectively. 2. Offered Storage array shall be end-to end 12Gbps enabled which means that both Front-end Fiber channel ports and Back-end engines shall be operated at minimum 12Gbps speed.
Operating System & Clustering Support	The storage array should support industry-leading Operating, System platforms including: Windows server 2012, Windows 2016, Vmware, Solaris, HPE-UX, IBM-AIX and Linux.
Capacity & Scalability	1. The Storage Array shall be offered with 12TB usable (RAID 6) Capacity using SSD & 48TB usable (RAID 6) using SAS 10K RPM drives. Minimum One Hot spare drive should be provided for a set of 10 drives of each type (SSD, SAS or NL-SAS). 2. Storage shall be scalable to at least 1PB. 3. Offered storage array shall support at-least 240 SSD drives. 4. Offered storage array shall support at-least 500TB usable capacity for file operations.
Cache	1. Offered Storage Array shall be given with Minimum 64GB cache in a single unit and should be scalable to 128GB with or without controller change. Cache should be mirrored and protected across two storage controller. 2. Cache shall be completely dynamic for read and write operations and vendor shall not offer any additional card/ module for write cache operations. 3. Cache shall be used only for data Control information. OS overhead shall not be done inside cache. 4. Offered Storage array shall also have additional support for Flash Cache using SSD/ Flash drives. Both File services as well as Block operations shall be able to utilize flash cache. Minimum of 1TB Flash cache shall be supported. 5. If Flash cache is not supported inside the storage array then vendor shall ensure that offered storage array shall be scalable to minimum of 256GB DRAM cache without any replacement or upgrade of controllers.
Processing Power	Offered Storage architecture shall be such so that there shall be no load on the storage CPU during Raid Party calculations.
Architecture & Processing Power	Controller shall be true active-active so that a single logical unit can be shared across all offered controller in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning, Data Tiering etc.
No Single point of Failure	Offered Storage Array shall be configured in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.
Disk Drive Support	Offered Storage Array shall support dual-ported 300/ 600/ 1200/ 1800GB hot-pluggable Enterprise SAS hard drives, Minimum of 400GB SSD Drives along with near line SAS 2TB/ 4TB/ 6TB/ 8TB drives.
Raid Support, Virtualization & No. of Volumes	1. Offered Storage Subsystem shall support Raid 10, 5 and raid 6. 2. Offered storage array shall have native virtualization support so that Raid 10, Raid 5, Raid 6, can be carved out from a logical space instead of dedicating separate physical disks for each application. 3. Every supplied disk shall be able to participate into multiple and different raid sets simultaneously. 4. In case vendor doesn't have above functionality, then 20% additional raw capacity shall be provided for each type of disk to balance out the capacity utilization. 5. Offered Storage Array shall support at-least 1500 Volumes.
Cloud Enabled Monitoring and Analytics	1. Offered storage shall have cloud enabled monitoring and analytics engine for proactive Storage management. All required licenses for same shall be included in the offer. 2. Cloud Enabled Monitoring and analytics engine shall have capability to provide following:

	<ul style="list-style-type: none"> <li>a. Providing Firmware upgrade and patch upgrade recommendations proactively.</li> <li>b. Providing historical capacity and performance trend analysis.</li> <li>c. Shall provide history of support cases logged with Support team under different column like Critical, Normal and low severity along with closed cases. Cloud monitoring tool shall be able to provide the complete month-wise breakup.</li> <li>d. A Complete connectivity map starting from controller to back-end disks.</li> <li>e. Shall be able to provide the executive Dashboard covering various critical and must aspects of Total Capacity, overall health/ wellness score of array. De-duplication and compression ratio, over-all front-end performance etc.</li> </ul>
Cloud Enabled- Analytics	<p>Cloud enabled Analytics engine shall have capability to provide following:</p> <ul style="list-style-type: none"> <li>a. Shall have capability of global learning – Analytics engine shall collect control information form at-least 6200+ arrays installed base for meaningful output. Vendor shall provide the documentary proof for it.</li> <li>b. Analytics engine shall have capability of proactive recommendation for arresting the issues/ problems noticed at other install base of vendor after indentifying the problematic signature.</li> </ul>
Cloud Enabled- HyperVisor Integration	<p>Cloud enabled monitoring and analytics engine integration with Hypervisor</p> <ul style="list-style-type: none"> <li>a. Offered cloud enabled monitoring and analytics engine shall be tightly integrated with Hypervisor layer and shall be certified to work with at-least Vmware.</li> <li>b. Hypervisor integration shall be able to provide end to end monitoring of hypervisor Datacenter, Data-store, Hypervisor Host and VMs running within the hypervisor datacenter and shall be able to link with offered storage array.</li> <li>c. Cloud monitoring and integration tool shall provide the detailed analysis of CPU Contention, Memory contention, IO contention for each VM- including the latency.</li> <li>d. Cloud monitoring and integration tool shall have capability to identify the top VMs which are contributing towards maximum IOs and Latency.</li> <li>e. In case vendor doesn't support the above offered functionality then Vendor shall supply the enterprise license for Vmware vRealize suite for at-least 20 Physical servers, each running with dual physical CPUs.</li> </ul>
Data Protection	Incase of Power failure, Storage array shall have de-stage feature to avoid any data loss.
protocols	Offered Storage array shall support all well-known protocols like FC, ISCSI, SMB 3.0, NFS V4, FTP/FTPS etc.
Host Ports and Back-end Ports	<ol style="list-style-type: none"> <li>1. Offered Storage shall have minimum of 4 x 16gb, 4 x 10gbps ISCSI and 4 x 10 gbps IP (Port for file operations) host ports for connectivity to servers. All types of ports shall be 100% scalable.</li> <li>2. Offered storage shall have two additional IP ports for the storage based replication.</li> <li>3. Offered storage shall have minimum of 16 SAS lanes running at 12 Gbps speed and shall be scalable to 24 SAS lanes without any controller change.</li> </ol>
Global Hot Spare	<ol style="list-style-type: none"> <li>1. Offered Storage Array shall support Global hot Spare for offered Disk drives.</li> <li>2. Global hot spare shall be configure as per industry practice.</li> </ol>
Performance and Quality of Service	<ol style="list-style-type: none"> <li>1. Shall have capability to use more then 30 drives per array group or raid group for better performance.</li> <li>2. Offered storage array shall support quality of service for critical applications so that appropriate and required response time can be defined for application logical units at storage. It shall be possible to define different service/ response time for different application logical units.</li> <li>3. Quality of service engine shall allow to define minimum and maximum cap for required IOPS/ bandwidth for a given logical units of application running at storage array.</li> <li>4. It shall be possible to change the quality of service Response time (In both milliseconds as well as Sub-milliseconds), IOPS, bandwidth specification on basis of real time.</li> </ol>
Thin Provisioning and Space optimization	<ol style="list-style-type: none"> <li>1.Offered storage array shall support Thin provisioning and Thin Re-claim to make the volume thin for an extended period of time for complete array supported raw capacity.</li> <li>2. Offered storage array shall support data reduction feature of De-duplication and Compression for thin volumes running on Solid state drives. Vendor shall support both de-duplication and compression on a given volume simultaneously.</li> <li>3. Offered storage array shall be tightly integrated with Vmware so that Eager zero disks layout can be used with thin provisioning and thin re-claim.</li> </ol>
Maintenance	Offered storage shall support online non- disruptive firmware upgrade for both

	Controller and disk drives.
Integration- VMWARE	1.Offered storage array shall be tightly integrated with Vmware and shall be certified for VVOL. 2. Offered storage array VASA provider shall be certified by Vmware for VVOL. storage based replication.
Integration- Container	Offered storage array shall be integrated with Docker, Red-hat Openshift, Kubernetes and MESOS container technologies. Vendor shall provide documentary proof for integration.
Snapshot /Point in time copy/ Clone	1. Offered storage shall have support to make the snapshot and full copy (Clone) on the thin volumes of original volume is created on thick or vice- versa. 2. The Storage array should have support for both controller-based as well as file system based snapshots functionality (At-least 1024 copies for a given volume or a file store).
Quota Management and Antivirus Scanning	1.For file services operations, offered storage shall support both user level as well as file level hard and soft quota. 2.For file services operations, offered storage shall support integration with industry leading antivirus vendors like Symantec, Trend Micro and MacAfee.
Storage Array Configuration & Management Software	1.Vendor shall provide Storage Array configuration and Management software. 2.Software shall be able to manage more than one array of same family.
Storage Tiering	1. Offered storage shall support dynamic migration of volume from one Raid set to another set while keeping the application online. 2.For effective data tiering, Storage subsystem shall support automatically Policy based Sub Lun Data Migration from one Set of drive Tier to another set of drive tier.
Remote Replication	1.The storage array should hardware based data replication at the array controller level across all models of the offered family. 2.The storage array shall also support three ways (3 Data Centers) replication to ensure zero RPO with or without using any additional replication appliance. 3. Replication shall support incremental replication after resumption from Link Failure or Failback situations.
File Level retention and immutability	1. For file service operation, offered storage shall support file protection against accidental, premature, malicious deletion and modification of data using file locking mechanism of WORM and legal hold. 2. Apply of legal hold shall ensure that file cannot be moved, modified, or deleted regardless of the retention period
Licenses	Storage subsystem shall be supplied with Thin provisioning, Snapshot, Clone, Performance Monitoring, Online Raid Migration, Online Volume Conversion (thin to thin compressed, thin to thin de-dup etc.), Quality of services, Sub-LUN data tiering, Flash cache, and File services on day 1 for the maximum supported capacity of array.
Warranty:	3 years onsite OEM warranty

#### SAN switch

- a. 20 port 8/16 Gbps SAN switch module with 8/16 Gbps auto negotiating FC modules
- b. SAN Switch Module should have minimum 20 Fiber Channel ports to operate as in-fabric ports at 2/4/8 Hbps or higher.
- c. High availability features including hot pluggable design, non-disruptive software upgrades, automatic.
- d. Path failover, and power-on self-test diagnostic and status reporting
- e. Aggregate Fiber Channel I/O bandwidth: minimum 96 Gbps (6 external ports at 16 Gbps line rate)
- f. Segments a SAN into virtual private SANs to increase security and availability
- g. Provides Web-based management interface designed to help simplify monitoring and configuration management
- h. Power-on self-test diagnostics and status reporting
- i. Non blocking architecture to prevent latency
- j. Min 15 numbers of LC-LC-FC patch chords Cable of length of 10 meter each and accessories for connecting Servers/ Devices to SAN.
- k. 3 years onsite OEM warranty

## ANNEXURE – V

### **PERFORMANCE BANK GUARANTEE (Specimen only)**

To,  
Commissioner cum Secretary,  
Board of Revenue, Uttarakhand  
Dehradun

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This deed of guarantee made on this ..... day..... 2019 by ..... Bank, having its registered/Head office at ..... and amongst all places a branch at ..... And wherever the context so requires includes its successors and assigns (hereinafter called the SURETY) for the favour of Board of Revenue Uttarakhand, Ring Road, Dehradun (hereinafter called Department) and wherever the context so requires include it successors and assigns. The Department is placing the order for purchase is hereby called as "purchaser". The Purchaser has placed an order no. ..... Dated the ..... (hereinafter called the 'Said Order') for SUPPLY & INSTALLATION of "**Servers and its related items**" for the total value of Rs..... with M/s \_\_\_\_\_, a company having its registered office at ..... and wherever the context so requires includes its successors and assigns (hereinafter called to or referred to as 'The Supplier').

In terms of the order, the supplier is required to furnish the purchaser at his own cost a Performance Bank Guarantee for an amount of Rs. \_\_\_\_\_ (equal to the 5% of the above total value) for fulfilling the conditions of guarantee against all manufacturing defects for a period upto \_\_\_\_ 36 months for all items, from the date of installation of **all items** and acceptance thereof). The surety at the request of the supplier agreed to issue a Performance Bank Guarantee in terms of the order. Further the supplier and the purchaser have agreed that the supplier shall repair or replace free of cost, its parts and accessories found defective on account of bad workmanship or defective materials or inferior manufacture as mentioned in the warranty and guarantee clause.

We ..... (Indicate the name of the Bank giving the guarantee) do hereby undertake to pay the amounts due and payable under this guarantee, without any demur merely on a demand from the purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the purchaser by reason of breach by the supplier in any of the terms or conditions contained in the said order or by reason of the supplier's failure to perform the order. (ANY SUCH DEMAND MADE BY THE PURCHASER SHALL BE CONCLUSIVE AS REGARDS THE AMOUNT DUE AND PAYABLE TO THE PURCHASER UNDER THIS GUARANTEE).

We undertake to pay to the purchaser any money so demanded notwithstanding any dispute or disputes raised by the supplier in any suit or proceeding pending before any Court or Tribunal or Arbitration relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment there under and the supplier shall have no claim against us for making such payment.

Page We ..... (Indicate the name of the Bank giving the guarantee) further agree with the purchaser that the purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations there under to vary any of the terms and conditions of the said order or to extend time of performance by the said supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the purchaser against the said supplier and to forbear or enforce any of the terms and conditions relating to the said order and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said supplier or for any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties, but for this provision, have effect of so relieving us.

We shall not be discharged or released from the guarantee by any arrangement between the purchaser and the supplier with or without consent of the surety or by any alteration in the obligations of the parties or by any indulgence, forbearance whether as to payment time, performance or otherwise.

This guarantee shall not be affected by any change in the constitution of M/s ----- i.e. supplier by absorption with any other body or corporation or other and this guarantee will be available to or enforceable by such body or corporation also.

Unless a claim under this guarantee is made by the purchaser against us on or before (date of expiry of guarantee), all the rights of the purchaser under this guarantee shall be forfeited and the bank shall be relieved and discharged from all liability under this guarantee.

Notwithstanding anything contained herein:

- a. Our liability under this Bank Guarantee shall not exceed Rs.----- (Rupees .....).
- b. This Bank Guarantee shall be valid upto----- and
- c. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before-----

DATED AT \_\_\_\_\_ (PLACE) THIS \_\_\_\_\_ DAY OF-----.

FULL SIGNATURE WITH SEAL OF THE BANK (SURETY)

-XX-X-XX-