**Institute of Bioresources and Sustainable Development (IBSD)**

(Department of Biotechnology, Govt. of India)

Takyelpat, Imphal-795001, Manipur

**Tender No. 5/146/2020-IBSD/PUR: DATED: August 1, 2021**

**Tender For Supply & Installation of** High Performance Computing (HPC) system **for the Institute of Bioresources and Sustainable Development (IBSD), Imphal**

**The Director, IBSD Imphal**, invites quotations for supply of equipments as per details at **Annexure** in double bid in sealed covers and so as to reach the undersigned on or before 5 p.m **of August 22, 2021.**

**INSTRUCTION TO BIDDERS:**

**A) Two Bids:**

**01**. Quotations will have to be submitted in two Parts i.e. a) Technical Bid and (b) Price Bid, in two separate sealed covers; and both these covers will have to be again put in to a single sealed cover. Also, the address of the firm submitting the quotation and the Officer to whom the quotation is addressed, must appear distinctly on both the inner sealed envelopes, indicating Price Bid/Technical Bid as may be applicable. Further, on both inner and outer sealed covers the following lines are to be written:

**QUOTATION FOR SUPPLY & INSTALLATION OF (*name of the equipment*) FOR IBSD, Imphal**

**To,**

**The Purchase i/c**

**Institute of Bioresources and Sustainable Development (IBSD)**

(Department of Biotechnology, Govt. of India)

Takyelpat, Imphal-795001, Manipur

 **From: M/s**

 **Contact No.:**

 **Email ID:**

**Each equipment should have separate envelope**

**NOTE: The bid documents are not transferable and the firm’s seal and signature of the authorized official must appear on all the papers and envelopes submitted. Tenders must be submitted separately for each item. Combined tenders submitted for more than one item together will be summarily rejected.**

**02.** In **Technical Bid** the vendor must provide the followings:

1. Details of the technical features of the offered equipment vis-à-vis NIQ specifications;
2. Standard technical literature on each of the items offered;
3. Dealership certificate on the offered products in case of dealers;
4. In case of foreign quote, the address of Principal/Manufacturer and their bankers’ details should be furnished. The mode of dispatch should be by Air Post Parcel/ Ocean Freight/ Air freight (on competitive rate). The approximate dimensions of the packages and weight of consignment are to be indicated.
5. List of reputed organizations/Institutions, where similar orders have been executed (copies of the purchase/work orders will have to be enclosed);
6. Up-to-date sales tax clearance certificate/ GST Registration Certificate indicating also the TIN number of the firm will have to accompany the quotation to be submitted;
7. Details of nature and maximum period of warranty offered by the vendor. The firm should give at least 2 years extended warranty.
8. After Sales Service: The name and address of the nearest available authorized service centre to IBSD, Imphal should be stated in the quotation.
9. Dealers should undertake to provide expert qualified engineers for maintenance /support within 24 hours of receiving complaint.
10. The tenderer has to state in detail the electrical power/ UPS requirements, floor space, head room, foundation needed and also to state whether Air- conditioned environment is needed to house the system etc. and to run the tests, i.e. pre- installation facilities required for installation in technical bid.
11. The firm/ supplier should submit guarantee letter of the spares or related chemicals/kit etc. of the respective equipment that the same will be available for next 10 years.
12. Amount of Earnest Money deposit (EMD), in the form of Demand Draft only will have to be enclosed with technical Bid only.

**03.** In the **Price Bid**, the vendor must provide the followings:

1. Quantity, basic price (against item-wise details of specifications of each of the offered items);
2. Prices of each of the optional accessories, as required by NIT specifications and also may be relevant for an offered equipment, will have to be specifically stated in the quotation.
3. Packing & Forwarding Charge, if any (percentage of basic price or as lump sum)
4. Applicable tax
5. Freight & Insurance charge, if any {as percentage of (a) + (b) + (c) or as lump sum}
6. Annual maintenance contract (AMC) rate (after expiry of the warranty period) is to be clearly indicated-preferably in both comprehensive and non-comprehensive terms, *failure to which the offer may not be considered eligible even if it turns out to be at the lowest price*. Discount on all spares have to be specified during warranty period.
7. Installation & commissioning charge (Including Service tax), to be shown item-wise extra, if any.
8. In case, if the quote is FOR/ FOB basis, estimated insurance coverage charges may please be indicated.
9. CIF, Kolkata value both by Airfreight and Ocean freight.

04. Date & Time:

 **(i)** Last date & Time for receipt of tender: **05.00 pm of August 22, 2021**

 (ii) Bid opening date: **2.00 pm of August 23, 2021**

**TERMS & CONDITIONS:**

(Please note that the term “both foreign & indigenous’ wherever mentioned means the term is applicable to both foreign & indigenous purchase)

01. **Rates**: Rates quoted for indigenous items should be on **F.O.R. IBSD Imphal**, on door delivery basis, (for import items please refer additional terms for imported goods at clause No.22 below). The equipment has to be delivered at IBSD, Imphal premises. Unloading the item from the transport is under the risk of supplier.

Note: *Vague terms like “packing, forwarding, transportation extra” without mentioning the specific amount will not be accepted. Such offers shall be treated as incomplete and rejected*. Bidders shall indicate their rates in clear/ visible figures as well as in words and shall not alter/overwrite/make cutting in the quotation. In case of a mismatch, the rates will be written in words will prevail.

**02. Validity** (both foreign & indigenous): Quoted rates must be valid for **120 days.**

**03**. **Earnest Money Deposit:** (both foreign & indigenous)

Refundable earnest money deposit, amounting to minimum 2.5% of the total quoted value (rounded off to the nearest thousand rupees) must be deposited as earnest money along with the “Technical Bid” by demand draft in favour of **‘Director, IBSD Imphal** and payable at **Imphal**. The EMD of unsuccessful bidders shall be returned after award of contract. All tenders received without EMD shall be summarily rejected. EMD of the successful bidder will be released on submission of the Performance Bank Guarantee (PBG).No interest will be paid on EMD.

**04. Performance Bank Guarantee** (both foreign & indigenous): The successful bidder shall furnish an unconditional performance bank guarantee valid till 60 days after the warranty period from a scheduled bank for 10% of the Purchase order value within 21 days from the placement of this order failing to which the contract shall be deemed as terminated (Applicable only to orders costing more than INR 5,00,000.00).

a) The vendor shall provide a certificate of Guarantee guaranteeing xxx (Name of the equipment) of the satisfactory operation of the components and against poor workmanship, bad quality of materials used, faulty designs and performance figures given by the Vendor.

b) The guarantee shall be operative for a period of 60days after the warranty period. The performance bank guarantee would be to the extent of 10% of the order value.

c) The vendor shall at their own risk/cost rectify the defects/replace the items supplied, for defects identified during the period of guarantee.

(d) While clause 4(a), 4(b) & 4(c) are applicable to all orders worth INR Rs 5, 00,000.00 or more, competent authority may take appropriate decisions on exceptional cases.

**05.PENALTY FOR DELAYED DELIVERY** (for both foreign & indigenous supplier): In the event of delayed delivery, installation & commissioning i.e. after the expiry of the period as agreed by both parties, the vendor shall be liable for a penalty deduction at a percentage of the value of the undelivered equipment subject to a maximum of 10% as detailed below:

 @ 1% to one week

 @ 2.5% upto two weeks

 @ 5% upto three weeks

 @ 10% for four weeks and above

For the purpose of this clause, part of the week is considered as a full week.

In case of delayed delivery, the Director of IBSD Imphal reserves the right not to accept the subject consignment.

**06**. **In case of indigenous supplier**s, the goods should be insured against theft, loss or breakage during transit and insurance charge should not exceed 1% of the cost of material supplied. The rates of sales tax, excise duty etc. (as applicable) should be clearly indicated. (Form C & D are not applicable to us.)

**07. Pre-Installation** (both foreign & indigenous): Pre-installation requisites (electrical/floor/space/air-conditioning etc.) if any should be invariably mentioned clearly. Installation/training will be the full responsibility of the supplier/Indian agent.

**08. Short Shipment:** If any short-shipment is noticed, the same will be arranged immediately with all charges to this effect to be borne by supplier/Indian agent.

**09. Genuine pricing** (both foreign & indigenous supplier): **Vendor is to ensure that quoted price is not more than the price offered to any other customer in India to whom this particular item has been sold. Copy of the latest price list for the quoted item, applicable in India, must be enclosed with your offer.**

**10.** Concessional GST @ 5% will be applicable as per GOI norms for research institutes. In this regard, IBSD, Imphal will provide GST concession certificate (DSIR) to the successful bidder.

**11. Delivery**: a) delivery of goods at IBSD, Imphal, will have to be within 45 days from the date of the order.

a) **Safe Delivery of goods**: All aspects of safe delivery shall be the exclusive responsibility of the vendor. At the destination the packing will be opened in presence of IBSD user/representative. The proper commissioning will be the basis for receipt in good condition.

 b) **No part delivery/shipment will be allowed.**

**12. Mode of Payment for Indigenous Purchase:**

 a) Payment for indigenous purchases will be within 45 days from the date of successful delivery and installation of goods at IBSD Imphal, generally through A/c payee cheque. In case payment is required by DD, the draft commission will be deducted from bill amount.

***Note: Please note as per Organization’s norms advance payment is not allowed for indigenous purchase***

**13. Late & delayed tender (both foreign & indigenous):** Late & delayed tender will not be considered. In case any unscheduled holiday occurs on prescribed closing/opening date the next working day shall be prescribed date of closing/opening.

**14. Conditional tenders not acceptable** (both foreign & indigenous): Conditional tenders shall not be accepted on any ground and shall be rejected straightway. In other word, printed conditions mentioned in the tender bids submitted by vendors will not be binding on IBSD. All the terms and conditions for supply, payment terms, penalty etc. will be as those mentioned herein and no change in the terms and conditions by the vendors will be acceptable.

**15.Specifications are basic essence of the product** (both foreign & indigenous): **It must be ensured that the offers are strictly as per our specifications**. At the same time it must also be kept in mind that merely copying our specifications in their quotation shall not make the firms eligible for consideration. **A quotation has to be supported with the printed technical leaflets/literature and the specifications mentioned in the quotation must be reflected/supported by such printed technical leaflets/literature** model quoted/tendered specifications should invariably be highlighted in the leaflets for easy reference.

**16. Enquiry during the course of evaluation not allowed:** No enquiry shall be made by the bidders during the course of evaluation of the tender till the final decisions conveyed to the successful bidder(s). However, the committee/its authorized representative can make any enquiry/seek clarifications from the bidders. In such situation, the agency shall extend full co-operation. The bidders can also be asked to arrange demo of the offered items, in a short notice, as such the bidders have to be ready for the same.

**17.** Due to the pandemic COVID-19 situation, bidding parties may present during the opening of quotations either through videoconferencing or physically wherever possible. Parties may be invited during the meeting for any clarification, if required through videoconferencing.

**18. The acceptance of the quotation will rest solely with the Director**, IBSD Imphal, who in the interest of the organization is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received without assigning any reason.

**19**. **Termination for default:** Default is said to have occurred

* If the supplier fails to deliver any or all of the services within the time period(s) specified in the purchase order or any extension thereof granted by GBP.
* If the supplier fails to perform any other obligation(s) under the contract.

If the vendor, in either of the above circumstances, does not take remedial steps within a period of 30 days after receipt of default notice from **Director**, IBSD Imphal (or takes longer period in-spite of what IBSD may authorize in writing), IBSD may terminate the contract/purchase order in whole or in part and forfeit the EMD/PBG as applicable. In addition to above, IBSD may at its discretion also take the following actions: IBSD may procure, upon such terms and in such manner, as it deems appropriate, good similar to the undelivered items/products and the defaulting supplier shall be liable to compensate IBSD for any extra expenditure involved towards goods and services obtained.

**20. Applicable Law** (both foreign & indigenous):

(a) The contract shall be governed by the laws and procedures established by Govt. of India and subject to exclusive jurisdiction of competent Court & forum in Imphal, India only.

(b)Any dispute arising out of this purchase shall be referred to the **Director**, IBSD Imphal, and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an arbitrator, who should be acceptable to both the parties, to be appointed by the **Director**, IBSD Imphal. The decision of such arbitrator shall be final and binding on both the parties.

**ADDITIONAL TERMS FOR IMPORTED GOODS:**

In addition to above mentioned terms, the following terms will be applicable in case of foreign purchases:

**21. Rates:** Quoted rates should be in CIF/CIP Kolkata terms and charges to be stated in the following break-up

 (a) Ex-works value

 (b) + Documentation & handling Charge, if any

 (c) + Estimated Overseas Freight to be paid at actual against authentic documents and monetary receipt

 (d) + Estimated Overseas Insurance charge to be paid at actual against authentic documents and monetary receipt (in case the firm holds open insurance policy, the insurance certificate relating to the consignment will have to be provided).

 (f) Total CIP/CIF Kolkata value

**22. Delivery:**

 (a) Delivery of goods at IBSD Imphal, will have to be within 95 days from the date of issue of the Purchase order.

 (b) Supplier must take necessary steps for custom clearance at Kolkata. IBSD will provide necessary documents on request.

 (c) While transshipment will be allowed, part shipment will not be allowed.

**23. After Sale Service:** In case of imported items, foreign manufacturing firms should indicate facilities available for after sales service in India without which their offers are liable to be ignored. Detail address and contact number of local representative in India, without which the offers are liable to be rejected.

**24. Country of Origin:** While the country of origin will not be insisted, the same however will have to be stated in the original Invoice for payment through LoC.

25. **LoC Amendment:** LoC/FDD amendment charges due to mistake on the part of the supplier,

if any, will have to be borne by the supplier.

**Price Schedule for Goods Being Offered From Abroad**

**Name of the Bidder\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TENDER No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Sl No. | Item Description | Country of origin | Unit | Quantity | Unit Price | Total Price (5x6) | Charges for insurance & transportation to port/ place of destination | Total Price (7+8) |
| FOB (named port of shipment) | FCA (named place of delivery) | FOB (named port of shipment) | FCA (named place of delivery) | Ocean  | Air | CIF |
|  |  |  |  |  |  |  |  |  |  |  |  |

Note: Total Bid Price in foreign

Currency\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in words

1. Indian agents name & address\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature of Bidder

(b) Installation, commissioning & training charges, Name

 If any\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Business

( c) Cost of spares\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(d) The Indian agent’s commission shall be paid in

 Indian Rupees only based on the Exchange Rate

prevailing on the date of negotiation of documents

in accordance with clause 22.1 of GCC.

(e) The cost of optional items shall be indicated separately

**Price Schedule For Goods Being Offered From India.**

Name of the Bidder\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tender No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Sl. No. | Item Description | Country of origin | Unit | Quantity | Ex-Works. Ex-warehouse, Ex-show room off the shelf price (inclusive of all taxes already paid) | Total price Ex-Works Ex-warehouse, Ex-showroom off the shelf price (inclusive of all taxes already paid)5x6 | VAT & other taxes like excise duty payable, if contract is awarded | Packing & for warding up to a station of dispatch, if any | Charges for inland transportation, insurance up to Lab./instt. | Installation Commissioning and training Charges, if any |
|  |  |  |  |  |  |  |  |  |  |  |

Total Bid price in foreign

currency\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in words.

Signature of Bidder

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Business

Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Note:

1. The cost of optional items shall be indicated separately
2. Cost of Spares \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Bidder Information Form**

1. The Bidder shall fill in this form in accordance with the instructions indicated below. No alternations to its format shall be permitted and no substitutions shall be accepted. This should be done of the letter head of the firm

Date: (of Bid Submission)

Tender No.: (insert number from invitation for bids)

Page 1 of \_\_\_\_\_\_ pages

|  |
| --- |
| 1. Bidder’s Legal Name: |
| 2. In case of JV, legal name of each party: |
| 3. Bidder’s actual or intended Country of Registration: |
| 4. Bidder’s Year of Registration: |
| 5. Bidder’s Legal Address in Country of Registration: |
| (1) 6. Bidder’s Authorized Representative Information Name: (Authorized Representative’s name) Address: (Authorized Representative’s Address) Telephone/Fax numbers: (Authorized Representative’s Telephone/Fax numbers) Email Address: (Authorized Representative’s Email Address) |
| 7.Attached are copies of original documents of: (check the boxes of the attached original documents) Articles of Incorporation or Registration of firm named in 1, above , in accordance with ITB Sub-Clauses 4.1 and 4.2 |

Signature of Bidder \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Business Address

**Manufacturer’s Authorization Form**

The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.

Date: (date of Bid submission)

Tender No.: (insert number from invitation for bids)

To: (Complete name and address of Purchaser)

Whereas

We (complete name of the manufacturer), who are official manufacturers of (type of goods manufactured), having factories at (full address of manufacturer’s factories), do hereby authorize (complete name Bidder) to submit a bid the purpose of which is to be provide the following Goods, manufactured by us (name and or brief description of the goods), and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee and warranty in accordance with Clause 21 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: (signature(s) of authorized representative(s) of the Manufacturer)

Named: (complete name(s) of authorized representative(s) of the Manufacturer)

Title:

Duly authorized to sign this Authorization on behalf of: (complete name of Bidder)

Dated on \_\_\_\_\_\_\_\_\_\_\_\_\_\_day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_ (insert date of signing)

**BID SECURITY FORM**

Whereas \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Hereinafter called the tenderer)

Has submitted their offer dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For the supply of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Hereinafter called the tender)

Against the purchaser’s tender enquiry no. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

KNOW ALL MEN by these presents that WE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ having our registered office at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are bound unto \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter called the “Purchaser”)

In the sum of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_day of \_\_\_\_\_\_\_\_\_\_\_\_, 20\_\_\_\_\_\_\_\_\_\_\_\_.

The Conditions of this Obligation are:

1. If the tendered withdraws or amends, impairs or derogates from the Tender in any respect within the period of validity of this tender.
2. If the tendered having been notified of the acceptance of his tender by the Purchaser during the period of its validity:
3. If the tenderer fails to furnish the Performance Security for the due Performance of the contract.
4. Fails or refuses to accept/execute the contract.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Signature of the authorized officer of the Bank)

Name and designation of the officer

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

**Performance Statement Form**

**(For a period of last 3 years)**

**Name of the Firm………………………………………**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Order Placed by (full address of Purchaser) | Order No. and Date | Description and quantity of ordered equipment | Value of order | Date of completion of delivery as per contract | Date of actual completion of delivery | Remarks indicating reasons for late delivery, if any | Has the equipment been installed satisfactory? (attach a certificate from the Purchaser/Consignee | Contact person alongwith Talephone No.,FAX No. and email-address |
|  |  |  |  |  |  |  |  |  |

Signature and Seal of the manufacturer/ Bidder……………………………………..

Place:

Date:

**Deviation Statement Form**

1. The following are the particulars of deviations from the requirements of the tender specifications:

|  |  |  |
| --- | --- | --- |
| Clause | Deviation | Remarks (Including Justification) |
|  |  |  |

Place:

Date:

Signature and Seal of the

Manufacturer/Bidder

NOTE:

1. Where there is no deviation, the statement should be returned duly signed with an endorsement indicating “No Deviation”.

**Service Support Detail Form**

|  |  |  |  |
| --- | --- | --- | --- |
| Sl No. | Nature of training imparted | List of similar type equipments serviced in the past 3 years | Address, Telephone Nos., FAX Nos. and email address |
|  |  |  |  |

Signature and Seal of the Manufacture/Bidder ……………………………….

Place:

Date:

**ANNEXURE**

**LIST OF ITEMS**

1. **4CPU SERVER**

|  |  |  |
| --- | --- | --- |
| **Item** | **Description of Requirement** | **Quantity** |
| Chassis | 2 U Rack Mountable | ONE (01) |
| CPU | 4 x Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) processors |
| Memory | 48DIMM slots.1TB DDR4 RDIMM RAM expandable up to 3 TB@2933MHz , Adv. ECC , memory mirroring |
| Memory Protection | Advanced ECC with multi-bit error protection, Online spare, mirrored memory and fast fault tolerance |
| HDD Bays | 11.52TB(6 x 1.92TB SATA 6G Read Intensive SFF SC SSD)Server should support up to 24 SFF HDD/SSD The drive carrier should have intuitive icon based display along with "DO NOT REMOVE" caution indicator that gets activated automatically in order to avoid data loss/downtime due to wrong drive removal. |
| Hard disk drive  | Hot Plug SFF or LFF SATA/SAS/SATA SSD/SAS SSD and NVMe drives |
| Controller | PCIe 3.0 based 12Gb/s SAS Raid Controller with RAID 0/1/1+0/5/50/6/60/1 Advanced Data Mirroring/10 Advanced Data Mirroring with 2GB battery backed write cache (onboard or on a PCI Express slot)Storage controller should support Secure encryption/data at rest Encryption |
| Networking features | Server should be configured with below networking cards:1. 1Gb 4-port network adaptors2. 10Gb 2-port Ethernet adaptor3. 16Gbps Dual port FC HBA card |
| Interfaces | Serial - 1Micro SD slot - 1USB 2.0 support with 4 total: 2 front (optional); 2 rearUSB 3.0 support with Up to 5 total: 1 front, 2 rear, 2 internal |
| Bus Slots | Eight PCI-Express 3.0 slots without using Riser Card |
| Power Supply | Redundant 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply with minimum 94% efficiency |
| Fans | Redundant hot-plug system fans |
| Industry Standard Compliance | ACPI 6.1 CompliantPCIe 3.0 CompliantPXE SupportEnergy StarASHRAE A3/A4UEFI Secure Boot and Secure Start supportSecurity feature to ensure servers do not execute compromised firmware codeAdvanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browserTPM (Trusted Platform Module) 1.2TPM (Trusted Platform Module) 2.0 |
| Operating Systems and Virtualization Software Support | Windows ServerVMware ESXiRed Hat Enterprise Linux (RHEL)SUSE Linux Enterprise Server (SLES)CentOS |
| System tuning for performance  | 1. System should support feature for improved workload throughput for applications sensitive to frequency fluctuations. This feature should allow processor operations in turbo mode without the frequency fluctuations associated with running in turbo mode2. System should support workload Profiles for simple performance optimization |
| Secure encryption | System should support Encryption of the data (Data at rest) on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encyption deployment. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.  |
| Provisioning | 1. Should support tool to provision server using RESTful API to discover and deploy servers at scale2, Provision one to many servers using own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell |
| Server Management | Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data center. It should provide an at-a-glance visual health summary of the resources user is authorized to view. |
| The Dashboard minimum should display a health summary of the following:• Server Profiles• Server Hardware• Appliance alerts |
| The Systems Management software should provide Role-based access control |
| Management software should support integration with popular virtualization platform management software like vCenter, and SCVMM |
|  | Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. |
|  | The Server Management Software should be of the same brand as of the server supplier. |

1. **4CPU SERVER with NVidia T4 GPU**

|  |  |  |
| --- | --- | --- |
|  **Item** | **Description of Requirement** | **Quantity** |
| Chassis | 2 U Rack Mountable | ONE (01) |
| CPU | 4 x Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) processors |
| Memory | 48DIMM slots.1TB DDR4 RDIMM RAM expandable up to 3 TB@2933MHz , Adv. ECC , memory mirroring |
| Memory Protection | Advanced ECC with multi-bit error protection, Online spare, mirrored memory and fast fault tolerance |
| HDD Bays | 11.52TB(6 x 1.92TB SATA 6G Read Intensive SFF SC SSD)Server should support up to 24 SFF HDD/SSD The drive carrier should have intuitive icon based display along with "DO NOT REMOVE" caution indicator that gets activated automatically in order to avoid data loss/downtime due to wrong drive removal. |
| Hard disk drive  | Hot Plug SFF or LFF SATA/SAS/SATA SSD/SAS SSD and NVMe drives |
| Controller | PCIe 3.0 based 12Gb/s SAS Raid Controller with RAID 0/1/1+0/5/50/6/60/1 Advanced Data Mirroring/10 Advanced Data Mirroring with 2GB battery backed write cache (onboard or on a PCI Express slot)Storage controller should support Secure encryption/data at rest Encryption |
| Networking features | Server should be configured with below networking cards:1. 1Gb 4-port network adaptors2. 10Gb 2-port Ethernet adaptor3. 16Gbps Dual port FC HBA card |
| Interfaces | Serial - 1Micro SD slot - 1USB 2.0 support with 4 total: 2 front (optional); 2 rearUSB 3.0 support with Up to 5 total: 1 front, 2 rear, 2 internal |
| GPU Card | 2x Nvidia 16Gb T4 16GB GPU(2560 Cuda Cores) |
| Bus Slots | Eight PCI-Express 3.0 slots without using Riser Card |
| Power Supply | Redundant 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply with minimum 94% efficiency |
| Fans | Redundant hot-plug system fans |
| Industry Standard Compliance | ACPI 6.1 CompliantPCIe 3.0 CompliantPXE SupportEnergy StarASHRAE A3/A4UEFI Secure Boot and Secure Start supportSecurity feature to ensure servers do not execute compromised firmware codeAdvanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browserTPM (Trusted Platform Module) 1.2TPM (Trusted Platform Module) 2.0  |

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| Operating Systems and Virtualization Software Support | Windows ServerVMware ESXiRed Hat Enterprise Linux (RHEL)SUSE Linux Enterprise Server (SLES)CentOS |  |
| System tuning for performance  | 1. System should support feature for improved workload throughput for applications sensitive to frequency fluctuations. This feature should allow processor operations in turbo mode without the frequency fluctuations associated with running in turbo mode2. System should support workload Profiles for simple performance optimization |
| Secure encryption | System should support Encryption of the data (Data at rest) on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encyption deployment. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.  |
| Provisioning | 1. Should support tool to provision server using RESTful API to discover and deploy servers at scale2, Provision one to many servers using own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell |
| Server Management | Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data center. It should provide an at-a-glance visual health summary of the resources user is authorized to view. |
| The Dashboard minimum should display a health summary of the following:• Server Profiles• Server Hardware• Appliance alerts |
| The Systems Management software should provide Role-based access control |
| Management software should support integration with popular virtualization platform management software like vCenter, and SCVMM |
| Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. |
| The Server Management Software should be of the same brand as of the server supplier. |

# 3. Storage

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| **Sl.No.** | **Item** | **Description of Requirement** | **Quantity** |
| 1 | Operating System & Clustering Support | 1. The storage array should support industry-leading Operating System platforms including: Windows 2016 / 2019, VMware and Linux.2. Offered Storage Shall support all above operating systems in Clustering. | ONE (01) |
| 2 | Capacity & Scalability | 1. The Storage Array shall be offered with **288TB Raw Capacity using 12TB NL-SAS Drives**2. Storage shall be scalable to minimum of 240 number of SAS SFF drives. |
| 3 | Front-end Ports & Back-end Ports | **1. Offered Storage system shall be supplied with 4 \* 16Gbps FC ports per controller2. Offered storage system shall have 2 \* 12G SAS ports for Back-end connectivity.** |
| 4 | Architecture | The storage array should support dual, redundant, hot-pluggable, active-active array controllers for high performance and reliability |
| 5 | No Single point of Failure | Offered Storage Array shall be configurable in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc. |
| 6 | Disk Drive Support | 1. Storage system shall also support maximum of Enterprise SAS spinning drives, SSD and near line SAS / 7.2K RPM drives. 2. Offered storage array shall also have support for self-encrypted SSD, SAS and near line SAS / 7.2K RPM . |
| 7 | Cache | 1. Offered Storage Array shall be given with **Minimum of 12GB cache per controller in a single unit (24GB Cache across Controller).**2. Cache shall be backed up in case of power failure for indefinite time either using batteries or capacitors or any other equivalent technology.3. Offered Storage shall also have optional support for Flash cache using SSD / Flash drives. Offered storage shall support at-least 8TB Flash Cache.4. Offered Flash cache shall be tuned for random read operations and shall remain activated even at less than 70% of random average read workload. |
| 8 | Raid Support | 1. Offered Storage Subsystem shall support Raid 1 , 5 and Raid 62. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array.3. Thin provisioning shall be supported with offered Flash Cache.4. Raid processing shall be offloaded to dedicated ASIC instead of CPU. In case vendor is not supporting it then vendor shall ensure that additional 12GB cache per controller is configured to offset the raid processing workload. |
| 9 | Point in time and clone copy | 1. Offered Storage array shall be configured with array based Snapshot and clone functionality and shall be configured for minimum of 512 snapshot licenses.2. Offered Storage array shall support at-least 512 point in time copies (Snapshots) and 128 volume / Clone copies |
| 10 | Replication | Offered storage subsystem shall support storage based replication. |
| 11 | Thin provisioning | Offered Storage shall be offered and configured with Thin Provisioning capability. |  |
| 12 | Data Tiering | Offered Storage shall also be configured for Sub-Lun Data tiering in real time fashion across different type of drives within a given pool like SSD, SAS, NL-SAS etc.  |
| 13 | Global and dedicated Hot Spare | 1. Offered Storage Array shall support Global hot Spare for offered Disk drives.2. Atleast 2 Global hot spare drive shall be configured for every 30 drives.3. Offered storage array shall have the support for distributed hot spare |
| 14 | Logical Volume & Performance | 1. Storage Subsystem shall support minimum of 512 Logical Units. Storage Array shall also support creation of more than 100TB volume at controller level.2. Offered Storage shall have inbuilt performance management software. Configuration Dashboard shall show overall IOPS and MB/sec performance. |
| 15 | Warranty | 3 Years |

**4. 36U Rack**

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| Sl No. | Description of Requirement | Quantity |
| 1 | 36U Rack Frame/600/1000/Steel/NRS1/ Casters Type 2, Levellers, 19" Adopter kit/Loops, Glass Door/ Metal Door/42U/800/NRS1, Side Panels/1000/42U/ Vented | ONE (01) |
| 2 | 1Ph, 32A, Zero U Vertical PDU 12 X IRP 5/15A, 16A MCB X 2, Rating 7.3KVA |
| 3 | Horz. Cable Organiser/1U/Loop |
| 4 | Shelf/1000 |
| 4 | Shelf/Key Board/19"Rty/1000 |
| 5 | Mounting Hardware-CR (Pack of 20) |
| 6 | ITE / Server Rack Air Circulation module/Tower Mount/360CFM |