## TENDER DOCUMENT

For Supply, Installation and Commissioning Of

SERVERS, STORAGE and SAN SWITCH



Assam University
Silchar-788011

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#### **NOTICE INVITING TENDER**

The Assam University, Silchar, hereinafter, called "AUS", invites Tender on Two-Bid system for Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH.

#### **General information about the Tender:**

i. Tender No. and Date : AUS/CC/2016/03-02; 16/01/2017

ii. Last date and time for receipt of Tender: 14/02/2017; 2PM

iii. Time and date of opening of Tender : 14/02/2017; 3PMiv. Estimated Cost : Open Tender

v. Place of opening of Tenders : Conference Hall, Computer

Centre, AUS, Silchar, Assam

vi. Address of Communication : Director, Computer Centre, Assam

University Silchar, Assam -788011

Sd/-Director, Computer Centre Assam University Silchar-788011

## SECTION - 1

# INTRODUCTION AND GENERAL INSTRUCTION

#### 1. Introduction

Assam University came into existence through Assam (Central) University Act, 1989. It was established in 1994, since then the University is steadily becoming an excellent centre of learning. The University has two campuses; the main campus is in Silchar and the second campus is in Diphu. It has sixteen Schools on major disciplines. There are 41 Departments under these Sixteen Schools.

#### 2. BID Details

The format for submission of technical details is as given in Section-3.

Bidders must submit the Technical (non-financial) bid in a sealed cover strictly as per the terms specified in "Section-3" provided for the purpose. Bids submitted otherwise will not be accepted.

Authorized signatory of the vendor should duly sign in each page of the offer.

**2.1** The Tender document can be downloaded from the website of Assam University at URL: <a href="www.aus.ac.in">www.aus.ac.in</a>. Bids should be submitted along with the bid processing fees in the form of Demand Draft/ Banker's Cheque of Rs. 1000/- in favour of "Finance Officer, Assam University", payable at Silchar.

#### 3) SUBMISSION OF BIDS/TENDER DOCUMENTS:

The sealed tenders should be submitted with superscription "AUS TENDER No.

DATED. FOR Supply, Installation and Commissioning of SERVERS,

STORAGE and SAN SWITCH".

The tender will contain two bids: (i) Technical bid in a sealed cover strictly as per the terms specified in "Section-3" with superscription "AUS TENDER No.

DATED. FOR Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH". - Technical

and (ii) Financial bid in a sealed cover strictly as per the terms specified in "Section-4" with superscription "AUS TENDER No. DATED. FOR Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH".
"- Financial.

Tender should be addressed to:-

The Director, Computer Centre, Assam University, Silchar Assam-788011

#### 4) Last date for Submission:

The last date and time up to which tenders will be accepted at the above address is as follows:

DATE: 14/02/2017

TIME: 2PM

The Tender may be submitted by hand in the Computer Centre, Assam University, Silchar Assam-788011 or can also be sent by Courier/Post so as to reach the above address on or before the last date and time specified above.

Bids received after the above date will not be considered.

#### 4) CANCELLATION OF TENDER:

The AUS reserves the right to accept or reject any NIT bid and to annul the process and reject all NIT bids at any time without assigning any reason or incurring any liability of the firms.

5) EARNEST MONEY DEPOSIT (EMD): The bidder shall deposit a sum of Rs. 30,000/-(Rupees Thirty Thousand only) as EMD in the form of DD/Banker's Cheque from any Public Sector or Private Sector Bank payable at Silchar in favour of Finance Officer, Assam University, Silchar and forward the same along with Technical Bid.

Refund of the EMD will be made only on completion of the tender exercise. EMD will be forfeited in the event of vendor not accepting the purchase order.

#### 6) VALIDITY of OFFER:

The offer of contract should be valid up to 3 months from the date of finalization of successful bidder by the Committee for issue of work order. The validity time may be extended by another one month with the approval of the Evaluation Committee in case the project cannot be commenced immediately.

#### 7) Delivery Terms and Period:

The entire project should be completed within two months **(60 days)** of award of the Work Order.

The successful bidder must ensure timely completion of work.

#### 8) Award of Work:

AUS will award the work order to the **Best Value Bidder** on receipt of the performance security in the form of BG. Detailed procedure for calculation of the **Best Value Bidder** may be referred at Section 5. The work will be deemed to be completed on successful Supply, Installation and Commissioning of the Servers, Storage and SAN Switch as per the scope of work given in Section 2.

#### 9) Cancellation/Termination of Agreement:

AUS at its sole discretion with 30 days prior notice can cancel/terminate the agreement without assigning any reasons thereof. The bidder will deliver to AUS all the work product deliverable completed and confirm in writing that all rights and permissions and licenses are also vested now with the AUS and that it is free of royalty and is fully paid up. All payments due to bidder and payable till that time will only be paid by AUS.

#### 10) Eligibility of Bidders

- i. Only manufacturers or their sole Authorized Distributors/dealer who have been authorized by the OEM as well as the Public Sector Undertakings / Enterprises having MoU with OEMs may submit the tenders.
- ii. The party must have experience in supply, installation and commissioning of such items in Govt. organization /Public Sector Enterprises and Universities etc. with at least Three years of experience and also have networking project experience in educational institutions. Certificate in this regard from the responsible officer of that organizations with contact no., e-mail address etc is to be submitted.
- iii. The manufacturer having ISO 9002 certificate or similar certification would be preferred.
- iv. The bidder must submit the latest Trade License, Income tax clearance certificate for last three years, PAN card & Sales tax clearance certificates, CST/VAT clearance certificate if quoted in the tender for CST/VAT with the tender.
- v. No consortiums are allowed. The bidder shall not assign, transfer or sublet or attempt to assign, transfer or sublet, whether wholly or in part, any portion of the work to any other entity.
- vi. Being an educational institute, Assam University, Silchar is entitled for Custom and Central Excise duty exemption for procurement of scientific equipment etc. The interested bidder while quoting rates should indicate the Excise duty component and tax component separately.

#### 11) Payment Terms

No payment shall be made in advance nor any loan from any bank or financial institution recommended on the basis of the order of award of work. Payment for Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH shall be made as per following terms:

- a) 100% Payment on successful Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH as per the scope of work given in section-2. Final acceptance will be done on "Successful Go-Live, completion of training of the AUS Technical Team and handing over of the documentation of design and technical details to the AUS."
- b) TDS, Service tax and any other applicable taxes as per prevailing rates will be deducted as per GOI rules before making the payment

Payment will be made by AUS to the bidder in accordance with the rate quoted by the bidder in the financial bid on submission of bills in triplicate in the name of Assam University, Silchar. Payments shall be subject to deductions of any amount as per Terms and Conditions of this Tender. All payments shall be made by Account Transfer only.

## SECTION - 2

## **SCOPE OF WORK**

#### Scope of the Work

- Supply, installation and commissioning of rack mountable servers at Computer Centre as per specification attached in **Annexure I** to be configured as Web Server, Mail Server, Domain Name Server, Database Server etc. Archival system for web services should be configured along with backup facility of critical data.
- 2. Supply, installation and commissioning of Storage and SAN Switch at Computer Centre as per specification attached in **Annexure II.** Storage has to be mapped for the Web Server, Mail Server, Domain Name Server, Database Server etc and the Archival system for web services.
- 3. Supply, installation and commissioning of software for e-mail solution based on Red Hat Linux Operating System and developing application for accessing through smartphone as per specification attached in Annexure A. This includes configuring a Web Server, Mail Server, Domain Name Server, Database Server etc. The offered software should be ready to use, open to customization and scale-able.
- 4. Configuration of Mail Services at the Server end for integration with OUTLOOK from the end user level using LDAP authentication.
- 5. Database server configuration should support the following database and control Panel features
  - i. Unlimited MySQL Database with PHP My Admin Access
  - ii. Programming Language CGI, Fast CGI, PHP, Ruby on Rails, Perl, Python SSI
  - iii. Programming Modules: Curl, CPAN, G D Library Image Magick
  - iv. System Management: SSH Access and Cron job Scheduling
  - v. Latest cPanel Control Panel
  - vi. Website statistics AWStats, Webalizer Raw Log Manager Referrer and Error Logs
  - vii. Portals Forums Counters Form mail
  - viii. Password Protected Directories and Custom Error Pages
  - ix. Web Based File Manager Hotlink Protection, IP Deny Manager, Redirect URL
- 6. Configuration of the software (Email; Email antivirus, Email anti-spam; Email to SMS, Email content filtering) to derive fullest functionalities mentioned under the heading of the technical specification and requirements.
- 7. Demonstration of back up configuration as per the possible retention period based on the hardware and software resources available with Assam University email logs, email content along with attachment restoration and viewing.
- 8. Coordination with Computer Centre for the installation of e- mail server on the DMZ created by them. Configuration of e-mail with <a href="mailto:aus.ac.in">aus.ac.in</a> domain. Installation, configuration and commissioning of the email system as per AUS

#### requirements

- 9. Imparting training to Computer Centre, Assam University Silchar, engineers on how to configure all the features of the software, back up policy configuring, back up restoration methods, log viewing, etc. along with documented manual.
- 10. To provide comprehensive warranty and maintenance for all supplies i.e Hardware ( Servers ) and Software (Operating system, e-mail software) for one year including bug fixes, preventive maintenance, troubleshooting, regular back of the system, configuration services and updates to the software.
- 11. Provide comprehensive Annual Maintenance Services (AMC) for all supplies i.e Hardware ( Servers ) and Software ( Operating system, e- mail software) for three years immediately after completion of the performance / warranty period including bug fixes, preventive maintenance, troubleshooting, regular backup of the system, configuration services and updates to the software.
- 12. Regular update of the system for bug fixes, new versions, etc.
- 13. Project specific training for users.

#### 14. Performance criteria:

- **i.** The system will be designed in a way to ensure response time of less than one second for normal web based user.
- ii. The system shall permit online storage of emails for 100GB or more
- iii. Archival storage shall be designed to provide minimum 1000 GB of archives.
- iv. Archival server shall have means to offload the archived emails to offline storage (e.g. External Hard Disk, DVD Drives, etc.).
- v. The servers shall share the email storage to ensure smooth switchover in case of server failure.
- vi. Should support switchover in case of the active server failure automatically within 10 seconds to the standby server.
- vii. The last completed email transaction shall be available in the storage in case of a server failure / switchover.

#### 15. Delivery & Installation:

- a) The tenderer shall have to complete the supply of equipments as contained in the Work Order within six weeks from the date of issue of Work Order.
- b) The tenderer has to complete Installation, testing and commissioning of the equipments as well as their handing over in faultless working conditions including system integration within 2 (two) months from the date of receipt of material on the respective sites.

#### 16. Satisfactory Installation:

The satisfactory Installation, Testing & Commissioning and Handing over of

the equipments means the faultless functioning including system integration of all the equipments for a minimum period of 15 (fifteen) days from the date of handing over the same to AUS. The entire work as stipulated in the tender document is to be completed within two months from the date of issue of Work Order.

#### 17. Assam University Silchar Obligations

Assam University Silchar shall provide the following;

- i. Data Center rack space
- ii. Cyberoam firewall
- iii. DMZ
- iv. Connection to internal network
- v. Internet connectivity
- vi. Domain registration (aus.ac.in)
- vii. Static IPs as required.

#### 18. Training:

Extensive training should be undertaken for users at AUS to handle server maintenance. Additionally a separate training should be done for System Administrators.

#### 19. Documentation:

Complete documentation on the Server configuration, User Manual and Technical Manual has to be provided.

## SECTION - 3

## TECHNICAL BID

#### **Proforma for submission of Technical Bids**

(In accordance to the Annexure mentioned)

- 1) Bid Letter (Annexure A)
- 2) Name and Address of the Company (Annexure B)
- 3) Bidder's expertise in Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH (*Annexure C*)
- 4) Earnest Money Rs.30,000/- as Bid Security in the form of Demand Draft/ Bankers" Cheque, from Scheduled Commercial Bank, drawn in favour of the Finance Officer, **Assam University, Silchar,** payable at Silchar (*Annexure D*)
- 5) All the pages in the Technical and Financial bid must bear the signature of the bidder.

#### (Bid Letter to be given in Company Letterhead)

To.

The Director, Computer Centre Assam University, Silchar – 788011 Tele: 03842-270826 Fax:03842-270806 E-mail:dir cc@aus.ac.in

Ref. Tender No.	Dated :
Bidder's Reference No	Dated :

## Sub.: Proposal for providing services relating to Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH Sir.

Having examined the conditions of contract as in the eligibility and general instructions, scope of work and special terms and conditions, I/we, the undersigned, offer to undertake Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH at Assam University, Silchar in conformity with conditions of contract and specifications for sum as may be ascertained in accordance with the qualifying the Technical and Financial bids attached herewith and made part of this Bid.

Until a formal Work Order is prepared and executed, this Bid together with your notification of award shall constitute a binding contract between us. We undertake to complete delivery installation and commissioning of all the hardware as specified in the Work Order within stipulated time in Work Order.

If our Bid is accepted, we will obtain the Performance Guarantee of a Scheduled Bank for an amount of 5% of the Work Order value for the due performance of contract and in accordance with the agreement.

We agree to abide by this Bid for a period of 180 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement. We also declare that the printed terms and conditions, if any at the back of our tender quotation or any other paper enclosed are not applicable. We understand that the authorised committee of the University is not bound to accept the lowest or any bid, you may receive.

We enclose herewith the complete Technical Bid as required by you. This includes:

- Bid Particulars (Annexure B)
- Performa for the Bidder's experience (Annexure C), attached photocopies of letters of awards to establish validity.
- Details of Earnest Money Deposit furnished in the form of Demand Draft (Annexure D).

#### Certified that we are:

A sole proprietor firm and the person signing the Tender is the sole proprietor / constituted attorney of the sole proprietor,

#### OR

A partnership firm and the person signing the Tender is the signing authority and he/she has the authority to refer to arbitration disputes concerning the business of the partnership by the virtue of the partnership agreement/by virtue of general power of attorney.

#### OR

A company and the person signing the Tender is the constituted attorney.

#### OR

The person signing the Tender is the constituted attorney or authorized signatory of the primary party in case of consortium bidding.

We do undertake that, until a formal Work Order is prepared and executed, this bid, together with your acceptance thereof, the tender document and placement of letter of intent awarding the contract, shall constitute a binding contract between us.

Dated this day of 2016 day of
Signature: [NAME IN BLOCK LETTERS of the SIGNATORY]
In capacity of duly authorized to sign the bid for and on behalf of
Witness
Address
Signature  Date:

#### Signature of the Bidder OR

Officer authorized to sign the Bid Documents on the behalf of the bidder Note:

In case of authorized signatory the authorization letter on letter head of the firm must accompany. Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the tender document.

#### **Bid Particulars**

Tender No
1) Name of the Bidder:
2) Address of the Bidder:
3) Telephone No.
4) Fax:
E- mail:
5) The bidder should be registered for Service Tax (Attested copy of the Registration Certificate to be enclosed):
6) Name and Address of the officer to whom all references shall be made regarding this Tender:
Phone:
Fax:
E-mail:
Signature
Name
Designation
Date
Company Seal
PAN No.
TAN No.

#### **Bidder's Experience**

- a) Clients details where Supply, Installation and Commissioning of Servers, Storage and SAN Switches have been undertaken during last three years Name & Address of Client
- b) Type of Client :
- c) Place(s) of Service :
- d) Duration :
- e) Total Number of manpower Deployed
- f) Cost of the project :
- g) Approximate value of Service (in Indian Rupees)
- h) Details of Hardware/ Software/Technology used
- i) Any special features of the project which the Bidder may like to specify
- j) Name, Title and Contact details of the contact at Client location

Bidder's Signature, Name, Designation & Company with Seal

#### Note:

1. Separate sheets for each client to be enclosed

#### **Earnest Money Deposit Details**

lease give the details of the Earnest Money Deposit of Rs. 30,000/
mount :
emand Draft No. :
rawee Bank / Branch :
ate:
Bidder's Signature
Name Designation
& Company with Sea
ate:
ace:

## SECTION - 4

## FINANCIAL BID

#### **FINANCIAL BID FORMAT**

(Note: In the financial bid format, the rate shall be quoted in Indian Rupees in **figures and words**. In case of discrepancy between the rate quoted in **figures and words**, the **rate quoted in words will be taken as final** and shall be binding on the Bidder)

Form 1: Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH

S.NO.	ITEM	Quantity	AMOUNT IN RS.
1	Supply of SERVERS including three years of Warranty, (inclusive of all Taxes)	4	
2	Supply of 10 TB useable capacity STORAGE including minimum three years of Warranty period (inclusive of all Taxes)	1	
3	Supply of SAN SWITCH including minimum three years of Warranty period (inclusive of all Taxes)	1	
4	Installation and Commissioning of Servers as per Scope of Work Defined in Section -2 (including taxes as applicable)	1	
5	Installation and Commissioning of Storage and SAN Switch as per Scope of Work Defined in Section -2(including taxes as applicable)	1	
6	Technical documentation and Training	1	
	Total: (in words)		
	Total: (in figure)		•

Bidder's Signature,
Name,
Designation
& Company with Seal

Date:	
Place:	
Note(if any):	

## SECTION - 5

## BID OPENING & EVALUATION

#### (a) Evaluation Criteria Technical Bid

The University authorised Committee shall evaluate the bids based on the eligibility criteria, and strict compliance to the information sought in **Section 3**. The Committee may, at its discretion, call for additional information, live demonstration of technical capability of Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH or seek clarifications from the bidder(s). Such information has to be supplied within the time frame set out by the Committee; otherwise AUS shall make its own reasonable assumptions and do the evaluation accordingly. Seeking additional information / clarifications cannot be treated as acceptance of the bid. The bidders shall provide all the necessary documents, and reference information as desired by the Committee. After due evaluation of Technical bids, the University authorised Committee would submit its recommendation. **Only those bidders who score 50 marks or more evaluated in accordance with the following Technical Evaluation criteria shall be technically qualified.** 

#### **Technical evaluation criteria**

Parameter	Proof to be submitted by vendor apart from the presentation		Weight	
Does the vendor have expertise in Supply of SERVERS with installation of Operating system in Open source platform (Red Hat Enterprise Linux	No. of similar projects successfully completed for govt. universities /IIT/ IIM/ NIT/IIIT/value more than 10 lakhs (max. 5, each carrying 4 marks)			
etc)	Projects	Work	Completion	
		Order Nos.	document of	
			each project	Max-20
	1			
	2			
	3			
	4			
	5			
Does the vendor have expertise in Supply of SERVERS with installation of Operating system in Open source platform( Red Hat Enterprise Linux	completed			
etc)		Work	Completion	
		Order Nos.	document of	
			each project	Max-10
	1			
	2			
	3			
	4			
	5			
Does the Vendor have capability of	List of we	bsites curren	tly running (max.	
Installation and commissioning of		rying 3 marks)		Max - 15
web servers, mail servers, DNS	1. www.			
Server (value not less than 5 lakhs)?	2. www.			
	3. www.			
	4. www.			
	5. www.			
Does Vendor have expertise in supply, installation and commissioning of STORAGE and SAN SWITCH?	completed /IIT/IIM/NI	than 10 lak		
		T	Completion	1
			document of	
			each project	Max - 20
	1		- <u>-</u>	
	2			
	3			
	4			
	5			

Does Vendor have expertise in supply, installation and commissioning of STORAGE and SAN SWITCH?	No. of s completed /Colleges/C each carryin	for priv ther organ	ects successfully ate universities, isations (max. 5,	
	Projects	work order	Completion	
			document of	
			each project	Max - 10
	1			
	2			
	3			
	4			
	5			
Does the vendor have capability of installation and commissioning of	List of ma carrying 1 n		ites(max. 5, each	Max - 05
servers in open source platform?	1.	•		
	2.			
	3.			
	4.			
	5.			
Does the vendor have the right		rofile sheet	of the Company	Max - 10
people to deliver on this project?			y	
		VII level 4	or higher - 02	
	marks	0001.2008	certified" or "ISO	
			- 02 marks	
	3. Nam	ne and de	etails of max 3	
	employee	s having g	lobal certification	
	– 06 mar	ks ( each car	ry 2 marks)	
Does the vendor have experience in	Supporting	docume	nt for each	Max - 10
providing AMC support for three		n(Max 5, ead	ch carry 2 Marks)	
years or above (Onsite support as an	1.			
when needed)	2.			
	3. 4.			
	5.			
	٦.			1

#### Total 100

Any quotations received after the closing time for submission shall be returned unopened.

#### (b) Financial Evaluation

The financial evaluation shall be based in accordance with the following criteria.

The bidder quoting the lowest cost (L1) in financial bid in **Section 4** will be awarded a 100% score. Scores of other bidders will be evaluated using the following formula. Score of a Bidder = {lowest cost of L1/ lowest cost of the bidder) X 100} (adjusted to 2 decimals)

#### (c) Joint Evaluation of Technical and Financial Bids

The following is the procedure for evaluation as applicable to technically qualified bids:

The technical and financial scores secured by each bidder will be added with weightages of 65:35 respectively and a Composite Bid Score arrived at. The bidder securing the highest Composite Bid Score will be adjudicated as the **Best Value Bidder** for award of the Supply, Installation and Commissioning of SERVERS, STORAGE and SAN SWITCH. In the event the composite bid scores are "tied", the bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Contract.

#### (d) Notification of Award

Prior to the expiration of the validity period, AUS will notify the successful bidder in writing or by fax or email, that it's bid has been accepted.

#### (e) Requirement Study:

The successful Bidder will be required to do a requirement study for the Mail Server, DNS server, Database Server which when agreed upon by the University, will form part of the Agreement to be signed with AUS. The desired navigation structure, general functionalities and reference points for the design will be part of the Requirement Study Document (RSD). The signed copy of the RSD will form the basis of implementation and Go-Live. Failure of the successful bidder to sign the RSD within the time stipulated by AUS, shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event AUS may make the award to another bidder or call for fresh bids.

#### (f) Termination for Insolvency and Default Termination for Insolvency

AUS may at any time terminate the contract by giving written notice of four weeks to the agency, without any compensation to the agency, if the agency becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to AUS.

#### (g) Termination for default

Default is said to have occurred:

If the bidder fails to complete the Development, Re-designing and Maintenance of Website of AUS in accordance with the Tender Notice within the time period(s) specified in the contract or any extension thereof granted by AUS.

If the bidder fails to perform any other obligation(s) under the contract / work order.

If the bidder fails to comply with instructions of AUS with respect to improving the quality of Website Designing, Content, Format, WCMS software, Navigation Structure, Pictures, Ease of Use etc.

#### (h) Performance Bank Guarantee (PBG)

The successful bidder, on intimation of notification through email, will have to submit an

amount of 5% of the Work Order value towards Performance Security in the form of Bank Guarantee (BG), in favour of Finance Officer, Assam University, Silchar payable at Silchar within ten (10) working days prior to release of Work Order.

All incidental charges whatsoever such as premium; commission etc. with respect to the PBG shall be borne by the bidder. The PBG shall be valid till completion of three years from the date of commissioning of the newly created website and extended period if any. Subject to the terms and conditions in the PBG, after completion of three years of the commissioning of the project the PBG will lapse automatically. The PBG may be discharged/returned by AUS upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable by AUS on the PBG. In the event of the bidder being unable to service the contract for reasons not found to be reasonable and satisfactory by the competent authority, AUS would invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of AUS under the contract in the matter, the proceeds of the PBG shall be payable to AUS as compensation for any loss resulting from the bidder's failure to perform/comply its obligations under the contract. AUS shall notify the bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the bidder is in default. AUS shall also be entitled to make recoveries from the bidder's bills, PBG, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

Sd/Director, Computer Centre
Assam University,
Silchar – 788011.

## <u>Detailed Technical Specification of Servers</u> a) Server as per the under mentioned specification: Qnty required 4 nos.

Sl.No.	Item	Description Requirement
1	Chassis	2 U Rack Mountable
2	CPU	Dual Intel Xeon E5-26xxv3 2.4 Ghz octa core or higher
3	CPU Cache	20MB Cache or higher
4	Chipset	Intel C600 Series Chipset or better compatible with CPU
4	Memory	32GB memory with 16 DIMM slots or higher
5	Maximum Memory	The system has to support a maximum memory of 256 GB or higher.
6	Storage	2 X 300 GB 15K RPM Serial –Attach SCSI 6Gbps or higher Dish hot pluggable, internal Tape Drive support
7	Raid Controller	SAS RAID Controller with RAID 1, 5 and compatible with 512 MB Cache or higher
8	Slots	6 (six) PCI-Express 3.0 Slots or higher
9	Networking	2 (two) Nos. of 10/100/1000 Ethernet Ports and 2 (two) Nos.
	features	of 10Gbe Ports with asset feature tracking and security
		management, remote wake up.
10	Video	On board Video Controller of at least 8MB or higher
	Controller	
11	Ports	4 USB3.0 & 1 Serial port, video-1
12	HBA	2(two) x dual port 8Gbps Ports
13	Power Supply	Redundant hot swap power supply
14	Fans	Redundant hot-plug system fans
15	Optical Drive	DVD Read Write Drive
16	Operating	Red Hat Enterprise Linux (RHEL) 7.0 or higher (license with
	Systems	support for 3 years)
	Support	
17	Remote	System remote management should support browser based
	Management	graphical remote console along with Virtual Power Button, c-Panel, remote boot using USB/CD/DVD Drive.
18	Industry	ACPI 2.0b Complaint
	Standard	PCIe 3.0 Complaint
	Compliance	PXE Support
	1	WOL Support
		USB 3.0 Support
		ASHRAE A3/A4
19	Warranty	3 years Comprehensive Onsite Warranty

#### Specification for SAN System with 10 TB usable capacity

Sr. No.	Paramater	Functionality
1.	Converge / Unified Storage	<ol> <li>Storage array should support File, block and object services.</li> <li>Storage array should support end-to end 6Gbps or higher.</li> </ol>
2	Operating System & Clustering Support	<ol> <li>Should support industry-leading Operating System platforms including: Windows 2012, VMware, Solaris, HP-UX, IBM-AIX and Red hat Linux.</li> <li>Should Support all well-known protocols</li> </ol>
3	Capacity & Scalability	Storage Array should be offered with 10 TB usable Capacity using 600GB 10K RPM SAS drives or higher.      Storage should be scalable to more than 20 drives or more
4	Cache	Storage Array should be given with minimum of 8GB cache in a single unit or higher.
5	Controller	Storage system should have minimum two controllers with 4 ports of 8 GBps on each controller, active-active controller with failover to other in case of any one controller failure.
6	No Single point of Failure	Storage Array should support No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.
7	Disk Drive Support	Storage Array should support dual-ported 600GB or higher hotpluggable Enterprise SAS hard drives.
8	Raid Support & Virtualization	Storage Subsystem should support Raid 1, 5.
9	Data Protection	In case of Power failure, Storage array should have de-stage feature to avoid any data loss.
10	Maintenance	Storage should support online non-disruptive firmware upgrade for both Controller and disk drives.
11	Quota Management and Antivirus Scanning	1. For file services operations, offered storage should support both user level as well as file level hard and soft quota.  2. For file services operations, offered storage should support integration with industry leading antivirus vendors like Symantec, Trend Micro and MacAfee.
12	Storage Array Configuration & Management Software	Vendor should provide Storage Array configuration and Management software.
13	Storage Tiering	Offered storage should support dynamic migration of Volume from one Raid set to another set while keeping the application online.     For effective data tiering, Storage subsystem should support automatically Policy based Data Migration from one Set of drive Tier to another set of drive tier.
15	SAN Switch	<ol> <li>One number of 8 Port SAN switch scalable to 16 ports</li> <li>Populated with single mode SFP module</li> <li>Each port should be configure with 8 Gb/s full duplex performance.</li> <li>1 USB port for firmware download, support save, and configuration upload/download</li> <li>12 nos of Single Mode LC-LC or compatible 5 m fibre cable.</li> <li>Support for auto sensing ports, zoning, Ethernet and serial port management</li> <li>The Switch should be rack mountable.</li> <li>Offered SAN switch should support redundant power supply</li> <li>Three years onsite comprehensive maintenance for both hardware and software (24 X 7) after the expiry of warranty</li> </ol>