

UNIVERSITY OF GOUR BANGA



Established under West Bengal Act XXVI of 2007 [Recognised by U/S 2(f) & 12(B) of the UGC and NAAC accredited University with Grade-'B' (2016)]

P.O: Mokdumpur, Dist.: Malda, West Bengal, Pin: 732103 (India)

Ref. No.: 003/UGB/RUSA/CE-22 Date: 17.09.2022

NOTICE INVITING ELECTRONIC TENDER No.: 003/UGB/RUSA/CE-22 Date: 17.09.2022 by the Convener, RUSA Project Monitoring Unit, University of Gour Banga, Malda

The Convener, Tender & Purchase Committee, University of Gour Banga, Malda invites e-Tender in two bid system i.e. Technical bid and Financial bid from eligible, reputed and OEM authorized dealers for SUPPLY AND INSTALLATION OF SERVERS & STORAGE" at University of Gour Banga Full Campus, Malda. The details work are given in the table below (Submission of Bid through online).

<u>Storage</u>				
Sr. Number	Parameter	Functionality		
1	Operating System & Clustering Support	 The storage array should support industry-leading Operating System platforms including: Windows 2016 / 2019, VMware and Linux. Offered Storage Shall support all above operating systems in Clustering. 		
2	1. The Storage Array shall be offered with 24 nos 1.92 TB SSD drives. 2. For effective power saving, Storage subsystem shall be supplied with 2.5" Small form factor SFF drives however storage subsystem shall also support LFF drives with the addition of required disk enclosures. 3. 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 * 16 Gbps FC ports 2. Offered storage system shall support 12G SAS Back-end connectivity.			
4	Architecture The storage array should support dual, redundant, hot-pluggable, 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 configuration including Array Controller card, Cache memory, FAN, Pov supply etc.			
6	Disk Drive Support	 Storage system shall support Enterprise SAS spinning drives, SSD and near line SAS / 7.2K RPM drives. Offered storage array shall also have support for FIPS 140-2 validating self-encrypted drives. 		
7	1. Offered Storage Array shall be given with Minimum of 12 controller in a single			

	T		
		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.	
	1. Offered Storage Subsystem shall support Raid 1, 10, 5 a		
		2. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array.	
8	Raid Support	3. Thin provisioning shall be supported with offered Flash Cache.	
		4. Raid processing shall be offloaded to a 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.	
		Offered Storage array shall be configured with array-based Snapshot and	
		clone functionality and shall be configured for minimum of 512 snapshot	
9	Point in time and clone copy	licenses.	
		2. Offered Storage array shall support at-least 512 point in time copies	
		(Snapshots) and 128 volume / Clone copies	
		1. Offered storage subsystem shall support storage based replication to DR	
		location. License for maximum supported capacity of the array shall be	
	offered.		
10	Replication		
		2. Offered storage subsystem shall support replication to multiple storage	
		array of the same family in fan-out mode. At least 1:4 mode shall be	
		supported.	
		1. Offered storage shall be offered and configured with virtualization capability so that a given volume can be striped across all spindles of given	
		drive type within a given disk pool. Disk pool shall support all listed raid sets	
11	Virtualization and Thin provisioning	of Raid 1, Raid 10, Raid 5 and Raid 6.	
		2. Offered Storage shall be offered and configured with Thin Provisioning	
		capability.	
		Offered Storage shall also be configured for Sub-Lun Data tiering in real	
12	Data Tiering	time fashion across different type of drives within a given pool like SSD, SAS,	
12	שמנם ווכווווצ	NL-SAS etc. License shall be configured for maximum supported capacity of	
		the array.	
		1. Offered Storage Array shall support Global hot Spare for offered Disk drives.	
	Global and	diffees.	
13	dedicated Hot Spare	2. Atleast 2 Global hot spare drive shall be configured for every 30 drives.	
	aculcutcu Hot Spare	2. Access 2 Global Hot spare affect shall be configured for every 50 unives.	
		3. Offered storage array shall have the support for distributed hot spare	
		1. Storage Subsystem shall support minimum of 512 Logical Units. Storage	
	La minal Malaura 0	Array shall also support creation of more than 120TB volume at controller	
14	Logical Volume &	level.	
	Performance	2 Offered Storage shall have inhuit norfermance management software	
		2. Offered Storage shall have inbuilt performance management software. Configuration Dashboard shall show overall IOPS and MB/sec performance.	
		Configuration Dashboard shall show overall for 3 and IVID/Sec performance.	

15	Load Balancing & Muti-path	Multi-path and load balancing software shall be provided, if vendor does not support MPIO functionality of Operating system.	
16	Performance	Offered storage shall have listed benchmark for performance of more than 250,000 in Raid 5 using appropriate drives at 8k block size. Vendor shall provide documentary proof for it.	
17	Array Integration	Offered storage array shall have plug-in for VMware VCenter, Microsoft	
		System center as well as vStorage APIs (VAAI) for array integration.	

	<u>San</u>			
Sr. No.	Specifications			
Archite	cture/Scalability/Performance/Management/Availability:			
	Minimum Dual SAN switches shall be configured where each SAN switch shall be configured			
1	with minimum of 12 Ports scalable to 24 ports.			
	Required scalability shall not be achieved by cascading the number of switches and shall be			
2	offered within the common chassis only			
	Should deliver 16 Gbit/Sec Non-blocking architecture with 1:1 performance for up to 24 ports in			
3	a energy-efficient fashion			
4	Should protect existing device investments with auto-sensing 8, 16 Gbit/sec capabilities.			
5	The switch should be rack mountable			
6	The switch shall provide Aggregate bandwidth of 768 Gbit/sec end to end.			
7	Switch shall have support for web based management and should also support CLI.			
	The switch should have USB port for firmware download, support save, and configuration			
8	upload/download.			

	<u>Master Node</u>			
SI.	Minimum Requirement Specifications			
1	Make Offered			
2	Model Offered			
3	OS Support	Windows Server, RHEL, SLES		
4	Compliance(s) Required	UL, FCC, RoHS, EU Lot9, ASHRAE A3/A4		
5	2U Rack Mountable	with RAIL Kit		
6	Processor shall be In	tel latest series/ generation X86 based		
	Minimum Core/CPU		32	
	Minimum Clock Rate (GHz)		2	
	No's of CPU/Server		2	
7	OEM Chipset or equivalent OEM motherboard/ chipset to support above feature.			
8	Should support minimum up to 3 no's Co-Processor/ GPU			
9	GPU	Should support recent GPUs		
10	Minimum RAM needed from day1	1TB, Up to 32 DIMM slots		

Minimum 8 Hot Plug 2.5/ 3.5-inch SATA/SAS HDD Bays				
from day1 2X 90068 ASA HDDS in RAID1 and 4X 2.418 SAS HDD in RAID5 3Support minimum up to 8 PCIe 4.0 slots HDD (RAID) Controller RAID 0, 1, 5, 6, 10, 50, 60 Self-error Ports from Day1 Other interfaces: 1Gb Dedicated OOB Management with License, VGA, USB 3.0 Redundant AC hotswap platinum power supplies and fans/blowers a) Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port b) Should have encrypted virtual Media support with all required licenses, Remote KVM, Server Health Logging, Out of Band Management, and Virtual NIC c) Solution should be open and programmable providing REST API d) Management Features: d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual proactive server health monitoring by OEM including recording of required a) OEM credentials OEM credentials OEM credentials 22 On Site OEM 3 Vasar.	11	Minimum 8 Hot Plug 2.5/ 3.5-inch SATA/SAS HDD Bays		
HDD (RAID) Controller RAID 0, 1, 5, 6, 10, 50, 60 Minimum RAID Controller Cache Ethernet Ports from Day1 Other interfaces: 1Gb Dedicated OOB Management with License, VGA, USB 3.0 Redundant AC hotswap platinum power supplies and fans/blowers a) Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port b) Should have encrypted virtual Media support with all required licenses, Remote KVM, Server Health Logging, Out of Band Management, and Virtual NIC c) Solution should be open and programmable providing REST API d) Management and Virtual NIC c) Solution should be open and programmable providing REST API d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immabile Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM credentials OEM credentials OEM credentials OEM credentials OEM credentials A Varer	12	$\frac{1}{2}$ $\frac{1}$		
Controller KAID 0, 1, 5, 6, 10, 50, EU	13	Support minimum up to 8 PCIe 4.0 slots		
Controller Cache 4GB	14		RAID 0, 1, 5, 6, 10, 50, 60	
17 Other interfaces: 16b Dedicated OOB Management with License, VGA, USB 3.0	15		4GB	
Power and Cooling Redundant AC hotswap platinum power supplies and fans/blowers a) Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port b) Should have encrypted virtual Media support with all required licenses, Remote KVM, Server Health Logging, Out of Band Management, and Virtual NIC c) Solution should be open and programmable providing REST API d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM credentials a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available	16		4 x 1G BaseT and 2 X 10G	
a) Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port b) Should have encrypted virtual Media support with all required licenses, Remote KVM, Server Health Logging, Out of Band Management, and Virtual NIC c) Solution should be open and programmable providing REST API d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM credentials a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available	17	Other interfaces: 1G	b Dedicated OOB Management with License, VGA, USB 3.0	
gigabit management port b) Should have encrypted virtual Media support with all required licenses, Remote KVM, Server Health Logging, Out of Band Management, and Virtual NIC c) Solution should be open and programmable providing REST API d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM credentials a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available	18	Power and Cooling	Redundant AC hotswap platinum power supplies and fans/blowers	
RVM, Server Health Logging, Out of Band Management, and Virtual NIC c) Solution should be open and programmable providing REST API d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available				
Management Features: d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM credentials OEM credentials OEM credentials 3 Vears Veats d) Management subsystem shall have common criteria certification (EAL2 or higher) e) Support for IEEE 802.1x & IEEE 802.1AR f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available				
Features: d) Management subsystem shall have common criteria certification (EAL2 or higher)		Managamant	c) Solution should be open and programmable providing REST API	
f) Single-click secure erase g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available	19	_	d) Management subsystem shall have common criteria certification (EAL2 or higher)	
g) Workload Performance Advisor or equivalent solution h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available			e) Support for IEEE 802.1x & IEEE 802.1AR	
h) Forensics capture of defective FW images to NAND/USB for external analysis i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available			f) Single-click secure erase	
i) HTML5 Remote Console a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available			g) Workload Performance Advisor or equivalent solution	
a) NVMe dupport including "Boot from NVMe" b) Immutable Silicon Root of Trust c) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available			h) Forensics capture of defective FW images to NAND/USB for external analysis	
Other specifications: Other specifications: b) Immutable Silicon Root of Trust			i) HTML5 Remote Console	
C) FIPS 140-2 validation d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available			a) NVMe dupport including "Boot from NVMe"	
Other specifications: d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available On Site OEM 3 Years			b) Immutable Silicon Root of Trust	
21 OEM credentials d) CNSA or equivalent compliance e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available On Site OEM 3 Years		Other	c) FIPS 140-2 validation	
e) Continual runtime firmware validation f) Continual proactive server health monitoring by OEM including recording of required a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available On Site OEM 3 Years	20		d) CNSA or equivalent compliance	
21 OEM credentials a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available 3 Years		specifications.	e) Continual runtime firmware validation	
21 OEM credentials India market report. b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available On Site OEM 3 Years			f) Continual proactive server health monitoring by OEM including recording of required	
b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available On Site OEM 3 Years	24	OFM and dentiels		
JJ I J VOORC	21	UEM credentials		
	22		3 Years	

	Compute Node			
SI.	Minimum Requirement Specifications			
1	Make Offered			
2	Model Offered			
3	OS Support	Windows Server, RHEL, SLES		
4	Compliance(s) Required	UL, FCC, RoHS, EU Lot9, ASHRAE A3/A4		
5	1U Rack Mountable	with RAIL Kit		
6	Processor shall be In	tel latest series/ generation X86 based		
	Minimum Core/CPU	26		
	Minimum Clock Rate (GHz)	2.2		
	No's of CPU/Server	2		
7	OEM Chipset or equ	uivalent OEM motherboard/ chipset to support above feature.		
8	Should support Co-Pi	rocessor/ GPU		
9	GPU	Should support recent GPUs		
10	Minimum RAM needed from day1	1TB, Up to 32 DIMM slots		
11	Minimum 8 Hot Plug	2.5/ 3.5-inch SATA/SAS HDD Bays		
12	HDD's required from day1	2X 300GB SAS HDDs in RAID1		
13	Support minimum up	to 8 PCle 4.0 slots		
14	HDD (RAID) Controller	RAID 0, 1, 10		
15	Minimum RAID Controller Cache	Any		
16	Ethernet Ports from Day1	4 x 1G BaseT and 2 X 10G		
17	Other interfaces: 1Gl	Dedicated OOB Management with License, VGA, USB 3.0		
18	Power and Cooling	Redundant AC hotswap platinum power supplies and fans/blowers		
		a) Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port		
	Management Features:	b) Should have encrypted virtual Media support with all required licenses, Remote KVM, Server Health Logging, Out of Band Management, and Virtual NIC		
19		c) Solution should be open and programmable providing REST API		
		d) Management subsystem shall have common criteria certification (EAL2 or higher)		
		e) Support for IEEE 802.1x & IEEE 802.1AR		
		f) Single-click secure erase		
		g) Workload Performance Advisor or equivalent solution		

		h) Forensics capture of defective FW images to NAND/USB for external analysis
		i) HTML5 Remote Console
		a) NVMe dupport including "Boot from NVMe"
		b) Immutable Silicon Root of Trust
	Other	c) FIPS 140-2 validation
20	Other specifications:	d) CNSA or equivalent compliance
	specifications.	e) Continual runtime firmware validation
		f) Continual proactive server health monitoring by OEM including recording of required
24	OFM and all all	a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report.
21	OEM credentials	b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available
22	On Site OEM Warranty (Year)	3 Years

	<u>ums</u>			
SI.	Minimum Requirement Specifications			
1	Make Offered			
2	Model Offered			
3	OS Support	Windows Server, RHEL, SLES		
4	Compliance(s) Required	UL, FCC, RoHS, EU Lot9, ASHRAE A3/A4		
5	2U Rack Mounta	ble with RAIL Kit		
6	Processor shall b	e Intel latest series/ generation X86 based		
	Minimum Core/CPU		32	
	Minimum Clock Rate (GHz)	ock		
	No's of CPU/Server		2	
7	OEM Chipset or equivalent OEM motherboard/ chipset to support above feature.			
8	Should support r	ninimum up to 3 no's Co-Processor/ GPU		
9	GPU	Should support recent GPUs		
10	Minimum RAM needed from day1	1TB, Up to 32 DIMM slots		
11	Minimum 8 Hot Plug 2.5/ 3.5-inch SATA/SAS HDD Bays			
12	HDD's required from day1	1 7X 900GR SAS HDDs in RAID1 and AX 7 ATR SAS HDD in RAID5		
13	Support minimum up to 8 PCIe 4.0 slots			
14	HDD (RAID) Controller RAID 0, 1, 5, 6, 10, 50, 60			

15	Minimum RAID Controller Cache	4GB	
16	Ethernet Ports from Day1	4 x 1G BaseT and 2 X 10G	
17	Other interfaces	: 1Gb Dedicated OOB Management with License, VGA, USB 3.0	
18	Power and Cooling	Redundant AC hotswap platinum power supplies and fans/blowers	
		a) Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port	
		b) Should have encrypted virtual Media support with all required licenses, Remote KVM, Server Health Logging, Out of Band Management, and Virtual NIC	
		c) Solution should be open and programmable providing REST API	
19	Management Features:	d) Management subsystem shall have common criteria certification (EAL2 or higher)	
		e) Support for IEEE 802.1x & IEEE 802.1AR	
		f) Single-click secure erase	
		g) Workload Performance Advisor or equivalent solution	
		h) Forensics capture of defective FW images to NAND/USB for external analysis	
		i) HTML5 Remote Console	
	Other	a) NVMe dupport including "Boot from NVMe"	
		b) Immutable Silicon Root of Trust	
		c) FIPS 140-2 validation	
20	specifications:	d) CNSA or equivalent compliance	
		e) Continual runtime firmware validation	
		f) Continual proactive server health monitoring by OEM including recording of required	
_	OEM	a) OEM must be from the Top3 vendors during any two of the last 4 quarters as per IDC India market report.	
21	credentials	b) Server OEM should have facility to log case online through their portal and historical data of cases should also be available	
On Site OEM Warranty (Year) 3 Years		3 Years	

	Supply	Installation	Configuration
[1] Storage	One Number of storage supply.	Storage Install & configure Unix based Operating System (Rocks Cluster / Red Hat) at UGB.	Storage will be configured with HPC & UMS Server.
[2] SAN Switch	Two Number of SAN Switch Supply.	SAN Switch Install & Configure at UGB.	One SAN switch configured with HPC server & another SAN switch configured with UMS server.
[3] HPC Server	One Number of Master Node and One Number of Compute Node supply.	Installed, Siasta Software, Quantum Espresso Software, Lamps Software, Cp2k Software and others Scientific Software.	Clustering & Configuring HPC cluster suite within Master Node, Compute Node & storage. Installing & configured different type of research software (parallel Version) in HPC Cluster suite
[4] UMS Server	One Number of UMS server Supply.	Windows based UMS Server install & Configure at UGB.	Configured UMS server with Storage & Configured FTP server.

TERMS & CONDITION

- 1. Intending bidders have to download the tender document from the website directly by the help of Digital Signature Certificate & necessary cost of tender document may be remitted through **demand draft only** issued from any nationalized bank in favour of *University of Gour Banga*, payable at **Malda**. & same may be documented along with earnest money through e-Filling. EMD of unsuccessful bidder will be returned subsequently. No interest shall be paid on EMD.
- 2. During Online submission of Bid only scan copy of **EMD** (Earnest Money Deposit) should be submitted. Only successful L1 Bidder will have to submit the EMD in original (same as submitted during online bidding) to the office of the Convener, University of Gour Banga, Malda. However department (Tender Inviting Authority) will not be held responsible for late delivery or loss of the DD so mailed through post / courier. Technical Bid and Financial Bid both will be submitted concurrently duly digitally signed in the Website https://etender.wb.nic.in. Tender documents may be downloaded from website & submission of Technical Bid/Financial Bid as per Tender time schedule sated in (Date & Time Schedule).
- 3. EMD –A sum of Rs. 20,000.00 (Rupees Twenty Thousand Only) in the form of CTS Demand Draft from any Nationalized Bank in favour of 'University of Gour Banga' payable at 'Malda' is to be attached/ uploaded with the tender documents as earnest

- money deposit, failing which the tender/quotation will be treated as cancelled. EMD of unsuccessful bidder be refunded and no interest will be paid against EMD.
- 4. The tender is liable to be rejected if OEM Authorization is not given there-in, or if the particulars and data (if any) asked for.
- 5. Payments will be made on account pay in cheque on the basis of on finished work.
- 6. Taxes shall be deducted as per Govt. norms
- 7. Documents like PAN, GST and Trade License are to be submitted with the tender paper. The University of Gour Banga reserves the right to amend or cancel the scope of the job as well as to modify the terms and conditions of the tender. Dispute, if any, arising out of the supply of Items shall be settled by mutual discussion or arbitration by sole Arbitrator to be appointed by the Vice Chancellor UGB as per the provisions of the Indian arbitration and Conciliation CIS Tender Supply and installation "
 - Act, 1996 and the Rules framed there under. Any Arbitrator appointed shall not have the jurisdiction to pass any interim awards, or to grant interest higher than 8% charged simply on the award amounts, or amounts payable to either party.
- 8. The number of Items may increase or decrease by the demand/decision of the authority of UGB.
- 9. Damage to goods or any other loss due to accident etc. during transit shall be the Responsibility of the supplier.

Minimum Eligibility Requirement:

- 1 Bidder should be OEM/Authorized Partner/service provider of the OEM. In case the tenderer is an Authorized Partner or Service Provider a valid Agency-ship/Dealership Certificate (MAF specific to this tender) to quote on behalf of OEM should also be enclosed along with the technical bid. A document in support of this must be enclosed.
- 2 OEM & bidders should have Sales and support office in Country. <u>A self-certified document</u> in support of this must be enclosed.
- 3 OEM and bidder should have service and support office in West Bengal. <u>A self-certified</u> document in support of this must be enclosed.
- 4 The warranty provided by the bidder should have a back to back arrangement with the OEM.

 The declaration should be the part of a Letter of Authorization and signed by competent authority at the OEM.
- 5 The vendor/OEM should be able to provide 24x7 NOC & Tele support of their own if required by UGB at agreed terms. A self-certified document in support of this must be enclosed.
- 6 The bidder shall provide the Registration number of the firm along with the valid GST number with PAN Number allotted by the competent authorities. <u>A self-certified document in support of this must be enclosed.</u>
- 7 If the bidder is an authorized partner or service provider of an OEM, <u>an undertaking from</u> the OEM is required (please enclose) stating that they would facilitate the bidder on a regular basis with technology/product updates and extends support for the warranty as well.
- 8 The bidder must be responsible for supply, deploy and support the infrastructure.
- 9 The bidder should have an annual turnover not less than 4 Crore during the last three consecutive financial years. Bidder should submit photocopy of audited balance sheet of the above criteria.
- 10 The bidder should have their presence in Kolkata or Malda. Valid proof should be submitted along with the bid.
- 11 Without **OEM** Authorized Latter Tender will be treated as cancelled.
- 12 Time of delivery shall be 90 from the date of receipt of work order.

- 13 Warranty period will be considered as mentioned in the e-NIQ.
- 14 Price shall be quoted in Indian Rupees (INR) and inclusive of all taxes.
- 15 Tools and tackles for any installation work as required shall have to be arranged by the agency at their own cost.
- 16 Agency shall maintain & comply with all standard/relevant safely norms and measures at their own cost during installation of such equipment.
- 17 Recommendation of payment 80% will be done only after successful deliver of all the material as per tender specification at UGB & others 20% Payment will be done after successful installation and configuration of the materials.
- 18 University authority has the liberty to take administrative/legal steps as deem fit against the successful bidder at their discretion if the warranty/guarantee/services are not provided properly and in time by the agency/service provider. For any discrepancies, decision taken by the Vice Chancellor, University of Gour Banga is final and binding. And for any court cases the jurisdiction will be Calcutta High Court.
- 19 OEM shall have their own spares Centre in the state of West Bengal. Relevant GST details in the name of OEM should be submitted.

Date & Time Schedule:

Sl.	Particulars	Date and Time
No.		
1	Date of uploading of NIT Tender Documents. (online)	17/09/2022
2	Tender Document sale / download start date and time (online).	19/09/2022 from 10.00 hrs.
3	Start Date of Bid Submission (Technical and Financial) (online).	19/09/2022 from 10.00 hrs.
4	Closing date and time of sale / download of Tender Document (online).	17/10/2022 upto 15.00 hrs.
5	Closing date of Bid submission (Technical and Financial) (online).	17/10/2022 upto 15.00 hrs.
6	Date and time of opening of Technical Proposals (online).	19/10/2022 on 15.00 hrs.
7	Date of uploading of list of Technical qualified bidders.(online)	21/10/2022 on 12.00 hrs.
8	Date of opening of Financial Proposal (online).	21/10/2022 on 13.00 hrs.
9	Tentative date of uploading of list of bidders along with their offered rates (online)	21/10/2022 on 13.00 hrs.

NOTE: Any complain / grievance will have to submit in writing only before the date & time of opening of tender / tenders. No complain / grievance will be entertained after opening of this / these tenders.

- 10. No Conditional / Incomplete Tender will be accepted under any circumstances.
- 11. During scrutiny, if it is come to the notice to tender inviting authority that the credential or any other papers found incorrect/ manufactured/ fabricated, that tenderer will not be allowed to participate in the tender and that application will be out rightly rejected without any prejudice.
- 12. Before issuance of the work order, the tender inviting authority may verify the necessary documents of the lowest tenderer if found necessary. After verification, if it is found that

such documents submitted by the lowest tenderer is either manufacture or false in that case, work order will not be issued in favour of the tenderer under any circumstances and the earnest money will be forfeiture duly without any prejudice.

- 13. Bidders should upload their documents from the original copies. Uploaded copies which are not clearly visible will not be accepted.
- 14. If proportionate progress with time is not maintained in any work then any work can be rescind without any further reminder and NO TIME OF EXTENSION will be entertained in any circumstances unless this Department sought for it and submission of tentative barcharts within three days of date of issue of work order.
- 15. For a particular work, in 2nd Call, Bona fide outsider Contractors may be allowed to participate along with other categories if that tender in 1st call cannot be finalized due to shortage of successful bidders. The bidders will be disqualified if all necessary documents as required in NIT are not produced by those bidders.

INSTRUCTION TO BIDDERS

1. General guidance for e-Tendering

Instructions/ Guidelines for tenders for electronic submission of the tenders online have been annexed for assisting the contractors to participate in e-Tendering. 2.

Registration of Contractor

Any contractor willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement system, through logging on to https://etender.wb.nic.in (the web portal of public works department) the contractor is to click on the link for e-Tendering site as given on the web portal. 3. Digital Signature certificate (DSC)

Each contractor is required to obtain a class-III or Class-III Digital Signature Certificate (DSC) for submission of tenders, from the approved service provider of the National Information's Centre (NIC).

4. Downloading of Tender Documents

The Bidders can search & download NIT & Tender Documents electronically from computer once he logs on to the website mentioned in Clause 2 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

5. Participation in more than one work

A prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. If found to have applied severally in a single job all his applications will be rejected for that job.

6. Submission of Tenders.

General process of submission, Tenders are to be submitted through online the website stated in

Cl. 2 in two folders at a time for each work, one in Technical Proposal & the other is Financial Proposal before the prescribed date &time using the Digital Signature Certificate (DSC) the documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

A. Technical proposal

The Technical proposal should contain scanned copies of the following further two covers (folders).

A-1. Statutory Cover Containing

i) Prequalification Application ii. Earnest Money Demand Draft of Rs. 20,000/- (TWENTY THOUSAND) only.

- iii. Demand Draft towards cost of tender documents as prescribed in the NIT, against each serial of work in favor of *University of Gour Banga*, payable at **Malda**. iv. Demand Draft towards earnest money (EMD) as prescribed in the NIT against each of the serial of work in favor of the *University of Gour Banga*, payable at **Malda**.
- v. Special Terms, condition & specification of works.
- vi. Certificate of revolving line of credit by the Bank (if required).
- vii. A letter of authorization from the Principal specific (OEM) as proof of manufacturing unit/dealership to the tender should be enclosed

A-2. Not statutory Cover Containing

- i) Professional Tax (PT), deposit receipt challan, Pan Card, GST Registration Certificate.
- ii) Registration Certificate under Company Act. (if any).
- iii) Registered Deed of partnership Firm/ Article of Association & Memorandum. iv) Power of Attorney (For Partnership Firm/ Private Limited Company, if any)
- v) Tax Audited Report in along with Balance Sheet & Profit & Loss A/c for the last three years, (year just preceding the current Financial Year will be considered as year 1).
- vi) List of Technical staffs along with structure & organization.
- vii) Enlistment copy issued by Department.

Note: Failure of submission of any of the above mentioned documents will render the tender liable to summarily rejected for both statutory & non statutory cover.

THE ABOVE STATED NON-STATUTORY / TECHNICAL DOCUMENTS SHOULD BE ARRANGE IN THE FOLLOWING MANNER

Click the check boxes beside the necessary documents in the My Document list and then click the tab "Submit Non Statutory Documents' to send the selected documents to Non-Statutory Folder. Next Click the tab "Click to Encrypt and upload" and then click the "Technical" Folder to upload the Technical Documents.

Sl. No.	Category	Sub-Category Description	Details
<i>A</i> .	CERTIFICATES	CERTIFICATES	 GST Registration Certificate & Acknowledgement. PAN, I. Tax Return (up to date)
			3. P. Tax (Challan and Number, Current FY.
В.	COMPANY DETAILS	COMPANY DETAILS 1	 Proprietorship Firm (Trade License). Partnership Firm (Partnership Deed, Trade License). Ltd. Company (Incorporation certificate, Trade License). Co-operative Society (Society Registration copy, Renewal copy, NOC from ARCS, Up to date meeting resolution copy.

			2. Power of Attorney.
C.	CREDENTIAL	CREDENTIAL -1 CREDENTIAL – 2	credential of similar nature of job without any reservation for any particular class of contractors
D.	P/L AND BALANCE SHEET	P/L AND BALANCE SHEET LAST THREE YEARS	Profit and Loss and Balance Sheet (with Annexure in case of Tax Audit – Current F.Y.).

B. Financial proposal

- i) The financial proposal should contain the following documents in one cover (folder) i.e. Bill of quantities (BOQ) the contractor is to quote the amount.
- ii) Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the Bidders.

07. Rejection of Bid

The Employer (tender accepting authority) reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time prior to the award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for Employer's (tender accepting authority) action.

08. Award of Contract

The Bidder, whose Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through acceptance letter/ Letter of Acceptance / Work Order.

The notification of award will constitute the formation of the Contract.

The Agreement will incorporate all agreements between the Tender Accepting Authority and the successful Bidder. All the tender documents including NIT & B.O.Q. will be the part of the Contact Document.

<u>#NOTE:</u> Successful bidders (i.e. L1 bidders) are requested to submit self- attested hard copies of all documents which were submitted during bidding.

GUIDELINES TO THE TENDERER

Instruction / guidelines for the tenderer for Electronic Submission of the tenders online

:- 1. Registration of the Contractor

- Any contractor/Bidders willing to participate in the processes of e-Tendering is required to log on to https://etender.wb.nic.inwith user ID (a valid e-mail ID with password) for enrolment and registration. The contractor/Bidders is to click on the link for e-Tendering site as given on the web portal.□
- The registration page would appear where the contractor is to fill up the details asked for regarding basic organization information in that page. □
- Upon submission of such details online, registration would be done. □

2. Obtaining Digital Signature Certificate (DSC).

• A Digital Signature is not a digitized form of signature. It is rather an identity proof for the tenderer, who is tendering electronically online, this may be used is the name of Authorized Representative of the Organization (Firm). It is stored in and given as a USB e-token.□

- Class- II and Class III Digital Signature Certificate can be procured from the approved Certifying Authorities recognized the Controller of Certifying Authorities, Government of India on payment of requisite amount. □
- The contractor/Bidders is again required to log on with the user ID and password to register the Digital Signature Certificate (DSC) without which he cannot participate in e-Tendering. One registered, this DSC can be used for participating in any e-Tendering□

3. Uploading documents

☐ The tenderer is to log in with Digital Signature Certificate (DSC), e-token password to ☐ upload scanned copies of various documents, as sought for in the NIT. This can be save, edited and even deleted, if necessary, by the tenderers.

4. Downloading Tender Documents

- By tender search, (by value, by location, and by classification) or from latest tender, the tenderer may download and view details of tenders after clicking on serial number.□
- Such downloaded documents can be saved in computer as well. □
- After downloading documents and before submission of tender online, it is to be ensured that the documents have properly been filled up and necessary scanned documents have been uploaded, virus scanned and digitally signed. □

5. Tender Submission

- The Tenderer is to read the NIT carefully.□
- All corrigendum, addendum to the original NIT is to be considered as part of NIT.

 □
- Each tenderer can submit tender for maximum 1 serial (package) in any particular NIT, but such tenders will be considered subject to fulfilment of credential criteria and financial capability to be assessed by the Tender & Purchase Committee (TEC).□
- The Tenderer is to use log in ID and password, followed by Digital Signature Certificate and to give e-token password to search the tender(s) he wants to participate from 'Search Active Tenders'.□
- The selected tender may be added firstly in 'My favourite' and then 'My Tender' A message would appear that the tender has been set as favourite.□
- The Tenderer is click 'View' to submit tender.□
- The Tenderer is to further click 'I agree' and 'Submit', before opting for offline payment for cost of tender paper and Earnest Money Deposit (wherever applicable). □
- Cost of Tender papers and Earnest Money Deposit (wherever applicable) are to be paid through Demand Draft (DD) or as may be prescribed, details of which are to be filed up subsequently for online information. □
- Synopsis of credential in prescribed format and other documents as may be required are to be entered, verified, encrypted (transformation into non readable format) and uploaded.□
- Financial Folder containing the Bill of Quantities (BOQ) for offering the rate for execution of works is to be submitted next online, by uploading scanned copies duly encrypted. □
- Before freezing the submission, changes may be made, but these cannot be done after freezing.□
- Technical and Financial Bids, both are to be submitted concurrently online, positively before the prescribed date and time of tender submission. □
 - 6. In case of any clarification / assistance required for the process of e-Tendering please contact during office hours to Convener, Tender & Purchase Committee, University of Gour Banga, Malda.

Sd/-

The Convener, Convener, RUSA Project Monitoring Unit, University of Gour Banga, Malda – 732103

PRE- QUALIFICATION APPLICATION

The Convener, Convene Malda - 732103	r, RUSA Project Monitoring Unit, University of Gour Banga,
Ref:- Tender for	
(Name of work)	
[N.I.T. No(Sl. no)
Dear Sir,	
•	utory, Non statutory & NIT documents, I /we hereby submit all the d relevant documents for evaluation.
	de by me / us on behalf of
	dmissible by law in respect of authority assigned to me on behalf of oplication and for completion of the related documents is attached
We are interested in biddi	ng for the work given in Enclosure to this letter.
We understand that :	
(a) Tender Inviting and a contract bid under this pro	Accepting Authority can amend the scope & value of the pject.
	son: <i>Encl:- e-filling of</i>
1. Statutory Docume	
2. Non Statute Documents.	ory
Documents.	
Date :-	Signature of applicant including title and capacity in which application is