INDIAN INSTITUTE OF TECHNOLOGY GOA

At Goa Engineering College Campus Farmagudi, Ponda, Goa 403401 E-mail: purchase@iitgoa.ac.in

GSTIN: 30AABAI1653D1ZF

PAN: AABAI1653D

TAN: BLRI08261B

Enquiry No: IITGOA/2020-21/009 Date: 22/09/2020

IIT Goa invites sealed quotations in two bid form for the supply of below mentioned item.

Sl. No.	Description of Item	Qty
1	Rack Servers with accessories	01 Set
	(Detail specifications is attached A,B C,D,E)	

General Terms & Conditions

- 1. Quotation must be valid for at least 90 days.
- 2. The GSTIN should invariably be mentioned in your offer.
- 3. Kindly attach a compliance certificate along with the technical quote.
- 4. Prices: Prices should be quoted in INR F.O.R., IIT Goa basis only.
- 5. Payment terms: Within 30 days after the delivery and successful installation of item at IIT Goa.
- 6. Delivery and installation should be made within 4 weeks of getting a confirmed order.
- 7. The suppliers shall provide the banking details along with their quote on their letterhead duly signed and stamped.
- 8. The successful bidder has to submit a Performance Guarantee Bond for 5% of the Purchase Order value and valid till one year OR up-to warranty period whichever is later from the date of issue of Purchase Order. Performance Guarantee Bond may be submitted within 15 (Fifteen) days from the date of order acknowledgment as a successful bidder.
- 9. Quotations shall be submitted in two parts;
 - Part I (Technical) should contain all the technical details and specification of the product. It should contain unpriced bid along with terms and conditions, compliance certificates, proprietary certificates (if applicable), any other certificates/details etc. This envelope should be marked as "Technical Bid"

- 2) **Part -II** (**Financial**) The financial bid of the above item should be in a sealed envelope marked as "Financial Bid" and should contain financial terms and conditions.
- 10. For any clarification, you may kindly contact Mr. Amol Kamble (E-mail: amol@iitgoa.ac.in and Stores & Purchase Department (email: purchase@iitgoa.ac.in) till 05/10/2020.
- 11. All sealed quotations must be super scribed with the tender enquiry number and should reach to the Assistant Registrar (Stores & Purchase), IIT Goa, at Goa College of Engineering Campus, Farmagudi, Ponda, Goa, 403 401 by 17.00 Hrs on or before 13/10/2020.

Sd/-

Asst. Registrar (S&P)

Technical Terms and Conditions

Terms and Conditions:

- All equipment must be compatible with Indian electrical standards and codes.
 Engineering documentation on the physical sizes and weights of all major and min or components must be submitted.
- 2. TENDER Specific Manufacturer Authorization Form from OEM Required.
- **3.** The Institute reserves the right of accepting or rejecting any quotations without assigning any reason thereof.
- **4.** Bidder must have third party authorized partner provided authorization certificate.
- **5.** OEM Authorization Certificate: Server and NAS box OEM must be submitted separately.
- **6.** Bidder must be ISO-Certified.
- **7.** Warranty & Support: Five years comprehensive onsite for both Hardware from OEM directly.
- **8.** Installation
 - **a.** Application server, NAS box and SAN switch installation and configuration must be done.
 - **b.** Testing of installation must be done in presence of IIT Goa authorized person.
 - **c.** Installation period must not exceed 20 Days after delivery of all materials.

Technical Specifications

Detailed Technical Specification for Application Server, Storage NAS Server and Accessories

A. <u>Application Server Configuration</u>

Sr.	Component	Minimum Specification
1	Server Processor	2.4 GHz or higher (base frequency), 20 Cores or higher, at least 22MB Cache (Gold Processor class should be quoted in case of Intel)
2	No. of Processors	2
3	Chipset	Intel C624 Chipset or comparable chipset from other OEMs
4	Memory	12x 32GB 2666 MHz registered ECC RAM, configured balanced memory configuration across memory channels
5	Expansion	Minimum 3x PCIe 3.0x 16 slots, 1x PCIe x8 Slots, 5 x USB 3.0 1x VGA
6	Storage	1.2 TB Usable space using RAID 5(p) with 10k rpm SAS drives.
7	Network	4x 1000 BASE-T Ports
8	FC HBA	2x 16 Gbps FC Ports
9	OS	Proxmox VE 4.6
10	Management	Browser based system remote management. System should support RESTful API integration. All management software must be from the same OEM. Management software dashboard should display a detailed health summary etc. All licenses must be perpetual with free upgrade for the entire warranty period. Driver & BIOS firmware should be available free even after the warranty is over for the server.
11	Power Supply	Dual redundant (1+1) hot-plug power supplies, 750 W or higher
12	Fans	Redundant hot-swap fans
13	Form Factor	1 RU with rail kit and other accessories
14	Warranty	5 years comprehensive OEM onsite warranty with Next Business Day resolution

B. Storage SAN Box

Sr.	Item Type	Description
1	CPU	2.0 GHz or Higher, Quad-core or Higher
2	System Memory	2x8GB DDR3L or Higher
3	Memory Slots	2
4	Drive Bay	12x 3.5" SATA III 6GB/s HDD and should be compatible for 2.5" SATA III 6GB/s HDD and 2.5" SATA III 6 Gb/s SSD
5	Cache acceleration Support	All 12 bays
6	10 Gigabit Ethernet Port	4xRJ45 10GBASE-T via a pre-installed PCIe network card, supporting 10G/5G/2.5G/1G/100M speeds
7	PCIe Slot	1x PCle 2.0x4
8	USB Ports	2 x USB 3.0 2 x USB 2.0
9	Form Factor	2 RU
10	Power Supply	2x 300 W, 100-240 V
11	Fan	2 x 7cm smart fans
12	os	Embeded Linux
13	Networking	Should Support TCP/IP:Dual Stack (IPv4 and IPv6), Jumbo Frames (failover, multi-IP settings, port trunking/NIC Teaming), USB WIFi Adapter, Virtual Switch, NAT, STP
14	iSCSI (IP SAN)	Should Support iSCSI targets with multiple LUNs per target LUN mapping and masking, Online LUN capacity expansion, SPC-3 persistent reservation, MPIO & MC/S, iSCSI LUN backup, one-time snapshot and restoration, Virtual disks using iSCSI initiator, Stack changing master
15	NAS File System	Should support EXT4 internal file system and EXT3, EXT4, NTFS, FAT32, HFS+ for external hard drive
16	Supported Browsers	Apple safari Google Chrome Mozilla Firefox Microsoft Internet Explorer 10 or later
17	Hard Disks HDD	11x 8TB 7200rpm SATA III 3.5" internal NAS HDD
18	SSD HDD	500 GB
19	RAID Management	RAID level 0 (0+1), 3, 5, 6, 10, 30, 50, 60 & JBOD, Multiple Array Support Up to 4096 Logical Volumes Up to 64 Disk Drives Per Volume Group, Hot-Swap Drive Support

		Global & Dedicated Spare Drive Assignment, Non- Disruptive Online Volume Migration, Online Volume Expansion, Thin Provision
20	Storage Pool	Should support RAID 10+hot spare, 10, 6+ hot spare, 6, 5+ spare, 5, 1, JBOD, Single Disk, Global hot spare for data redundancy. The supply of NAS should support storage pool, iSSCI Target, iSCSI LUN Snapshot/backup
21	Domain Controller	The Supply of NAS should support Windows AD and LDAP server/client authentication,
22	Backup Management	Should support windows ACL and shared folder level ACL support Should support Advanced folder permission with Subfolder ACL supports for CIFS/SMB Should support replication between identical NAS on real time or on scheduled based without any additional license cost Should support rsync protocol for remote replication Dual -Active RAID Controllers Cache Mirroring Through Dedicated High Bandwidth Channels, Flexible RAID Group Ownership, Management Port Seamless Fail -Over, Online Firmware Upgrade, No System Down Time, Multi -Path & Load -Balancing Support (Microsoft MPIO, MC/S, Trunking, LACP) Integrated Array -Based Hardware Replication (Between ES4200, ES3200 and ES2000 series Should support one touch copy from external drives connected to NAS automatically Should support a app with retention file if the file is deleted via CIFS/SMB and AFP without any additional cost The systems admin should get the notification via email and SMS if any malfunction appears in the NAS
23	Compatible/Features	Alert Notification (Email, SMS), LED indicators for HDD, USB, LAN, button
24	Warranty	5 years comprehensive Onsite OEM Warranty with Next Business Day resolution

C. FC SAN Switch Specifications.

Sr.	Component	FC Switch
1	Number of Ports	8 or higher no. 16 Gbps port smart switch capable of interfacing all the rack servers with SAN storage. All necessary licenses, fibre modules, and FC cables for using all ports from day 1.
2	Form Factor	1 RU with proper rack mount kit in a standard 19" rack
3	HBA Support	SAN switch should support FC HBA or different OEMs and multiple operating systems

4	Administration	The switch shall support role-based administration by allowing different administrators different access rights to switch
5	Warranty	5 years comprehensive Onsite OEM Warranty

D. 42U Server Rack, minimum Specifications

Sr.	Description	Specification
1	Rack Capacity	42U only.
2	Dynamic Load	3000 lb (1361 kg)
3	Static Load	3000 lb (1361 kg)
4	Door Color	Black with industry standard flush locking handle and silver accents
5	Frame Color	Black
6	Rack Depth	107.5 cm
7	Rack Height	42U
8	Rack Width	60 cm
9	Total Cabinet Area	At least (HxWxD) 78.98 x 44.30 x 23.54 in (200.66 x 112.52 x 59.78 cm)
10	Warranty Standard Statement	10-year warranty.
11	PDU	Vertical PDU on both sides.
12	Cable manager	Vertical cable manager
Note: Rack must have complete disassemble features.		

E. KVM Switch with LCD screen, specifications:

Туре	Rack mountable with Screen, Keyboard and optional touch pad.
Screen size	Minimum 17 inch
KVM switch Ports	Minimum 8 ports.
USB ports	Minimum 4 ports.
Warranty	Minimum 2 years onsite.
Accessories	All necessary cables and connectors.

FORMAT FOR PERFORMANCE GUARANTEE BOND

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT GOA OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT GOA OR ANY SCHEDULED BANK SITUATED AT GOA. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.

To, The Registrar, Indian Institute of Technology, Goa Farmagudi, Ponda, Goa – 403401

Goa – 403401	LETTER OF GUARANTEE
	EAS Indian Institute of Technology, Goa (Buyer) have invited Tenders vide Tender
AND	
to supply the Performance C in the form of value) and va- issue of Perfor	e said tender document requires that any eligible successful tenderer (seller) wishing equipment / machinery, etc. in response thereto shall establish an irrevocable Guarantee Bond in favour of "Registrar, Indian Institute of Technology, Goa" Bank Guarantee for Rs
failing to abide performance of Technology,	THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) le by any of the conditions referred in tender document / purchase order / of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Goa on demand and without protest or demur Rs
as to whether	ank further agrees that the decision of Indian Institute of Technology, Goa (Buyer) the said Tenderer (Seller) has committed a breach of any of the conditions referred ment / purchase order shall be final and binding.
the Guarantee	
Notwithstan	ding anything contained herein:
	bility under this Bank Guarantee shall not exceed Rs
2. This Ba	ank Guarantee shall be valid up to(date) and
only a	eliable to pay the guaranteed amount or any part thereof under this bank guarantee nd only if IIT Goa serve upon us a written claim or demand on or before(date).
4. This B enforce	ank further agrees that the claims if any, against this Bank Guarantee shall be eable at our branch office at situated atss of local branch).

Date:	Yours truly,
	Signature and seal of the Guarantor:
	Name of Bank:

Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.