



GAUHATI UNIVERSITY

Gopinath Bardoloi Nagar, Guwahati - 781014

www.gauhati.ac.in

Date: 01/12/2017

Notice Inviting Quotation

NIQ No.: GU/Regr(SF)/T/2027/400(R)

Sealed quotations are invited from intending suppliers/manufacturers/authorized dealers/service providers for supply, installation, commissioning of Desktop Computers/ Laptops/ Printers/ Scanners/ Projectors/ UPS/ Servers/ SAN/ Anti-virus/ Networking equipments etc. with other accessories required to be procured for Gauhati University.

The following general terms and conditions, in brief, will be applicable:

1. Two Bid Procedure: The quotation must be in a two-bid system. All technical documents along with the supporting documents in conformity with the terms and conditions are to be placed in a sealed envelope to be marked as "Technical Bid". Price quotations for various components clearly indicating the amount quoted, various tax components etc. must be in the second envelope to be marked as "Price Quotation". Both the envelopes are to be put in a single envelope and to be sealed and submitted to the Registrar, Gauhati University.
2. No separate tender paper will be issued from the office; one should only download the specifications/List from the website.
3. At least one similar work completion with successful implementation and completion certificate from the customer must be produced, the value of which should not be below 60% of the current quoted value. Firms not fulfilling this condition shall not be considered.
4. The rates should be quoted in Indian Rupee. The basic rates should be exclusive of GST and rate of applicable GST in % should be clearly indicated.
5. Charges for clearing and transportation should be incurred by the supplier.
6. Applicable levies, surcharge and discounts should be clearly indicated item-wise.
7. The Bidder is required to quote for any or all the lots.
8. Quoted rates should be valid at least for a period of one year.
9. The rates should be quoted along with supporting documents of specifications and technical features.
10. The system must be installed at the places in Gauhati University, and after installation a basic training must also be provided by the supplier or their Indian counterpart without any additional cost.
11. Warranty/Guarantee period should be specifically mentioned in the quotation against each item.
12. Details of availability of after sales support will have to be furnished. After sales support, directly from manufacturer and from Assam (Guwahati) will be preferred.
13. Demonstration may be sought from the vendors for authentication of quoted specification
14. The last date of submission of quotation is **21/12/2017 at 03.00 PM**. The quotations will be opened on the same day at 03.30PM. Representatives of the participating companies may attend the quotation opening meeting to be held in the office of the Registrar, Gauhati University.
15. Rates must be quoted item wise. PAN/GSTN wherever applicable, must be mentioned.

16. A non refundable processing fee of Rs. 3000/- (Three Thousand) only in the form of a DD/banker's cheques drawn in favour of Registrar, Gauhati University, payable at SBI, Gauhati University Branch should be submitted. All communications must be addressed to the Registrar, Gauhati University, Guwahati 781014, Assam, India.
17. A) Quotations should be accompanied by an EMD (refundable) of Rs. 20,000/- (Rupees Twenty Thousand) only in the form of a DD/banker's cheques drawn in favor of Registrar, Gauhati University, payable at SBI, Gauhati University Branch. The tender shall be summarily rejected in the absence of EMD. No interest on the Earnest Money shall be paid.
B) The university may accept bids without EMD from those bidders who are registered with the Central Purchase Organization, National Small Industries Corporation (NSIC) or the concern Ministry or Department as Manufacturer. To claim the exemption, the bidder must be offering goods manufactured by themselves. Exemption will not be granted in case the bidder is acting as an agent for some other vendor.
18. The firms who have submitted tenders against NIQ No.: GU/Regr(SF)/T/2027/400, dated 17/10/2017 may participate again with new bids and other relevant documents without submission of tender processing fee and EMD amount, if already submitted.
19. AMC policy including rate and other terms and conditions is required to be clearly stated along with the proposal for maintenance after the expiry of Warranty period. This may be weighed as a total package value of the contract at the discretion of the Gauhati University.
20. The selected Bidder for Server and Storage Area Network (Lot No. 6) shall be required to install and commissioning of Client/Server system in KKH Library.
21. The selected Bidders shall have to pay Performance Security Deposit @ 10% of the bid value only, in the form of FDR/ irrevocable bank guarantee from any nationalized bank in favour of the Registrar, Gauhati University at the time of Signing of the Agreement. The validity of the bank guarantee should cover ninety days beyond the contractual period of maintenance for lodgment of claims. No interest will be paid on such amount.
22. Lowest rate may or may not be the selection criteria for award of the contract. However, the negotiations if necessary, to be made by Gauhati University with the L1 bidder (s) may be held.
23. Manufacturer's Authorisation Form from OEM should be submitted by the Bidders within 15 days from the date of short listing of L1, L2 and L3. University will communicate the shortlisted bidder.
24. Unit buy back rate must be quoted for obsolete computers (Approximately 500 numbers).
25. All other terms and conditions will be as per the Gauhati University rules and regulations.
26. Gauhati University reserves the right of modifications, cancellations and decisions in regard to the entire process.



Registrar
Gauhati University

List of Items with Minimum Specifications

Item No.	Lot No.		
A	1.	Minimum Specifications for Desktop Computers (Preferred Make HP/Dell/Lenovo)	
		Operating System	Genuine install Microsoft Windows 10 professional 64-bit / Ubuntu Linux 64 bit (Quote separately for each OS model)
		Processor	Intel Core i3 7th Generation 3.0 Ghz or Higher / Intel Core i5 7th Generation 3.0 Ghz or Higher / Intel Core i7 7th Generation 3.0 Ghz or Higher (Quote Separately for each Processor Type)
		Chipset	Intel Q Series Chipset or Higher
		Motherboard	OEM Motherboard with OEM logo embossed on the motherboard (No sticker allowed)
		RAM	4GB/8GB 2400MHz DDR4 (minimum 32GB expandability) (Quote Separately with 4GB and 8GB RAM)
		Storage	1TB/2TB SATA Hard drive (7200RPM) (Quote Separately with 1TB and 2TB HDD)
		Graphics	Integrated HD Graphics
		Networking	Integrated Intel PRO 10/100/1000 Networking Connection with built-in wireless LAN connectivity
		Display	Min 19" LED Digital Colour Monitor (Same make as Desktop)
		Keyboard & Mouse	Std. Keyboard (USB), Optical Scroll Mouse (Same make as Desktop)
		Slots	3PCI Express (Minimum 1 No PCIe 3.0* 16, 1 No PCIe 3.0*1)
		Ports	8 x USB 3.1 Gen1 Ports (Atleast minimum 2 nos. in front), 1 VGA Port, Audio Ports, Atleast 1 Audio Port in front.
		Certifications	EPEAT, Energy STAR, RoHS, UL Listed, CE, FCC with documentary evidences
Warranty	Comprehensive 3 Years Onsite		
B	2.	Minimum Specifications for Laptops (Preferred Make HP/Dell/Lenovo)	
		Operating System	Genuine install Microsoft Windows 10 professional 64-bit / Ubuntu Linux 64 bit (Quote separately for each OS model)
		Processor	Intel Core i3-7th Generation 2.4 GHz or Higher / Intel Core i5-7th Generation 2.4 GHz or Higher / Intel Core i7-7th Generation 2.7 GHz or Higher (Quote separately for different processor Types)
		RAM	8 GB 2400MHz DDR4 expandable upto 32GB
		Storage	1TB Hard drive (5400RPM)
		Graphics	Integrated Intel HD Graphics
		Webcam	Integrated HD720p Webcam
		Screen	14.0" (355mm) , anti-glare, LED backlight, IPS,250 nits, 16:9 aspect ratio, 400:1 contrast ratio
		Resolution	upto 1920x1080
		Wireless & Bluetooth	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Ethernet	Onboard Gigabit NIC		

		Ports	Minimum 2 USB 3.1 Gen 1 , VGA, Mini Display Port, Ethernet (RJ-45), Dock connector.
		Optical Drive	DVD RW
		Media Card Reader	Integrated multi-format digital media reader
		Battery	Internal 3 cell battery with minimum 4 Hours of battery back-up time
		Certifications	EPEAT, Energy STAR, RoHS, UL Listed, CE, FCC with documentary evidences
		Carry Case	Leather/Nylon/Polyester carrying backpack
		Warranty	Comprehensive Onsite 3 Years
C			
C-1	3.	Minimum Specifications for Printers	
		Laser Printer A4 Size Type-1	
		Print Resolution	600x600 dpi or better
		Duty Cycle	5000 Pages per Month
		Paper Size	A4
		Print Speed	18 ppm
		Print Technology	Laserjet
		Network	Built-in Ethernet (RJ45 Port)
		Duplex Printing	Automatic Duplexing
		Connectivity	Hi-Speed USB 2.0 port
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Certifications	ENERGY STAR qualified
		Warranty	Comprehensive 1 Year
C-2	3.	Laser Printer A4 Size Type-2	
		Print Resolution	600x600 dpi, Upto 1200x1200 dpi
		Duty Cycle	15000 Pages per Month
		Paper Size	A4
		Print Speed	25 ppm
		Print Technology	Laserjet
		Network	Built-in Ethernet (RJ45 Port)
		Duplex Printing	Automatic Duplexing
		Connectivity	Hi-Speed USB 2.0 port
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Certifications	ENERGY STAR qualified
		Warranty	Comprehensive 1 Year
		C-3	3.
Print Resolution	600x600 dpi, Upto 1200x1200 dpi		
Duty Cycle	25000 Pages per Month		
Paper Size	A4		
Print Speed	33 ppm		
Print Technology	Laserjet		
Network	Built-in Ethernet (RJ45 Port)		
Duplex Printing	Automatic Duplexing		
Connectivity	Hi-Speed USB 2.0 port		
Driver	CD/DVD Driver Media for Windows 7/8/10		
Certifications	ENERGY STAR qualified		
Warranty	Comprehensive 1 Year		
C-4	3.		
		Print Resolution	600x600 dpi, Upto 1200x1200 dpi
		Duty Cycle	50000 Pages per Month
		Paper Size	A4
		Print Speed	40 ppm
		Print Technology	Laserjet
		Network	Built-in Ethernet (RJ45 Port)
		Duplex Printing	Automatic Duplexing
		Connectivity	Hi-Speed USB 2.0 port

		Driver	CD/DVD Driver Media for Windows 7/8/10
		Certifications	ENERGY STAR qualified
		Warranty	Comprehensive 1 Year
C-5	3.	Laser Printer A3 size Type-5	
		Print Resolution	600x600 dpi, Upto 1200x1200 dpi
		Duty Cycle	25000 Pages per Month
		Paper Size	A3
		Print Speed	15 ppm
		Print Technology	Laserjet
		Network	Built-in Ethernet (RJ45 Port)
		Duplex Printing	Optional
		Connectivity	Hi-Speed USB 2.0 port
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Certifications	ENERGY STAR qualified
		Warranty	Comprehensive 1 Year
		C-6	3.
Print Resolution	600x600 dpi or better (Colour)		
Duty Cycle	15000 Pages per Month		
Paper Size	A4		
Print Speed	14 ppm		
Print Technology	Laserjet		
Network	Built-in Ethernet (RJ45 Port)		
Duplex Printing	Automatic		
Connectivity	Hi-Speed USB 2.0 port		
Driver	CD/DVD Driver Media for Windows 7/8/10		
Certifications	ENERGY STAR qualified		
Warranty	Comprehensive 1 Year		
C-7	3.		
		Print Resolution	600x600 dpi or better (Colour)
		Duty Cycle	30000 Pages per Month
		Paper Size	A4
		Print Speed	15 ppm
		Print Technology	Laserjet
		Network	Built-in Ethernet (RJ45 Port)
		Duplex Printing	Automatic
		Connectivity	Hi-Speed USB 2.0 port
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Certifications	ENERGY STAR qualified
		Warranty	Comprehensive 1 Year
		C-8	3.
Print Resolution	600x600 dpi or better (Colour)		
Duty Cycle	30000 Pages per Month		
Paper Size	A4		
Print Speed	15 ppm		
Print Technology	Laserjet		
Network	Built-in Ethernet (RJ45 Port)		
Duplex Printing	Automatic Duplexing		
Connectivity	Hi-Speed USB 2.0 port		
Driver	CD/DVD Driver Media for Windows 7/8/10		
Certifications	ENERGY STAR qualified		
Warranty	Comprehensive 1 Year		
C-9	3.		
		Print Resolution	600x600 dpi or better
		Scanner	Flatbed
		Scan Resolution	600x600 dpi, Upto 9600x9600 dpi
		Copy Resolution	600x600 dpi

		Copy Enlarge/Reduce	30% to 400%
		Copy Speed	18cpm
		Duty Cycle	8000 Pages per Month
		Paper Size	A4
		Print Speed	18 ppm
		Print Technology	Laserjet
		Network	Built-in Ethernet (RJ45 Port)
		Duplex Printing	Optional
		ADF	Optional
		Connectivity	Hi-Speed USB 2.0 port
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Certifications	ENERGY STAR qualified
		Warranty	Comprehensive 1 Year
C-10	3.	Multi Function Laser Printer with FAX Type-10	
		Print Resolution	600x600 dpi or better
		Scanner	Flatbed
		Scan Resolution	600x600 dpi, Upto 9600x9600 dpi
		Copy Resolution	600x600 dpi
		Copy Enlarge/Reduce	30% to 400%
		Copy Speed	18cpm
		Duty Cycle	8000 Pages per Month
		Paper Size	A4
		Print Speed	18 ppm
		Print Technology	Laserjet
		Network	Built-in Ethernet (RJ45 Port)
		FAX Speed	33.6Kbps
		FAX Memory	256 pages
		Fax Resolution	Upto 200x400 dpi
		Speed Dial	100 Numbers
		Duplex Printing	Automatic
ADF	Optional		
Connectivity	Hi-Speed USB 2.0 port		
Driver	CD/DVD Driver Media for Windows 7/8/10		
Certifications	ENERGY STAR qualified		
Warranty	Comprehensive 1 Year		
C-11	3.	Laser Printer A4 Size Type-11	
		Print Resolution	Upto 1200x1200 dpi
		Duty Cycle	Upto 170000 Pages per Month
		Paper Size	A4
		Print Speed	>50 ppm
		Print Technology	Laserjet
		Network	10/100/1000 Built-in Ethernet (RJ45 Port)
		Duplex Printing	Automatic Duplexing
		Connectivity	Hi-Speed USB 2.0 port
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Certifications	ENERGY STAR Certified, EPEAT Certified
Warranty	Comprehensive 1 Year		
D		Minimum Specifications for Scanners	
D-1	4.	Flatbed Scanner Type-1	
		Scanner Type	Flatbed
		Scan Resolution	upto 1200 dpi
		ADF	None
		Scan Size	216 x 297 mm
		Connectivity	High Speed USB 2.0
Driver	CD/DVD Driver Media for Windows 7/8/10		

		Warranty	Comprehensive 1 Year
D-2	4.	Flatbed Scanner Type-2	
		Scanner Type	Flatbed
		Scan Resolution	upto 1200 dpi
		ADF	50 Sheets
		Scan Size	216 x 297 mm
		Connectivity	High Speed USB 2.0
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Warranty	Comprehensive 1 Year
D-3	4.	Flatbed Scanner Type-3	
		Scanner Type	Flatbed
		Scan Resolution	upto 4800 dpi
		ADF	None
		Scan Size	216 x 297 mm
		Connectivity	High Speed USB 2.0
		Driver	CD/DVD Driver Media for Windows 7/8/10
		Warranty	Comprehensive 1 Year
D-4	4.	Flatbed Scanner Type-4	
		Scanner Type	SheetFed
		Scan Resolution	upto 600 dpi
		ADF Capacity	> 75 Sheets of 75 Gsm
		Scan Size	215.9 x 355.6 mm
		Connectivity	High Speed USB 2.0
		Memory	512 MB
		Scan Speed	>45 ppm
		Processor Speed	>500 Mhz
		Duty Cycle	>5500 Daily
		Bit Depth / Gray scale Levels	24 bit External, 48 bit Internal
		Driver	CD/DVD Driver Media for Windows 7/8/10
Warranty	Comprehensive 1 Year		
E		Minimum Specifications for Projector	
E-1	5.	Standard Throw Projectors	
		Technology	LCD/ LED/ Laser /Hybrid
		Brightness	2500/ 3000 /3500/ 4000/ 5000 ANSI Lumens (quote separately for each)
		Native Resolution	WXGA
		Contrast Ratio	10000:1 or better
		Throw Ratio	1.5:1
		Keystone Correction	± 30 Degrees
		Interfaces	D-sub 15 Pin x 2 (VGA IN/OUT), RCA Video x1, HDMI x 2 (HDCP Compliant), Audio-IN 3.5mm x 1, RCA Audio IN L/R x1, LAN RJ45 x1, USB type A x 2, USB type B x 1
		Compatibility	PAL, 1080P/ 1080I/ 720P
		Lamp Life	Min. 5000 Hrs (Normal Mode)
		Remote Control	Full function IR / RF Remote Control Unit
		Warranty	1 Years Comprehensive
		E-2	5.
Technology	LCD/ LED/ Laser /Hybrid		
Brightness	2500/ 3000 /3500/ 4000/ 5000 ANSI Lumens (quote separately for each)		
Native Resolution	WXGA		
Contrast Ratio	10000:1 or better		
Throw Ratio	0.5:1 or better		
Keystone Correction	± 30 Degrees		

		Interfaces	D-sub 15 Pin x 2 (VGA IN/OUT), RCA Video x1, HDMI x 2 (HDCP Compliant), Audio-IN 3.5mm x 1, RCA Audio IN L/R x1, LAN RJ45 x1, USB type A x 2, USB type B x 1
		Compatibility	PAL, 1080P/ 1080I/ 720P
		Lamp Life	Min. 5000 Hrs (Normal Mode)
		Remote Control	Full function IR / RF Remote Control Unit
		Warranty	1 Years Comprehensive
E-3	5.	Optional Accessories for Projectors	
		Std. Ceiling Mount Kit	Powder coated robust Steel and Aluminium framework with height adjustable fitments along with all accessories, mountings, screws, tools, etc.
		Short Throw Mounting Kit	Powder coated robust Steel and Aluminium framework with height adjustable fitments along with all accessories, mountings, screws, tools, etc.
		HDMI Cable	Shielded HDMI Cable Length 20 Mtrs.
		VGA Cable	Shielded Length 20 Mtrs.
		Power Cable	3-Core Power Cable 20 Mtrs.
		Converters	HDMI to VGA or VGA to HDMI both way converter
		Wireless Adapter	Wireless Adapter for cable less connectivity with PC
		Warranty	1 Year Comprehensive on all accessories
F	6.	Minimum Specifications for Server (Preferred Make HP/Dell/Lenovo) [Installation and commissioning is mandatory]	
		Server Type-1	
		Chassis	2 U Rack Mountable
		CPU	Two numbers of Intel® Xeon® E5-2620v4 (2.1GHz/8-core) processor
		Motherboard	Intel® C610 Series Chipset or Higher
		Memory	64 GB RAM populated and scalable to at upto 768GB using DDR4 Load Reduced DIMM (LRDIMM) memory modules (32GB) at 2133MHz(depending on processor model). Should be capable of identifying and reporting whether genuine OEM memory is installed for system reliability System should support up to 128GB (8* 16GB) persistent memory. While the server is powered off, data should be saved in the NAND flash memory of each persistent memory DIMM to restore when power is on
		Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode
		HDD Bays	Up to 24+2 SFF/12+3 LFF max, HDD/SSD. Server model should support 8 SFF bays along with 6 NVMe drives for higher storage performance.
		Optical drive Bay	One optional optical drive bay to install DVD-ROM or DVD-RW (depending on HDD selection)
		Hard disk drive	4 Nos 2TB 10K HDD with RAID 5
		Controller	Server should support one of below RAID controller without consuming PCIe slot Embedded 6Gb/s SATA controller RAID controller with RAID 0/1/10/5 or PCIe 3.0 based 12Gb/s SAS Raid Controller with

			RAID 0/1/1+0/5/50/6/60/1 Advanced Data Mirroring/10 Advanced Data Mirroring with 2GB battery backed write cache (onboard or in a PCI Express slot)
		Networking features	<p>Server should support networking cards with below features:</p> <ol style="list-style-type: none"> 1. 1Gb 4-port network adaptor supporting advanced features such as Large Send offload capability, TCP checksum and segmentation, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMware NetQueue and Microsoft VMQ. 2. 10Gb 2-port Ethernet adaptor supporting enterprise class features such as VLAN tagging, adaptive interrupt coalescing, MSI-X, NIC teaming (bonding), Receive Side Scaling (RSS), jumbo frames, PXE boot and virtualization features such as VMware NetQueue and Microsoft VMQ. 3. 10Gb 2-port Adapter providing Ethernet and iSCSI or Fibre Channel Over Ethernet (FCoE) connectivity using Converged Enhanced Ethernet (CEE) standards. This adaptor should support Hardware acceleration and offloads for stateless TCP/IP, TCP Offload Engine (TOE), Fibre Channel over Ethernet (FCoE), Jumbo frames and iSCSI. 4. 10Gb 2-port provide up to 40Gb bi-directional bandwidth, Converges FCoE or RoCE with LAN traffic on a single 10 GbE wire, Tunnel Offload support for VXLAN and NVGRE, RDMA over Converged Ethernet (RoCE)
		Interfaces	<p>Serial - 1 Micro SD slot - 1 USB 3.0 support With Up to 5 total: 1 front, 2 rear, 2 internal (secure)</p>
		Bus Slots	Six PCI-Express 3.0 slots, atleast two x16 and four x8 slots
		Power Supply	Redundant platinum hot plug Power Supplies
		Fans	Redundant hot-plug system fans
		Graphics	<p>Integrated graphics controller supporting 1280 x 1024 (32 bpp) 1920 x 1200 (16 bpp)</p>
		Industry Standard Compliance	<p>ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 3.0 Support USB 2.0 Support Energy Star ASHRAE A3/A4 UEFI (Unified Extensible Firmware Interface Forum)</p>
		Security	<p>Power-on password Serial interface control Administrator's password UEFI Should support upto 12 customizable user accounts on out of band management port and SSL encryption</p>

			Should also supports directory services integration TPM 1.2
		Operating Systems and Virtualization Software Support	Microsoft Windows Server Canonical Ubuntu Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Oracle Solaris VMware Citrix XenServer
		Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.
		Warranty	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.
		Provisioning	Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server. There should be a built -in Update manager that can update firmware of system by connecting online.
		Remote Management	<p>1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1Gbps remote management port. Remote management port should have atleast 2GB NAND flash with 1GB available for user access. NAND flash should be used for keeping system logs and downloading firmware from website or internal repository</p> <p>3.The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur.</p> <p>5. Applications to access the server remotely using popular handheld devices based on Android or Apple IOS should be available.</p> <p>6. Remote console sharing upto 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support. Should provide support for AES and 3DES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console.</p> <p>7. Should support managing multiple servers as</p>

			<p>one via</p> <ul style="list-style-type: none"> Group Power Control Group Power Capping Group Firmware Update Group Configuration Group Virtual Media Group License Activation
		Server Management	<p>The Systems Management software should provide</p> <ul style="list-style-type: none"> Role-based security Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. Should support automatic event handling that allows configuring policies to notify failures via e-mail, pager, or SMS gateway or automatic execution of scripts Should provide an online portal that can be accessible from anywhere. The portal should provide one stop, online access to the product, support information and provide information to track warranties, support contracts and status. The Portal should also provide a Personalised dashboard to monitor device health, hardware events, contract and warranty status. Should provide a visual status of individual devices and device groups. The Portal should be accessible on premise (at customer location - console based) or off premise (using internet) Should support scheduled execution of OS commands, batch files, scripts, and command line apps on remote nodes Should be able to perform comprehensive system data collection and enable users to quickly produce detailed inventory reports for managed devices. Should support the reports to be saved in HTML, CSV or XML format Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components The Server Management Software should be of the same brand as of the server supplier Solution available to Deploy a fast and easy installation via software appliance delivery mode. With its own OS and Database to provide infra and lifecycle management Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and RedHat RHEV
F-2	6.	Server Type-2	
		Chassis	2 U Rack Mountable
		CPU	One no of Intel® Xeon® E5-2623v4 (2.6GHz/4-core) processors
		Motherboard	Intel® C610 Series Chipset or Higher
		Memory	8DIMM slots 32GB DIMMS scalable to at least upto 256GB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules. Should be capable of identifying and reporting whether genuine OEM memory is

			installed. Each LRDIMM should work at 2133MHz/2400MHz(depending on processor model)
		Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode
		HDD Bays	Up to 12 LFF max, SAS, SATA, SSD
		Hard disk drive	4 Nos 2TB 10K HDD with RAID 5
		Controller	Embedded 6Gb/s SATA controller RAID controller with RAID 0/1/10/5 for SATA Disk. OR PCIe 3.0 based 12Gb/s Raid Controller with RAID 0/1/1+0/5/50/6/60/1 Advanced Data Mirroring/10 Advanced Data Mirroring with 4GB battery backed write cache (onboard or in a PCI Express slot)
		Networking features	Server should support one of the following: 1. 1Gb 2-port network adaptor supporting advanced features such as TCP segmentation offload, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMDQ. 2. 10Gb 2-port Ethernet adaptor supporting enterprise class features such as VLAN tagging, adaptive interrupt coalescing, MSI-X, NIC teaming (bonding), Receive Side Scaling (RSS), jumbo frames, PXE boot and virtualization features such as VMware NetQueue and Microsoft VMQ.
		Interfaces	Video - 1 2 x 1GbE ports 4 USB ports (standard) Micro SD slot - 1
		Bus Slots	Minimum Four PCI-Express 3.0 slots, at least 2* x16 slots
		Power Supply	Redundant hot-plug Power Supplies
		Fans	Redundant system fans
		Graphics	Integrated Matrox G200 video standard 1280 x 1024 (32 bpp) 1920 x 1200 (16 bpp)
		Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 3.0 Support ASHRAE A3
		Security	Power-on password Serial interface control Administrator's password TPM 1.2 UEFI
		Operating Systems and Virtualization Software Support	Microsoft Windows Server Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Oracle Solaris VMware
		Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server

			and remote key management for central management for enterprise-wide data encryption deployment.
		Provisioning	Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server. There should be a built -in Update manager that can update firmware of system by connecting online.
		Remote Management	<p>1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication.</p> <p>2. Remote management port should have atleast 1GB NAND flash. NAND flash should be used for keeping system logs and downloading firmware from website or internal repository</p> <p>3.The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur.</p> <p>4. Remote console sharing upto 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support. Should provide support for AES and 3DES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console.</p> <p>5. Should support managing multiple servers as one via</p> <ul style="list-style-type: none"> Group Power Control Group Power Capping Group Firmware Update Group Configuration Group Virtual Media Group License Activation
		Server Management	<p>The Systems Management software should provide Role-based security</p> <p>Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. Should support automatic event handling that allows configuring policies to notify failures via e-mail, pager, or SMS gateway or automatic execution of scripts</p> <p>Should provide an online portal that can be accessible from anywhere. The portal should provide one stop, online access to the product, support information and provide information to track warranties, support contracts and status.</p>

			<p>The Portal should also provide a Personalized dashboard to monitor device health, hardware events, contract and warranty status. Should provide a visual status of individual devices and device groups. The Portal should be accessible on premise (at customer location - console based) or off premise (using internet).</p> <p>Should support scheduled execution of OS commands, batch files, scripts, and command line apps on remote nodes</p> <p>Should be able to perform comprehensive system data collection and enable users to quickly produce detailed inventory reports for managed devices. Should support the reports to be saved in HTML, CSV or XML format</p> <p>Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components</p> <p>The Server Management Software should be of the same brand as of the server supplier</p> <p>Solution available to Deploy a fast and easy installation via software appliance delivery mode. With its own OS and Database to provide infra and lifecycle management</p> <p>Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and RedHat RHEV</p>
		Warranty	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.
F-3	6.	Server Type-3	
		Chassis	2 U Rack Mountable
		CPU	Two no of Intel® Xeon® 6000 Series (2.1GHz / 16-core) processors (For 4000 Series / 5000 Series / 8000 Series Quote Separately)
		Motherboard	Intel® C621 Series Chipset or Higher
		Memory	24DIMM slots 64GB DIMMS scalable to at least upto 3.0 TB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules. Should be capable of identifying and reporting whether genuine OEM memory is installed. Each LRDIMM should work at 2666 Mhz(depending on processor model)
		Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode
		HDD Bays	Up to 24 LFF max, SAS, SATA, SSD
		Hard disk drive	6 Nos 2TB 10K HDD with RAID 5
		Controller	Embedded 14 port 6Gb/s SATA controller RAID controller with RAID 0/1/5/10 for SATA Disk. OR PCIe 3.0 based 12Gb/s Raid Controller with RAID 0/1/1+0/5/50/6/60/1 Advanced Data Mirroring/10 Advanced Data Mirroring with 4GB battery backed write cache (onboard or in a PCI Express slot)

	Networking features	Server should support one of the following: 1. 1Gb 4-port network adaptor supporting advanced features such as TCP segmentation offload, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMDQ. 2. 10/25Gb 2-port Ethernet adaptor supporting enterprise class features such as VLAN tagging, adaptive interrupt coalescing, MSI-X, NIC teaming (bonding), Receive Side Scaling (RSS), jumbo frames, PXE boot and virtualization features such as VMware NetQueue and Microsoft VMQ.
	Interfaces	Video - 1 4 x 1GbE ports uptp 5 USB 3.0 ports Micro SD slot - 1
	Bus Slots	Minimum Four PCI-Express 3.0 slots, at least 6 – (x8, x16, x8) plus 3 PCIe slots
	Power Supply	Redundant hot-plug Power Supplies
	Fans	Redundant system fans
	Graphics	Integrated video standard with 16MB Video Memory 1280 x 1024 (32 bpp) 1920 x 1200 (16 bpp)
	Industry Standard Compliance	ACPI 6.1 Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 2.0/3.0 Support ASHRAE A3/A4
	Security	Power-on password Serial interface control Administrator's password TPM 1.2 UEFI
	Operating Systems and Virtualization Software Support	Microsoft Windows Server Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Oracle Solaris VMware
	Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.
	Provisioning	Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server. There should be a built -in Update manager that can update firmware of system by connecting online.
	Remote Management	1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should

			<p>support server power capping and historical reporting and should have support for multifactor authentication.</p> <p>2. Remote management port should have atleast 1GB NAND flash. NAND flash should be used for keeping system logs and downloading firmware from website or internal repository</p> <p>3.The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur.</p> <p>4. Remote console sharing upto 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support. Should provide support for AES and 3DES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console.</p> <p>5. Should support managing multiple servers as one via</p> <ul style="list-style-type: none"> Group Power Control Group Power Capping Group Firmware Update Group Configuration Group Virtual Media Group License Activation
		Server Management	<p>The Systems Management software should provide Role-based security</p> <p>Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. Should support automatic event handling that allows configuring policies to notify failures via e-mail, pager, or SMS gateway or automatic execution of scripts</p> <p>Should provide an online portal that can be accessible from anywhere. The portal should provide one stop, online access to the product, support information and provide information to track warranties, support contracts and status. The Portal should also provide a Personalized dashboard to monitor device health, hardware events, contract and warranty status. Should provide a visual status of individual devices and device groups. The Portal should be accessible on premise (at customer location - console based) or off premise (using internet).</p> <p>Should support scheduled execution of OS commands, batch files, scripts, and command line apps on remote nodes</p> <p>Should be able to perform comprehensive system data collection and enable users to quickly produce detailed inventory reports for managed devices. Should support the reports to be saved in</p>

			<p>HTML, CSV or XML format</p> <p>Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components</p> <p>The Server Management Software should be of the same brand as of the server supplier</p> <p>Solution available to Deploy a fast and easy installation via software appliance delivery mode. With its own OS and Database to provide infra and lifecycle management</p> <p>Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and RedHat RHEV</p>
		Warranty	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.
Minimum Specifications for Storage Area Network			
F-4	6.	Power Cord	In-Cabinet,2m,C14-C13,E-SERIES
		Enclosure	System Enclosure with Controller
		Form Factor	2U-12,DE1600,Empty,2PSU,0E
		Controller Memory	>2GB Controller,0E
		Connectivity	HIC 8GB,FC,4-ports,0E
		Fiber	SFP,8Gb,FC,E-SERIES,0E
		Disk	>4TB,7.2k,FDE,DE1600,0E
		Warranty	3 Years Comprehensive Warranty
Minimum Specifications for Switch			
G		24 port 10/100/1000 Unmanaged Switch	
G-1	7.	Interfaces	24 auto sensing 10/100/1000 Ethernet ports
			All ports to have 10/100/1000 RJ 45 interfaces
		Store and Forward	Full and Half duplex auto negotiation
			LED Indicators which spot faults and check status of individual ports
		Switching Capacity	48 Gbps
		Forwarding Capacity	23 Mbps or higher
		Protocols	802.1p, 802.3x flow control
		Warranty	1 Year Comprehensive warranty
G-2	7.	24 Port Managed Switch	
		Product	Switch should have minimum 24GE + 4 GE (5G Stacking) 24 GE 2 combo GE + 2 1G/5G SFP
		Standards	Total No. of Physical Port 26*10/100/1000Base-T + 4 * 1G Fiber Port IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol, IEEE 802.3z Gigabit Ethernet, IEEE 802.3x Flow Control, IEEE 802.3ad LACP, IEEE 802.1D (STP, GARP and GVRP), IEEE 802.1Q/p VLAN, IEEE 802.1w Rapid STP, IEEE 802.1s Multiple STP, IEEE 802.1X Port Access Authentication, IEEE 802.3af, IEEE 802.3at.

H		Minimum Specifications for UPS	
H-1	8.	20 KVA ONLINE	
		Input	Input phase voltage: 400 V +/- 20 % (operating Range: 320-480 V) Supply frequency: 46 to 54 Hz Input power factor: ≥0.96 Input current distortion/harmonics: ≤6% Rectifier Technology: IGBT
		BY-PASS LINE	Three phase voltage: 400 V +/- 15 % Over load capacity for Continuous: ≤110 % Over load capacity for 1 min.: ≥ 125%
		OUTPUT	Inverter technology: IGBT with PWM Technology Voltage three phase: 400 V and should be selected to 380 or 415 V Voltage stability: +/- 1 % static, +/- 5% dynamic. Wave form: Pure Sinusoidal with THDV 2% on Linear & 5% on Non-Linear Frequency: 50 Hz Frequency stability: +/- 0.1% Crest factor: 3:1 Accepted over load: ≤ 110% for 10 min: 110% ≤ 130% for 1 min Load power factor: 0.8 Rated power: 20 KVA Active power: 16 KW
		SYSTEM	Total efficiency of the UPS: ≥ 90% Standard RS 232 interface facility: should be provided Battery should be: 12V SMF VRLA type for 60 Mins Backup on Each UPS. (28800 VAH) Battery Ah calculation: should be enclosed along with the bid at ECV @ 1.75V Isolation Transformer: Isolation Transformer of 30 KVA, 3 Phase should be provided at input of each UPS for providing galvanic isolation between input & output. Isolation Transformer should be external to the UPS and placed inside a suitable enclosure with powder coated paint and provided with cast iron wheels at bottom and hooks for lifting the unit. Servo Voltage Stabilizer: Servo Voltage Stabilizer of 30 KVA, 3 Phase, Input 210V-480V AC and Output 400V±1%, should be provided at input of each UPS for providing voltage stabilization.
	Warranty	3 years comprehensive onsite OEM warranty	
H-2	8.	10 KVA (Online UPS)	
		Output Power Capacity	8000 Watts / 10 kVA
		Nominal Output Voltage	230V (Configurable for 220 : 230 or 240 nominal output voltage)
		Efficiency at Full Load	90%
		Output Voltage Distortion	Less than 3%
		Output Frequency (sync to mains)	50/60 Hz +/- 3 Hz user adjustable +/- 0.1
		Crest Factor	3 : 1
		Waveform Type	Sine wave
		Output Connections	(1) Hard Wire 3-wire (H N + G)

		Nominal Input Voltage	230V
		Input Frequency	40 - 70 Hz (auto sensing)
		Input Connections	Hard Wire 3 wire (1PH+N+G)
		Input voltage range for main operations	160 - 280V (adjustable range 100 - 280V)
		Maximum Input Current	60A
		Input Breaker Capacity	63.0 A
		Battery Type	No internal battery - external battery system 12V / 75 AH Battery (20 Nos)
		Communications & Management Interface Port (s)	DB-9 RS-232
		Control panel	LED status display with load and battery bar-graphs and On Line: On Battery: Replace Battery : Overload and Bypass Indicators
		Audible Alarm	Alarm when on battery: distinctive low battery alarm : overload continuous tone alarm
		Emergency Power Off (EPO)	Optional
		Surge energy rating	420 Joules
		Environmental:	
		Operating Environment	0 - 40 °C
		Operating Relative Humidity	0 - 95%
		Storage Temperature	-20 - 50 °C
		Storage Relative Humidity	0 - 95%
		Audible noise at 1 meter from surface of unit	55.00 dBA
		Online Thermal Dissipation	652.00 BTU/hr
		Warranty	3 years comprehensive onsite OEM warranty
H-3	8.	5 KVA (Online UPS)	
		Output Power Capacity	4000 Watts / 5 kVA
		Nominal Output Voltage	230V (Configurable for 220 : 230 or 240 nominal output voltage)
		Efficiency at Full Load	>90%
		Output Voltage Distortion	Less than 5%
		Output Frequency (sync to mains)	47-50 Hz +/- 3 Hz user adjustable +/- 0.1
		Crest Factor	3 : 1
		Waveform Type	Sine wave
		Output Connections	(1) Hard Wire 3-wire (H N + G)
		Nominal Input Voltage	230V
		Input Frequency	40 - 70 Hz (auto sensing)
		Input Connections	Hard Wire 3 wire (1PH+N+G)
		Input voltage range for main operations	160 - 285V (adjustable range 150 - 300V)
		Battery Type	No internal battery - external battery system 12V /

			75 AH Battery (10 Nos)
		Control panel	LED status display with load and battery bar-graphs and On Line: On Battery: Replace Battery : Overload and Bypass Indicators
		Audible Alarm	Alarm when on battery: distinctive low battery alarm : overload continuous tone alarm
		Emergency Power Off (EPO)	Optional
		Surge energy rating	480 Joules
		Environmental:	
		Operating Environment	0 - 40 °C
		Operating Relative Humidity	0 - 95%
		Storage Temperature	-15 - 45 °C
		Storage Relative Humidity	0 - 95%
		Audible noise at 1 meter from surface of unit	< 55.00 dBA
		Online Thermal Dissipation	<440.00 BTU/hr
		Warranty	3 years comprehensive onsite OEM warranty
H-4	8.	1 KVA TRUE ONLINE UPS	
		Rating	1 KVA/800W IGBT based On-Line UPS with Inbuilt Isolation Transformer
		Input AC Parameters	Input Voltage: 160 - 280V Frequency: 50 Hz; Tolerance (45-55) Hz Input power factor: > 0.98
		Isolation Transformer (Inbuilt)	UPS should be fully isolated by double conversion and inbuilt isolation transformer within the UPS cabinet itself. External transformer shall not be considered
		Output AC Parameters	Rated apparent/active power: 1000 VA / 800W Output Voltage: 220/230 V AC Frequency: 50 +/- 0.5 Hz Over load: 10% for 30 seconds, 125% for 10 seconds Output Power Factor: 0.8
		Display & Level Indications	LED mimic diagram + LCD Display with measurements (Input / Output / Bypass V & Hz, Battery V & capacity level indicator, Load % & level Indicator)
		Audio Alarm operation	Suitable Alarms for Battery Operation / Overload
		Communication Ports	1 x Intelligent-Slot (SNMP), 1 x RS232 Serial Port
		Back-up Time & Battery Bank Details	(VAH Rating) 12V, VRLA sealed lead-acid Maintenance Free batteries for providing necessary back-up of 60 minutes
		Warranty	3 years comprehensive onsite OEM warranty
H-5	8.	650 VA UPS	
		Minimum Specifications	Capacity: 600 VA / 480 Watts • Input Voltage Range: 140-280 V AC • Input Frequency: 50 Hz +/- 10% • Output Voltage: 220 V +/- 15% • Output Frequency: 50 Hz +/- 0.5% Hz (under battery mode)

			<ul style="list-style-type: none"> • Noise: < 40 db at 1 m • Back-up Time: The system must be capable of providing requisite battery back-up time of 30 minutes on PC load, using Sealed Maintenance Free Batteries • Required VAH : 168 VAH • Line Interactive UPS with AVR & PWM Technology for computers suitable for Single Phase Input & Single Phase Output • Indicators: Mains presence, UPS mode, Battery low, Overload Battery, • Sealed Maintenance Free (VRLA) Built-in type of Exide/Quanta/CSB/Panasonic Make Batteries • On-site Warranty: 3 years comprehensive onsite OEM warranty
I	9.	M.S. Office (Academic Version)	
		Minimum Specifications	2016 or latest version
J	10.	Anti-Virus (Quick Heal/Norton/Bitdefender)	
		Minimum Specifications	<ul style="list-style-type: none"> • Total security • Validity period: Minimum 3 years
K	11.	WiFi Access point	
		Minimum Specifications	<ul style="list-style-type: none"> • IEEE 802.11 Ac Technology • Also Support IEEE 802.11 A/B/G/N Standard Technology • Concurrent Dual Band Wireless With Speed upto 750 Mbps WPS • Web Browser Based Setup And Configuration • Installation by BIDDER IS REQUIRED as per requirement.
L	12.	EXTERNAL HDD	
		Minimum Specifications	2 TB External Hard Disk without Any Power with 3 years Warranty.