## CENTRAL PURCHASE OFFICE ALIGARH MUSLIM UNIVERSITY, ALIGARH – 202002 TELEPHONE NO. 0571-2701327 Web site: <u>www.amuregistrar.com</u>

#### **TENDER NOTICE**

Sealed tenders on the prescribed format are invited from the reputed firms/manufacturers/distributors/authorized dealers for the supplies of <u>Server</u> and Storage Devices.

The prescribed format (non-transferable) alongwith the description of the material required and also other terms and conditions are given below the tender notice.

Each tender should be accompanied EMD 3% (Refundable) of the quoted value of items through D.D. in favour of the Finance Officer AMU, Aligarh payable at Aligarh failing which the tender will not be accepted.

Tenders will be accepted upto 4.00 p.m. by 22<sup>nd</sup> Nov 2010 and opened on 24<sup>th</sup> Nov 2010 at 12.00 Noon before the presence of tenderers or their representatives.

Dy. Finance Officer (Purchase)

### **INSTRUCTIONS TO SUPPLIERS/TERMS & CONDITIONS**

1. Tenders supported with manufacturer's price-list alongwith their literature, if any, must be properly sealed in envelop/cover and addressed to the Assistant Finance Officer, Central Purchase Office, AMU, Aligarh. The envelop be superscribed Tender for the item(s)

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2. Delivery will be made within the stipulated period as mentioned in the supply order and F.O.R. destination.

3. Supply should strictly be in accordance with the specifications given in the supply order. The articles not found according to the specifications or are damaged, will not be accepted and the supplier will be liable to remove the same from the University campus, otherwise, University will not be responsible for safe custody of it. The cost of return shall be borne by the supplier.

4. Either failure to execute the supply within stipulated period or sub-standard supplied, the University will have the right to black list the such supplier. Supply of goods after the stipulated period a regular sanction of extension of the period by the competent authority is necessary.

5. Any increase in the rate during the course of supply shall not be acceptable.

6. The incidental expenses such as; package, carriage, railway freight, forwarding and Insurance etc. will be borne by the firm/supplier.

7. Payment shall be made against bill which should be forwarded in triplicate.

8. Guarantee/warranty period should be clearly mentioned.

9. Free service after sale should be ensured during warranty period.

10. Maximum rebate/discount to the Educational Institution, if any, may be mentioned.

11. Rate quoted should be net after allowing all discount and inclusive of all Taxes/VAT etc.

12. All disputes will be settled in Aligarh Court only.

13. The tenders will be accepted from only those suppliers who have valid TIN/S.T. numbers and the copy of the same may also be submitted with the tenders.

14. Tender should be accompanied by EMD 3% of the quoted value of the items through D.D in favour of Finance Officer AMU, Aligarh. DOCUMENTS UNACCOMPANIED BY EARNEST MONEY SHALL BE OUT RIGHTLY REJECTED.

15. Tender must reach in the Central Purchase Office, AMU, Aligarh on or before 22nd .11.2010 by 4.00 p.m.

16. Tenders shall be opened at 12.00 Noon on 24.11.2010 in the Central Purchase Office in the presence of the tenderers/representatives of the firms.

17. The University reserves the right to accept or reject all or any of the tenders without assigning any reason thereof.

18. PREFERENCE WILL BE GIVEN TO THE COMPANIES APPLYING DIRECTLY.

# CENTRAL PURCHASE OFFICE ALIGARH MUSLIM UNIVERSITY ALIGARH

# **TENDER FORM**

NAME OF THE FIRM
ADDRESS
TELEPHONE NO
01- Tender Cost Rs.500/-(Non Refundable) D.D. Nodated
02EMD 3% (Refundable) of the quoted rates of the items through D.D.NO Datedamount Rsin favour of Finance Officer AMU, Aligarh payable at Aligarh.

# **SERVER**

Processors	True 64-bit High Performance EPIC Architecture & 2 or More CPU Core per CPU Socket, 1 CPU Socket Scalable to 2 CPU Socket Configured with min clock speed of 1.4GHZ or higher
Benchmark	The proposed processor should have the following published benchmarks for the following Industry Standard Benchmarks : SAP, TPC-C, TPC-H, SpecjAPP2005, Specjbb2005, Specint2006, Specfp2006
Cache	At least 6MB L3/ core .
Memory Type & Memory RAS	32 GB DDR2 Memory DIMM with parity protection. Also System should be capable to sustain Double Bit error on a DIMM/chip kill. (Scalable to 64GB)
Internal Disks Scalability	Minimum 3* 300 GB internal, hot plug, SFF SAS hard disk drives with minimum HW RAID1 Support. Should be scalable to 8 internal SAS Drive and support HW RAID5
I/OSlots	
Removable Media	Internal /External USB DVD Drive
Integrated I/O	Minimum 2 x 10/100/1000 Mbps onboard Ethernet Ports (Onboard HW RAID Controller or Dedicated PCI slot for HW RAID controller)
Server RAS Features:	The system should have the following RAS features on various resources  Processor & System RAS Cache error detection / correction Dynamic processor & memory allocation/deallocation. Core logic parity protection Dynamic Proc. Resiliency/Proc. Bus ECC /Service Processor I/O slots RAS Error detection / correction PCI failure isolation to a single slot Enhanced I/O error recovery Multi-pathing PCI card online replacement Support with UNIX OS
Error Handling	Machine Check Architecture (MCA) and event monitoring.
Operating System	64-bit Windows B13
High availability Features	Error checking and correcting (ECC) on memory and caches with Automatic deconfiguration of memory and processors
Virtualization Features	Policy based Workload management, Soft Partitions, Support for High Availability Clustering Software between Physical Servers & Virtual/Logical partitions
System Administration Tool	Integrated Remote management for managing system resources System should support Advanced iLO & with Virtual KVM & capable of Remote Read/Write Console Access
FC HBA	Should be configured with Dual Ported Fiber Channel HBA for SAN Connectivity
Clustering	Servers shall be configured in Active Passive Mode through clustering Tools ( to be of SAME OEM as of Servers )
Warranty	3-3-3 (1)

#### **WEB-Server**

Chasis CPU	2 U Rack Mountable Two * Quad Core Intel Xeon Processor E5640 2.6 GHz 12 MB
Mathanhaand	(1 x 8 MB) L3 cache
Moment	24 CD DDD2 operating at 1066MHz. Memory should be
Memory	24 GB DDK5 operating at 1000MHZ. Melliory should be upgradely to 102CD using DC2 8500D DDP2 Desistened
	(DDIMM) moments operating at 200MUz
	(RDIVIN) memory, operating at 80000Hz
	Advanced ECC (multi-bit error protection) Millioning mode &
Daria	Minimum 8 (acalable units 16) Let Dive 2.5" hand disk have
	Minimum 8 (scalable upto 16)Hot Plug 2.5 nard disk bays
	3X HOT PIUG SFF SAS 3000B OG SAS TOK KPM DP Drives
Controller	SAS Raid Controller with RAID 0/1/1+0/5/5+0 with 512MB
	battery backed write cache (onboard or in a PCI Express slot).
Networking features	Dual Port Multifunction GB Server Adapters (four ports total,
	Embedded or Slot based) with TCP/IP Offload Engine, including
	support for Accelerated iSCSI
Ports	USB 2.0 support With 5 total ports: (2) ports up front; (2) ports in
	back; (1) port internal and 1 internal Secure Digital (SD) slot
Bus Slots	Six PCI-Express slots, optional mixed PCI-X / PCI-Express or x16
	PCI configurations
Optical drive	DVD/CD-RW combo drive
Power Supply	Redundant Power Supplies
Fans	Redundant Fans
Standard Compliance	ACPI 2.0 Compliant, PCI 2.2 Compliant, WOL Support,
	Microsoft® Logo certifications, USB 2.0 Support
Security	Hardware-based system security feature that can securely store
	information, such as passwords and encryption keys to authenticate
	the platform. It can also be used to store platform measurements to
	ensure that the platform remains trustworthy.
OS Support	Microsoft Windows Server, Microsoft Windows Server Hyper-V,
	Red Hat Enterprise Linux (RHEL), Red Hat Enterprise Linux
	Virtualization, SUSE Linux Enterprise Server (SLES), SUSE Linux
	Enterprise Server with XEN Oracle Enterprise Linux (OEL), Solaris
	10 for x86/x64 based Systems, NetWare, VMware, Citrix Essentials
	for XenServer
Warranty	3 year warranty. Pre failure warranty on CPU, Memory and HDDs
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### **Remote Manageability Software**

System remote management software should support browser based Graphical Remote Console; Virtual Power button, Remote boot using USB/CD/ DVD Drive and should be capable to offer upgrade of software and patches from a remote client using Media/image/folder; server power capping and historical reporting; should have support for multifactor authentication. Remote console sharing 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. shared remote consol for minimum 6 users simultaneously

### Server Management

The Systems Management software should provide 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 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.

## **RACK & OTHER OPTIONS**

RACK	42 U with Rackmount Keyboard and 17/19 inch Monitor of 1U. Should support video resolutions from 640 x 480 through 1440 x 900 at up to 75 Hz refresh rate
8 ports KVM Switch	Displays system-related information on the console monitor, such as selected server name, status, power-up test data and configuration menus. The switch box should provide a password option for security.Should support the application code of the switch to be quickly and easily updated via FLASH ROM. The port communications settings should automatically configured to allow direct downloading from the connected computer. Support for variety of server connections with Interface Adapters PS/2, USB, VT 100 serial console support, BladeSystems support via front diagnostics connector. <b>Warranty</b> 3-3-3
Layer 3 Switch	Layer 3 Switch with 24 * 10/100/1000 BASE-T Ethernet Ports, 4 SFP Combo Ports and Two Extension Slots. Minimum 120 Gbps non-Blocking Switching Speed. Shall Support minimum 32K MAC Address and 4K Port Based VLANs

## **BACKUPSERVER**

Chassis	2 U Rack Mountable
CPU	One * Ouad Core Intel Xeon Processor E5640 2.6 GHz 12 MB
01.0	(1 x 8 MB) L3 cache. Server should be upgradable to 2 CPU
Motherboard	Intel® 5520 Chipset or better
Memory	16 GB DDR3 operating at 1066MHz. Memory should be
	ungradable to 192GB using PC3-8500R DDR3 Registered
	(RDIMM) memory, operating at 800MHz
	Advanced ECC (multi-bit error protection) Mirroring mode &
	Lockstep mode memory protection should also be available
Bays	Minimum 8 (scalable upto 16)Hot Plug 2.5" hard disk bays
Hard disk drive	3x Hot plug SEF SAS 300GB 6G SAS 10K RPM DP Drives
Controller	SAS Raid Controller with RAID $0/1/1+0/5/5+0$ with 512MB battery
	backed write cache (onboard or in a PCI Express slot)
Fiber Channel	Dual Port & Ghos fiber channel HBA
Networking features	Dual Port Multifunction Gigabit Server Adapters (four ports total
	Embedded or Slot based) with TCP/IP Offload Engine, including
	support for Accelerated iSCSI
Ports	USB 2.0 support With 5 total ports: (2) ports up front: (2) ports in
	back: (1) port internal and 1 internal Secure Digital (SD) slot
Bus Slots	Six PCI-Express slots, optional mixed PCI-X/PCI-Express or x16
	PCI configurations
Optical drive	DVD/CD-RW combo drive
Power Supply	Redundant Power Supplies
Fans	Redundant Fans
Standard Compliance	ACPI 2.0 Compliant, PCI 2.2 Compliant, WOL Support,
-	Microsoft® Logo certifications, USB 2.0 Support
Security	Hardware-based system security feature that can securely store
·	information, such as passwords and encryption keys, which can be
	used to authenticate the platform. It can also be used to store
	platform measurements that help ensure that the platform remains
	trustworthy.
OS Support	Microsoft Windows Server, Microsoft Windows Server Hyper-V,
	Red Hat Enterprise Linux (RHEL), Red Hat Enterprise Linux
	Virtualization, SUSE Linux Enterprise Server (SLES), SUSE Linux
	Enterprise Server with XEN Oracle Enterprise Linux (OEL),
	VMware, Citrix Essentials for XenServer
Warranty	3 year warranty. Pre failure warranty on CPU, Memory and HDD
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## **Remote Manageability Software**

System remote management software should support browser based Graphical Remote Console; Virtual Power button, Remote boot using USB / CD/ DVD Drive and should be capable to offer upgrade of software and patches from a remote client using Media / image/folder;server power capping and historical reporting;should have support for multifactor authentication. Remote console sharing 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. shared remote consol for minimum 6 users simultaneously

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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.

# **Tape Library**

Capacity	a. Shall support Native data capacity of 36TB (uncompressed) expand
	able to 72TB (2:1compressed).
	<b>b.</b> Shall be offered with Minimum of One LTO5 FC tape drive and
	minimum of 24 cartridge slots. Shall support encryption
Tape Drive Architecture	Offered LTO5 drive in the Library shall conform to the Continuous and
	Data rate matching technique for higher reliability.
Speed	Offered LTO5 drive shall support 140MB/sec in Native mode and
	280MB/sec in 2:1 Compressed mode.
Scalability	Tape Library shall support scalability for more than 4 Number of LTO-5
	and 120 slots either within the same frame or by cascading another
	frame.
<b>Encryption device</b>	Offered Library shall be provided with a hardware device like USB key,
	separate appliance etc. to keep all the encrypted keys in a redundant
	fashion.
Connectivity	Offered Tape Library shall provide 8Gbps native FC connectivity to
SAN s	witches.
Management	Tape Library shall provide web based remote management.
<b>Barcode Reader/Mail slots</b>	Tape library shall support Barcode reader and mail slot.
Other Features	a. Tape Library shall have GUI Panel
	<b>b</b> . Shall be rack mountable.
	c. Tape Library shall be supplied with software which can predict and
	prevent failures through early warning and shall also suggest the required
	service action.
	<b>d.</b> Offered Software shall also have the capability to determine when to
Warrantz	retire the tape cartridges and what compression ratio is being achieved
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## Storage Area Network (SAN)

#### **Operating System & Clustering Support**

1. The storage array should support industry-leading Operating System platforms including: *Windows Server 2003, 2008*, Vmware, Sun Solaris, HP-UX, IBM-AIX and Linux.

2. Offered Storage Shall support all above operating systems in Clustering.

# **Capacity & Scalability**

1. The Storage Array shall be offered with 12 FC drives of 300GB FC Disk Drives.

2. Storage shall be scalable to minimum of 90 number of drives or 37TB using 400GB drives.

## **Processing Power**

Offered controllers shall be based on latest PCI-e technology to ensure that there is no bottleneck for IO communication.

#### Architecture

1. The storage array should support dual, redundant, hot-pluggable, active-active array controllers with RISC based processors for high performance and reliability

2. Storage Array shall have Real Time / Embedded Unix Operating system to avoid frequent Firmware upgrades and shall not be based on General purpose operating system.

3. Storage Array shall have Switched Architecture for Disk drive connectivity.

4. Controllers shall be true active-active so that a single Logical unit can be shared by both controllers at the same time.

#### No Single point of Failure

Offered Storage Array shall be configurable in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.

### **Disk Drive Support**

Offered Storage Array shall support 4Gbps dual-ported 146/300/400/450GB / 600GB hot-pluggable Enterprise FC hard drives, Minimum of 73GB SSD Drives along with S-ATA/F-ATA (1TB) drives in the same device shelf.

#### Cache

1. Offerd Storage Array shall be given with Minimum of 4GB cache in a single unit out of which atleast 1GB shall be usable write cache.

2. Cache shall be mirrored using dedicated PCI-express bus and shall not use Disk data path.

3. Cache shall be dynamically managed for Read and Write operations.

4. Shall have dynamic management of Cache block size.

5. Cache shall not have any overhead for the operating system.

# **Raid Support**

1. Offered Storage Subsystem shall support Raid 0, 1, 1+0, 5 and Raid 6.

2. Offered Storage subsystem controllers shall have capability to create a single volume of more than 24TB

3. Storage subsystem shall support expansion of both Disk group and raid group dynamically at both storage and Host level as per defined policies.

#### **Data Protection**

1. Incase of Power failure, Storage array shall be able to hold data in the cache for at-least 96 hours of time or destage to disk drives. Bidders shall ensure that in case of de-stanging, dual redundant Standby power supplies are configured.

2. For optimal data protection, storage shall support distribution of metadata on more than one drive shelf.

#### Host Ports & Back-end Ports

Offered Storage shall have minimum of 4 host ports for connectivity to servers & minimum of 4 device ports for Disk shelf connectivity

## **Ports Bandwidth**

Offered storage shall be end to end 4Gbps where each drive and drive shelf shall be connected through dual active-active paths.

## **Global Hot Spare**

1. offered Storage Array shall support distributed Global hot Spare for offered Disk drives.

2. Atleast 2 Global hot spare drive shall be configured for every 50 drives.

### Performance

1. Offered Storage subsystem shall support more than 1,30,000 IOPS.

2. Shall have capability to use more than 30 drives per array group or raid group for better performance.

3. Shall support more than 1200MB/sec sequential throughput.

## Load Balancing & Muti-path

Multi-path and load balancing software shall be provided, if vendor does not support MPIO functionlity of Operating system.

## Maintenance

Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives.

# **Re-build time**

For better re-build times in case of disk failure, offered storage rebuild operations shall not depends upon the number of drives in the raid group.

## **Business Copy**

1. Shall support Snapshot, Capacity free snapshot without locking the disk space, Full physical copy (Clone).

2. Shall support incremental re-synchronization of business copy with Primary volume.

3. Shall support more than 48 business copy of a given production volume.

4. Shall be able to create business copy on different raid set as compared to Production volume.

5. Shall be able to create Clone operation on low performance SATA / FATA drives.

### Storage Array Configuration & Management Software

1. Vendor shall provide Storage Array configuration and Management software.

2. Software shall be able to manage more than one array of same family.

## **Performance Management**

Vendor shall also offer the performance management software for Storage Array.

### **Remote Replication**

1. Storage shall support both Synchronous and Asynchronous replication at controller level.

2. Shall support continuous replication to Remote location without using any buffering technology inside cache at Primary location for better Recovery Point Objective.

3. Shall support replication across all models of the offered family.

## FC Cables

Reqired 775m Multi-mode OM3 LC/LC FC Cable to be provided

## Warranty 3-3-3

# SAN Switch

- 1 Minimum Dual SAN switches shall be configured where each SAN switch shall be configured with minimum of 8 Ports scalable to 24 ports.
- 2 Required scalability shall not be achieved by cascading the number of switches and shall be offered within the common chassis only
- 3 Should deliver 8 Gbit/Sec Non-blocking architecture with 1:1 performance for up to 24 ports in a energy-efficient fashion
- 4 Should protect existing device investments with auto-sensing 1, 2, 4, and 8 Gbit/sec capabilities.
- 5 The switch shall support different port types such as FL\_Port, F\_Port, M\_Port (Mirror Port), and E\_Port; self-discovery based on switch type (U\_Port); optional port type control in Access Gateway mode: F\_Port and NPIV-enabled N\_Port
- 6 The switch should be rack mountable
- 8 Non disruptive Microcode/ firmware Upgrades and hot code activation.
- 9 The switch shall provide Aggregate bandwidth of 192 Gbit/sec: 24 ports × 8 Gbit/sec (data rate) end to end.
- 10 Switch shall have support for web based management and should also support CLI.
- 11 The switch should have USB port for firmware download, support save, and configuration upload/ download.
- 12 Offered SAN switches shall be highly efficient in power consumption. Bidder shall ensure that each offered SAN switch shall consume less than 60 Watt of power.
- 13 Switch shall support POST and online/offline diagnostics, including RAStrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).
- 14 Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expldite high-priority traffic
- 15 The switch shall be able to support ISL trunk up to 64 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing.
- 16 SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.
- 17 It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning
- 18 The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric.
- 19 Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device.
- 20. Warranty 3-3-3

# **Backup and Data Protection Software**

- 1. The proposed backup solution should be available on various OS platforms such as Windows and UNIX platforms and be capable of supporting SAN based backup / restore from various platforms including Tru64 UNIX, HP-UX, Linux, Open VMS, NetWare and Windows.
- 2. The proposed backup solution shall support industry leading cluster solution such as MSCS, MC Service Guard, Veritas Cluster.
- 3. The proposed backup solution shall have same GUI across heterogeneous platform to ensure easy administration.
- 4. The proposed backup solution software has inbuilt Java / Web based GUI for centralized management of backup domain.
- 5. The proposed backup solution must support integration of backup and restore with hardware cloning and snapshot features into the GUI, eliminating the traditional need to write user scripts
- 6. The proposed backup solution should support tape mirroring of the same job running concurrently with primary backup.
- 7. The proposed backup solution should allow creating tape clone facility after the backup process.
- 8. The proposed backup solution shall be configured in such a fashion that no extra license for client and media servers is required while moving from LAN to SAN based backup.
- 9. The proposed backup solution shall be configured with unlimited client and media licenses for both SAN based backup and LAN based backup.
- 10. The proposed backup solution must not require separate licensing when upgrading from a lower end server (1-2 CPU-based server) to higher end server (4-and CPU-based server)
- 11. The proposed backup solution supports the capability to write up to 32 data streams to a single tape device or multiple tape devices in parallel from multiple clients to leverage the throughput of the drives using multiplexing technology.
- 12. The proposed backup solution support de-multiplexing of data cartridge to another set of cartridge for selective set of data for faster restores operation to client/servers.
- 13. The proposed backup solution has in-built media management and supports cross platform device and media sharing in SAN environment. It provides a centralized scratched pool thus ensuring backups never fail for media.
- 14. The proposed backup solution has in-built frequency and calendar based scheduling system.
- 15. The proposed backup software must support open file support for Windows and Novell Netware.
- 16. The proposed backup solution has certified "hot-online" backup solution for different type of databases such as Oracle, MS SQL, Sybase etc.
- 17. The proposed backup solution shall also support Microsoft Sharepoint Portal server. **Backup Software should be configured with 2 online agents for 2 Database (Oracle) Servers.**
- 18. The proposed backup solution must be able to rebuild the backup database/catalog from tapes in the event of catalog loss/corruption.
- 19. The proposed backup solution shall provide granularity of single file restore.
- 20. The proposed backup solution must support MS Exchange single mailbox restore.
- 21. The backup software should support object level restore.
- 22. The proposed backup solution must support full automated transfer of disk backup images to tape on a scheduled basis.
- 23. The proposed backup solution shall support synthetic full backup so that an incremental forever approach may be implemented, where an actual full backup is no longer necessary as it can be constructed directly from the disk based incremental backups.
- 24. The proposed backup solution shall also support disk based virtual full backup approach.
- 25. The proposed backup solution shall be able to copy data across firewall.
- 26. The proposed backup solution shall support automatic skipping of backup during holidays.
- 27. The proposed backup solution must support at least AES 256-bit encryption capabilities.
- 28. The internal backup catalogue database should not have a big foot print.
- 29. The backup software should support object based restore option which is one of the most granular option available with any backup software vendor.
- 30. The backup software should support instant recovery of Exchange, SQL and Oracle databases.

Terms & Conditions:-

Signature & Seal of the Vender

Contract NO.....