

Sr. No.	Page No. of the Bid document	Clause No./Type	Clause Section	Existing Clause	Change Request / Justification	Response
1	6	Point number 6	ELIGIBILITY CRITERIA	The bidder should have national presence and should have supplied and maintained at least 300 servers in India during last five financial years in at least One PSU /central government organizations / BFSI / Financial Institution in India from the date of submission of bid.	The said clause is restricting , we request PNB authorities to amend the clause as for wider participation: "The bidder should have a national presence and must have supplied and maintained at least 150 servers in India over the last seven financial years. The deployments should include at least one engagement with a PSU, central government organization, BFSI, financial institution, or a Large enterprise > ₹100 Cr, as on the date of bid submission.	Please refer to corrigendum 1
2	3	3	Payment	Payments for procurement of above mentioned Hardware will be paid only after supply and installation and warranty status updated on OEM portal.	Payment Schedule: 70% of total amount on successful Delivery & 30% on successful Installation & commissioning of the equipment.	Please be guided as per RFP
3	6	Point number 6	ELIGIBILITY CRITERIA	The bidder should have national presence and should have supplied and maintained at least 300 servers in India during last five financial years in at least One PSU / central government organizations / BFSI / Financial Institution in India from the date of submission of bid.	The bidder should have national presence and should have supplied and maintained at least 50 servers in India during last five financial years in at least One PSU / central government organizations / BFSI / Financial Institution/ Large enterprise, in India from the date of submission of bid.	Please refer to corrigendum 1
4		Point -3	Annexure A – Terms and Conditions	Point 3 – Payment: Payments for procurement of above-mentioned Hardware will be paid only after supply and installation and warranty status updated on OEM portal.	Bidder requests this clause to be revised as under: <ul style="list-style-type: none"> • Hardware and Software Payment Terms: 100% payment within 15 days of hardware delivery. • Implementation / Migration Payment Terms: 100% payment within 15 days of successful installation and migration. 	Please be guided as per RFP

5		Point -4	Annexure A – Terms and Conditions	<p>Point 4 – Delivery: The delivery and installation must be completed within a maximum of four (4) weeks from the date of order placement.</p> <p>Four (4) servers, storage (1) and Switches (2) & Operating system are to be delivered to the Head Office in Delhi, and three (3) servers, storage (1) and Switches (2) Operating system at the Disaster Recovery (DR) site in Mumbai.</p>	Please amended the delivery timeline from 4 weeks to 8 to 10 weeks for delivery of Servers, Storage, OS and Switches from the date of order acceptance and execution in OEM system. Installation of Servers, Storage, OS and Switches within 4-6 weeks from the date of delivery.	Please refer to corrigendum 1
6			Annexure 13	Scope of Work - Issue Diagnosis and Resolution	Please specify per year total number of Man-days required by PNB Gilts Limited for Onsite Support from bidder for effort estimation to submit the bid.	The clarification is as under: "Company doesn't want dedicated support, it is bidder responsibility to resolve the issue through the OEM if any issue noticed or updated to bidder. Bidder needs to ensure that call logged and issue get resolved within stipulated time under warranty."
7			Annexure A	Cancellation of Purchase Order	We would like to clarify once the PO is accepted and executed by OEM it cannot be cancelled or terminated by PNB Gilts Ltd. for Server, Storage, OS and Switches supply.	Please be guided as per RFP
8	6	Point number 6	ELIGIBILITY CRITERIA	The bidder should have national presence and should have supplied and maintained	The bidder should have national presence and should have supplied and maintained at least 50 servers in India during last five financial	Please refer to corrigendum 1

				at least 300 servers in India during last five financial years in at least One PSU / central government organizations / BFSI / Financial Institution in India from the date of submission of bid	years in at least One PSU / central government organizations / BFSI / Financial Institution/ Large enterprise , in India from the date of submission of bid.	
9	6	Point number 10	ELIGIBILITY CRITERIA	Bidder should have support offices in Delhi/NCR and Mumbai Metropolitan Region.	Request you to relax this clause as these equipment are coming with back to back warranty from OEM and we will provide Resident engineer in Mumbai Location.	Please be guided as per RFP
10	14	Server	Annexure-8 Technical Specification	Chassis - 1U Rack Mountable	1U / 2U Rack Mountable	Please refer to corrigendum 1
11	14	Server	Annexure-8 Technical Specification	BOOT optimized storage - 2 x 480GB M.2 NVMe Hot Plug Boot Optimized Storage in RAID 1	2 x 480GB SSD drives M.2 NVMe Hot Plug Boot Optimized Storage in RAID 1	Please refer to corrigendum 1
12	14	Server	Annexure-8 Technical Specification	Bus Slots - Server should support upto three PCI-Express 5.0 x16 slots. Additional two x8 or higher PCIe 5.0 slots	Bus Slots - Server should support upto three PCI-Express 4.0 x16 slots. Additional two x8 or higher PCIe 4.0 slots	Please refer to corrigendum 1
13	14	Server	Annexure-8 Technical Specification	HDD Bays - Upto 20 1T EDSFF or 10 2T 20EDSFF (FUTURE)	Upto 20 1T EDSFF or 10 2T 20EDSFF (FUTURE) 8 drive bays of SAS/SATA or more	Please refer to corrigendum 1

14	15	Server	Annexure-8 Technical Specification	<p>Controller- Server should support one of the below controllers, must support Mixed Mode which combines RAID and HBA mode operation simultaneously : Embedded / PCIe based x16 RAID controller with 8GB Flash backed write cache, supporting RAID 0, 1, 5, 6, 10, 50, 60. Must support mix-and-match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 12G SAS, 16G NVMe. or Embedded / PCIe based x16 RAID controller supporting RAID 0, 1, 10. Must support mix-and-match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 12G SAS, 16G NVMe. or Embedded / PCIe based RAID controller with 4GB Flash backed write cache supporting RAID 0, 1, 5, 6, 10, 50, 60 s Must support mix-and-match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 12G SAS, 16G NVMe. Above mentioned controller must support following : 1. Hardware root of trust and secure encryption and decryption of critical drive data 2. Online Capacity Expansion (OCE) 3.</p>	<p>RAID controller with 8GB Flash backed write cache, supporting RAID 0, 1, 5, 6, 10, 50, 60.</p>	Please refer to corrigendum 1
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15	16	Server	Annexure-8 Technical Specification	<p>Networking features Server should support below networking cards: 1. 1Gb 4-port network adaptors 2. 10Gb 2-port Ethernet adaptor 3. 10GBaseT 2-port Ethernet adaptor 4. 10/25Gb 2-port SFP28 Ethernet adaptor 5. 10/25Gb 4-port SFP28 Ethernet adaptor 6. 100Gb 2-port QSFP28 Ethernet 7. 100Gb 1-port QSFP56 Ethernet 8. 100Gb 2-port QSFP56 Ethernet 9. 200Gb QSFP56 Ethernet InfiniBand Options: 100Gb or 200Gb Single or Dual port Adapter</p>	4x 10G Optical ports + 2x 32Gbps FC ports	Please refer to corrigendum 1
16	16	Server	Annexure-8 Technical Specification	<p>Interfaces Serial - 1 (Optional) USB support with Up to 5 total: 1 front, 2 rear, 2 internal. 1GbE Dedicated management port</p>	<p>Interfaces Serial - 1 (Optional) USB support with Up to USB support with Up to 3 total. 1GbE Dedicated management port</p>	Please refer to corrigendum 1
17	16	Server	Annexure-8 Technical Specification	<p>Power Supply Should support hot plug redundant low halogen power supplies with minimum 94% efficiency</p>	Should support hot plug redundant low halogen power supplies with minimum 94% efficiency	Please refer to corrigendum 1

18	16	Server	Annexure-8 Technical Specification	Industry Standard Compliance ACPI 6.4 Compliant PCIe 5.0 Compliant WOL Support Microsoft® Logo certifications PXE Support Energy Star SMBIOS 3.4 UEFI 2.7 Redfish API IPMI 2.0 Secure Digital 4.0 Advanced Encryption Standard (AES) Triple Data Encryption Standard (3DES) SNMP v3 TLS 1.2 DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP) Active Directory v1.0 ASHRAE A3/A4	ACPI Compliant PCIe 4.0 Compliant WOL Support Microsoft® Logo certifications PXE Support Energy Star SMBIOS UEFI 2.7 Redfish API IPMI 2.0 Advanced Encryption Standard (AES) Triple Data Encryption Standard (3DES) SNMP v3 TLS 1.2 Active Directory v1.0 ASHRAE A3/A4	Please refer to corrigendum 1
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19	16-17	Server	Annexure-8 Technical Specification	<p>System Security: UEFI Secure Boot and Secure Start support Immutable Silicon Root of Trust FIPS 140-2 validation Common Criteria certification Configurable for PCI DSS compliance Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser Support for Commercial National Security Algorithms (CNSA) Smart card (PIV/CAC) and Kerberos based 2-factor Authentication Tamper-free updates - components digitally signed and verified Secure Recovery - recover critical firmware to known good state on detection of compromised firmware Ability to rollback firmware Secure erase of NAND/User data TPM (Trusted Platform Module) 2.0 Bezel Locking Kit option Chassis Intrusion detection option</p>	<p>System Security UEFI Secure Boot and Secure Start support Immutable Silicon Root of Trust Common Criteria certification Configurable for PCI DSS compliance Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser Secure updates - components digitally signed and verified Secure Recovery - recover critical firmware to known good state on detection of compromised firmware Ability to rollback firmware Secure erase of NAND/User data TPM (Trusted Platform Module) 2.0 Bezel Locking Kit option Chassis Intrusion detection option</p>	Please refer to corrigendum 1
20	17	Server	Annexure-8 Technical Specification	<p>Operating Systems and Virtualization Software Support: Windows Server. Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware ESXi. Canonical Ubuntu Oracle Linux and Oracle VM Citrix</p>	<p>Operating Systems and Virtualization Software Support: Windows Server. Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware ESXi. Canonical Ubuntu</p>	Please refer to corrigendum 1

21	17	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 3. Server should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware	3. Server should have storage space to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware	Please refer to corrigendum 1
22	17	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 8. 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.	8. 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 support.	Please refer to corrigendum 1
23	18	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 11. Should provide support for Java free graphical remote console.	11. Should provide support for Java free graphical remote console.	Please refer to corrigendum 1
24	18	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 18. Workload Performance Advisor - Provides server	18. Workload Performance Advisor - Provides server tuning recommendations to improve server performance	Please refer to corrigendum 1

				tuning recommendations to improve server performance		
25	NA	Server	Annexure-8 Technical Specification	Additional Clause	5 Yr. 6 Hr. CTR warranty support	Please refer to corrigendum 1
26	NA	Server	Annexure-8 Technical Specification	Additional Clause	NA	Please refer to corrigendum 1
27	19 & 22	DC and DR Storage	Annexure-8 Technical Specification	<p>Front-end Ports & Back-end Ports:</p> <p>1. Offered Storage system shall be supplied with minimum of Quad 16 Gb FC ports per controller</p> <p>2. The proposed storage system shall support 12G SAS Back-end connectivity.</p>	<p>Since there is DC and DR solution and if replication will be there between storage to storage then 10/25G ports need to be configured, kindly change the clause to for point 1: Offered Storage system shall be supplied with minimum of Quad 16 Gb and 10Gbs ,FC and iSCSI ports per controller and NAS protocol along with SAN.</p>	Please refer to corrigendum 1
28	20 & 22	DC and DR Storage	Annexure-8 Technical Specification	<p>Disk Drive Support:</p> <p>1. The storage system shall support Enterprise SAS Drives, SSD and mid-line SAS drives of 7.2k rpm drives.</p> <p>2. The proposed storage array shall also have support for FIPS 140-2 validating self-encrypted drives.</p>	<p>1. The storage system shall support Enterprise SAS Drives, SSD and mid-line SAS drives of 7.2k rpm drives.</p> <p>2. The proposed storage array shall also have support for FIPS 140-2 validating self-encrypted drives.</p>	Please refer to corrigendum 1

29	20 & 23	DC and DR Storage	Annexure-8 Technical Specification	<p>Cache:</p> <ol style="list-style-type: none"> 1. The proposed Storage Array shall be given with Minimum of 48GB cache / memory per array in a single unit. 2. Cache shall be backed up in case of power failure for indefinite time either using batteries or capacitors or any other equivalent technology. 3. The proposed Storage shall also have optional support for Flash cache using SSD / Flash drives. Offered storage shall support at-least 8TB Flash Cache. 	<ol style="list-style-type: none"> 1. The proposed Storage Array shall be given with Minimum of 48GB cache / memory per array in a single unit. 2. Cache shall be backed up in case of power failure for indefinite time either using batteries or capacitors or any other equivalent technology. 3. The proposed Storage shall also have optional support for Flash cache using SSD / Flash drives. Offered storage shall support at-least 8TB Flash Cache. 	Please refer to corrigendum 1
30	20 & 23	DC and DR Storage	Annexure-8 Technical Specification	<p>Raid Support:</p> <ol style="list-style-type: none"> 1. The proposed Storage Subsystem shall support Raid 1 , 10, 5 and Raid 6 2. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array. 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 32GB Cache is configured inside the storage arrays to offset the raid processing workload. 	<ol style="list-style-type: none"> 1. The proposed Storage Subsystem shall support Raid 1 , 10, 5 and Raid 6 2. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array. 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 32GB Cache is configured inside the storage arrays to offset the raid processing workload. 	Please refer to corrigendum 1

31	21 & 23	DC and DR Storage	Annexure-8 Technical Specification	<p>Virtualization and Thin provisioning: 1. The proposed 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 of Raid 1, Raid 10, Raid 5 and Raid 6. 2. The proposed Storage shall be offered and configured with Thin Provisioning capability.</p>	<p>1. The proposed 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 of Raid 1, Raid 10, Raid 5 and Raid 6. 2. The proposed Storage shall be offered and configured with Thin Provisioning capability.</p>	Please refer to corrigendum 1
32	21 & 24	DC and DR Storage	Annexure-8 Technical Specification	<p>Data Tiering: The proposed storage shall also be licensed for SubLun Data tiering in real time fashion across different type of drives within a given pool like SSD, SAS, Midline SAS etc. License for same shall be offered for maximum supported capacity of the array</p>	<p>The proposed storage shall also be licensed for SubLun Data tiering in real time fashion across different type of drives within a given pool like SSD, SAS, Midline SAS etc. License for same shall be offered for maximum supported capacity of the array</p>	Please refer to corrigendum 1
33	21 & 24	DC and DR Storage	Annexure-8 Technical Specification	<p>Load Balancing & Muti-path: Multi-path and load balancing software shall be provided if vendor does not support MPIO functionality of Operating system.</p>	<p>Multi-path and load balancing software shall be provided if vendor does not support MPIO functionality of Operating system.</p>	Please refer to corrigendum 1

34	21 & 24	DC and DR Storage	Annexure-8 Technical Specification	Performance: The proposed storage shall have listed benchmark for performance of more than 700,000 IOPS for 100% random read and more than 8GB/sec for segmented sequential write operations. The bidder shall provide documentary proof for it.	The proposed storage shall have listed benchmark for performance of more than 700,000 IOPS for 100% random read and more than 8GB/sec for segmented sequential write operations. The bidder shall provide documentary proof for it.	Please refer to corrigendum 1
35	NA	DC and DR Storage	Annexure-8 Technical Specification	Additional Clause	5 Yr. 6 Hr. CTR warranty support	Please refer to corrigendum 1
36	24	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	General Features: 1.(c). Switch should have non-blocking per-slot throughput from day 1.	Switch should have non-blocking per-slot throughput capability on all ports from day 1.	Please refer to corrigendum 1
37	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	General Features: 1.(e). The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software to optimize performance and capacity	With open-networking capabilities, one can have a third-party Network Operating System installed on a switch, depending on what performance, capacity or optimisation is needed. With programmable ASIC and tighter integration of HW and SW, the dependency is completely on a single vendor	Please refer to corrigendum 1
38	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	General Features: 1.(f). Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source	As many network vendors provide Open Networking capabilities, where a Network OS from different vendor can be installed on a switch, image pre-check can be done before installing the software so that it is assured that it is not modified, after which the DC is made physically secure so that no one is able to login without proper access	Please refer to corrigendum 1

39	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Performance 2. (a) Should have 16GB DRAM and 32GB Flash.	Higher RAM means that switch OS is bloated and requires more RAM to operate. Switch OS should be as light as possible Should have 8GB or better DRAM and 32GB Flash.	Please refer to corrigendum 1
40	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (a). The switch should support front plane stacking on uplink port or Backplane stacking and should have Stacking Performance of minimum 160 Gbps	The switch should support MC-LAG / vPC / MLAG to allow two switches to form a virtual chassis or have Backplane stacking and should have 200 Gbps of Virtual Chassis performance or Stacking Performance of minimum 160 Gbps	Please refer to corrigendum 1
41	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (b). The Switch should support long distance across the Rack and Floor Switch Stacking.	The Switch should support long distance across the Rack and Floor Switch virtual- chassis or Stacking.	Please refer to corrigendum 1
42	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (c). Must support RIPv2, RIPng, EVPN, BGP, BGP4, VRF, VXLAN, EVPN, OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM- DM, PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1	Must support RIPv2, RIPng, EVPN, BGP, BGP4, VRF, VXLAN, EVPN, OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM-DM, PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1	Please refer to corrigendum 1
43	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (f). The switch should support STP, Trunking, Private VLAN (PVLAN), Q-in- Q, Deficit Weighted Round- Robin(DWRR) or equivalent scheduling, Committed Information Rate	STP, Trunking, Private VLAN (PVLAN) / VRF- Leaking / NAT , Q-in-Q, Shaped Round Robin (SRR)/Deficit Weighted Round-Robin (DWRR) scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port	Please refer to corrigendum 1

				(CIR)/Equivalent and eight egress queues per port		
44	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(h). The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute	The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet , ping, traceroute	Please refer to corrigendum 1
45	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(j). The switch should have Data Center Bridging (DCB), Supports lossless Ethernet networking standards to eliminate packet loss due to queue overflow, Priority Flow Control (PFC) 2 priorities per port, Enhanced Transmission Service (ETS) DCB Exchange Protocol (Pre-standard LLDP DCBX IEEE 1.01 version)	The switch should have Data Center Bridging (DCB), Supports lossless Ethernet networking standards to eliminate packet loss due to queue overflow, Priority Flow Control (PFC) 2 priorities per port, Enhanced Transmission Service (ETS) DCB Exchange Protocol (Pre-standard LLDP DCBX IEEE 1.01 version)	Please refer to corrigendum 1
46	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(k). Switch should have SCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)	Switch should have SCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)	Please refer to corrigendum 1
47	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(m). The switch should support IEEE 802.1X	The switch should support IEEE 802.1X or MAC filtering	Please refer to corrigendum 1

48	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(n). The switch should support Port-based authentication	The switch should support Port-based authentication, if solution is based on 802.1x	Please refer to corrigendum 1
49	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(o). The switch should support MAC-based authentication	The switch should support MAC-based authentication, if solution is based on 802.1x	Please refer to corrigendum 1
50	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(q). The switch should support Source-port filtering	The switch should support Source-port filtering or IP and Layer-4 port filtering	Please refer to corrigendum 1
51	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(r). The switch should support RADIUS/TACACS+, Dynamic ARP protection, Port Security, STP route guard, BPDU guard.	The switch should support RADIUS/TACACS+, Dynamic ARP protection or MAC filterting , Port Security, STP route root guard, BPDU guard.	Please refer to corrigendum 1
52	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Interface Requirement i) 24 nos. of 1G/10G SFP+ ports ii) 4 nos. of 40G/100G SFP28 uplink ports	ii) 4 nos. of 1G/10G/25G/50G or 40G 100G uplink ports.	Please refer to corrigendum 1

53	27	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	OEM qualification criteria, Warranty and Support: 6.(b). Switch or Switch's Operating System on different hardware platforms should be tested for EAL 2/NDPP or above under Common Criteria Certification	Switch or Switch's Operating System on different hardware platforms should be tested for EAL 2/NDPP/ FIPS or above under Common Criteria Certification	Please refer to corrigendum 1
54	27	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	OEM qualification criteria, Warranty and Support: 6.(c). The OEM shall be in Leaders Quadrant of Gartner report for Wired & Wireless LAN Infrastructure for minimum 5 Consecutive Years.	The OEM shall be in Leaders Visionaries or above in Quadrant of Gartner report for Wired & Wireless LAN Infrastructure for minimum 5 Consecutive Years Data-Centre networking infrastructure	Please refer to corrigendum 1
55	NA	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Additional Clause	5 Yr. 6 Hr. CTR warranty support	Please refer to corrigendum 1

Corriegendum-1

Sr. No.	Page No. of the Bid document	Clause No./Type	Clause Section	Existing Clause	Revised Clause
1	6	Point number 6	ELIGIBILITY CRITERIA	The bidder should have national presence and should have supplied and maintained at least 300 servers in India during last five financial years in at least One PSU /central government organizations / BFSI / Financial Institution in India from the date of submission of bid.	The Ameded Clause is as below: The bidder should have national presence and should have supplied and maintained at least 200 servers in India during last seven (7) financial years in at least One PSU /central government organizations / BFSI / Financial Institution/large enterprises in India from the date of submission of bid.
5		Point -4	Annexure A – Terms and Conditions	Point 4 – Delivery: The delivery and installation must be completed within a maximum of four (4) weeks from the date of order placement. Four (4) servers, storage (1) and Switches (2) & Operating system are to be delivered to the Head Office in Delhi, and three (3) servers, storage (1) and Switches (2) Operating system at the Disaster Recovery (DR) site in Mumbai.	The amended clause is as below: "The delivery and installation must be completed within a maximum of 6 weeks from the date of acceptance of purchase order. Four (4) servers, storage (1) and Switches (2) & Operating system are to be delivered to the Head Office in Delhi, and three (3) servers, storage (1) and Switches (2) Operating system at the Disaster Recovery (DR) site in Mumbai."
10	14	Server	Annexure-8 Technical Specification	Chassis - 1U Rack Mountable	The amended clause is as below: "Chassis - 1U / 2U Rack Mountable"
11	14	Server	Annexure-8 Technical Specification	BOOT optimized storage - 2 x 480GB M.2 NVMe Hot Plug Boot Optimized Storage in RAID 1	The amended clause is as below: "2 x 480GB SSD drives in RAID 1"

12	14	Server	Annexure-8 Technical Specification	Bus Slots - Server should support upto three PCI-Express 5.0 x16 slots. Additional two x8 or higher PCIe 5.0 slots	The amended clause is as below: "Bus Slots - Server should support upto three PCI- Express 4.0 x8 slots or higher. Additional two x8 or higher PCIe 4.0 slots"
13	14	Server	Annexure-8 Technical Specification	HDD Bays - Upto 20 1T EDSFF or 10 2T 20EDSFF (FUTURE)	The amended clause is as below: "HDD Bays - 8 drive bays of SAS/SATA or more"
14	15	Server	Annexure-8 Technical Specification	Controller- Server should support one of the below controllers, must support Mixed Mode which combines RAID and HBA mode operation simultaneously : Embedded / PCIe based x16 RAID controller with 8GB Flash backed write cache, supporting RAID 0, 1, 5, 6, 10, 50, 60. Must support mix-and-match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 12G SAS, 16G NVMe. or Embedded / PCIe based x16 RAID controller supporting RAID 0, 1, 10. Must support mix-and- match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 12G SAS, 16G NVMe. or Embedded / PCIe based RAID controller with 4GB Flash backed write cache supporting RAID 0, 1, 5, 6, 10, 50, 60 s Must support mix-and-match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 12G SAS, 16G NVMe. Above mentioned controller must support following : 1. Hardware root of trust and secure encryption and decryption of critical drive data 2. Online Capacity Expansion (OCE) 3. Configurable stripe size up to 1 MB 4. Global and dedicated Hot Spare with Revertible Hot 5. Instant Secure Erase 6. Migrate RAID/Stripe Size 7. Modifying Cache Write Policy 8. Move Logical Drive 9. Re-enable Failed Logical Drive or PCIe	The amended clause is as below: "Controller - Server should support RAID controller with 8GB Flash backed write cache, supporting RAID 0, 1, 5, 6, 10, 50, 60. Incase NVMe drives are proposed, RAID controller should support RAID on the same"

				<p>based x32 RAID controller with 8GB Flash backed write cache, supporting RAID 0, 1, 5, 6, 10, 50, 60, 1T, 10T supporting up to 32 direct-connected storage devices (SAS/SATA/NVMe). Must support mix-and-match SAS, SATA, and NVMe drives to the same controller. Controller must support 6G SATA, 24G SAS, 16G NVMe. Controller must support following : 1. Expand Logical Drive 2. Instant Secure Erase 3. Migrate RAID/Stripe Size 4. Modifying Cache Write Policy 5. Move Logical Drive 6. Re-enable Failed Logical Drive</p>	
15	16	Server	Annexure-8 Technical Specification	<p>Networking features Server should support below networking cards: 1. 1Gb 4-port network adaptors 2. 10Gb 2-port Ethernet adaptor 3. 10GbBaseT 2-port Ethernet adaptor 4. 10/25Gb 2-port SFP28 Ethernet adaptor 5. 10/25Gb 4-port SFP28 Ethernet adaptor 6. 100Gb 2-port QSFP28 Ethernet 7. 100Gb 1-port QSFP56 Ethernet 8. 100Gb 2-port QSFP56 Ethernet 9. 200Gb QSFP56 Ethernet InfiniBand Options: 100Gb or 200Gb Single or Dual port Adapter</p>	<p>The amended clause is as below: "Network Features: 4x 10G Optical ports across 2 NICs + 2x 32Gbps FC ports"</p>

16	16	Server	Annexure-8 Technical Specification	Interfaces Serial - 1 (Optional) USB support with Up to 5 total: 1 front, 2 rear, 2 internal. 1GbE Dedicated management port	The amended clause is as below: "Interfaces Serial - 1 (Optional) USB support with Up to USB support with Up to 3 total. 1GbE Dedicated management port"
17	16	Server	Annexure-8 Technical Specification	Power Supply Should support hot plug redundant low halogen power supplies with minimum 94% efficiency	The amended clause is as below: "Power Supply: Should support hot plug redundant power supplies with minimum 94% efficiency"
18	16	Server	Annexure-8 Technical Specification	Industry Standard Compliance ACPI 6.4 Compliant PCIe 5.0 Compliant WOL Support Microsoft® Logo certifications PXE Support Energy Star SMBIOS 3.4 UEFI 2.7 Redfish API IPMI 2.0 Secure Digital 4.0 Advanced Encryption Standard (AES) Triple Data Encryption Standard (3DES) SNMP v3 TLS 1.2 DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP) Active Directory v1.0 ASHRAE A3/A4	The amended clause is as below: "Industry Standard Compliance ACPI Compliant PCIe 4.0 Compliant WOL Support Microsoft® Logo certifications PXE Support Energy Star SMBIOS UEFI 2.7 Redfish API IPMI 2.0 Advanced Encryption Standard (AES) Triple Data Encryption Standard (3DES) SNMP v3 TLS 1.2 Active Directory v1.0 ASHRAE A3/A4"

19	16-17	Server	Annexure-8 Technical Specification	<p>System Security: UEFI Secure Boot and Secure Start support Immutable Silicon Root of Trust FIPS 140-2 validation Common Criteria certification Configurable for PCI DSS compliance Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser Support for Commercial National Security Algorithms (CNSA) Smart card (PIV/CAC) and Kerberos based 2-factor Authentication Tamper- free updates - components digitally signed and verified Secure Recovery - recover critical firmware to known good state on detection of compromised firmware Ability to rollback firmware Secure erase of NAND/User data TPM (Trusted Platform Module) 2.0 Bezel Locking Kit option Chassis Intrusion detection option</p>	<p>The amended clause is as below: "System Security UEFI Secure Boot and Secure Start support Immutable Silicon Root of Trust Common Criteria certification Configurable for PCI DSS compliance Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser Secure updates - components digitally signed and verified Secure Recovery - recover critical firmware to known good state on detection of compromised firmware Ability to rollback firmware Secure erase of NAND/User data TPM (Trusted Platform Module) 2.0 Bezel Locking Kit option Chassis Intrusion detection option"</p>
20	17	Server	Annexure-8 Technical Specification	<p>Operating Systems and Virtualization Software Support: Windows Server. Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware ESXi. Canonical Ubuntu Oracle Linux and Oracle VM Citrix</p>	<p>The amended clause is as below: "Operating Systems and Virtualization Software Support: Windows Server. Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware ESXi. Canonical Ubuntu"</p>

21	17	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 3. Server should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware	The amended clause is as below: "Embedded Remote Management and firmware security: 3. Server should have storage space to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware"
22	17	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 8. 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.	The amended clause is as below: "Embedded Remote Management and firmware security: 8. 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 support."
23	18	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 11. Should provide support for Java free graphical remote console.	The clause stands deleted
24	18	Server	Annexure-8 Technical Specification	Embedded Remote Management and firmware security: 18. Workload Performance Advisor - Provides server tuning recommendations to improve server performance	The clause stands deleted
25	NA	Server	Annexure-8 Technical Specification	Additional Clause	"The server should have 5 years and 6 Hour CTR warranty support"

26	NA	Server	Annexure-8 Technical Specification	Additional Clause	The should supply with Windows Server 2025 Standard Edition to be proposed along with the server
27	19 & 22	DC and DR Storage	Annexure-8 Technical Specification	Front-end Ports & Back-end Ports: 1. Offered Storage system shall be supplied with minimum of Quad 16 Gb FC ports per controller 2. The proposed storage system shall support 12G SAS Back-end connectivity.	The amended clause is as below: "Front-end Ports & Back-end Ports: 1. Offered Storage system shall be supplied with minimum of Quad 16 Gb and 10Gbps ,FC and iSCSI ports per controller and NAS protocol along with SAN. 2. The proposed storage system shall support 12G SAS Back-end connectivity."
28	20 & 22	DC and DR Storage	Annexure-8 Technical Specification	Disk Drive Support: 1. The storage system shall support Enterprise SAS Drives, SSD and mid-line SAS drives of 7.2k rpm drives. 2. The proposed storage array shall also have support for FIPS 140-2 validating self-encrypted drives.	The amended clause is as below: "Disk Drive Support: 1. The storage system shall support Enterprise, SAS Drives, SSD and mid-line/NLSAS drives of 7.2k rpm drives. 2. The proposed storage array should support encryption"
29	20 & 23	DC and DR Storage	Annexure-8 Technical Specification	Cache: 1. The proposed Storage Array shall be given with Minimum of 48GB cache / memory per array in a single unit. 2. Cache shall be backed up in case of power failure for indefinite time either using batteries or capacitors or any other equivalent technology. 3. The proposed Storage shall also have optional support for Flash cache using SSD / Flash drives. Offered storage shall support at-least 8TB Flash Cache.	The amended clause is as below: "Cache: 1. The proposed Storage Array shall be given with Minimum of 128GB cache / memory per array in a single unit. 2. Cache shall be backed up in case of power failure either using batteries or capacitors or any other equivalent technology. 3. The proposed Storage shall also have optional support for Flash cache using SSD / Flash drives. Offered storage shall support at-least 800GB Flash Cache.

30	20 & 23	DC and DR Storage	Annexure-8 Technical Specification	<p>Raid Support:</p> <ol style="list-style-type: none"> 1. The proposed Storage Subsystem shall support Raid 1 , 10, 5 and Raid 6 2. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array. 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 32GB Cache is configured inside the storage arrays to offset the raid processing workload. 	<p>The amended clause is as below:</p> <p>"Raid Support:</p> <ol style="list-style-type: none"> 1. The proposed Storage Subsystem shall support Raid 10, 5 and Raid 6 2. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array. 3. Thin provisioning shall be supported with offered Flash Cache 4. Clause Stands Deleted"
31	21 & 23	DC and DR Storage	Annexure-8 Technical Specification	<p>Virtualization and Thin provisioning:</p> <ol style="list-style-type: none"> 1. The proposed 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 of Raid 1, Raid 10, Raid 5 and Raid 6. 2. The proposed Storage shall be offered and configured with Thin Provisioning capability. 	<p>The amended clause is as below:</p> <p>"Virtualization and Thin provisioning:</p> <ol style="list-style-type: none"> 1. The proposed 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 of Raid 10, Raid 5 and Raid 6. 2. The proposed Storage shall be offered and configured with Thin Provisioning capability.
32	21 & 24	DC and DR Storage	Annexure-8 Technical Specification	<p>Data Tiering:</p> <p>The proposed storage shall also be licensed for SubLun Data tiering in real time fashion across different type of drives within a given pool like SSD, SAS, Midline SAS etc. License for same shall be offered for maximum supported capacity of the array</p>	<p>The amended clause is as below:</p> <p>"Data Tiering:</p> <p>The proposed storage shall also be licensed for SubLun Data tiering in real time fashion across different type of drives within a given pool like SSD, SAS, Midline/NLSAS etc. License for same shall be offered for maximum supported capacity of the array"</p>

33	21 & 24	DC and DR Storage	Annexure-8 Technical Specification	Load Balancing & Muti-path: Multi-path and load balancing software shall be provided if vendor does not support MPIO functionality of Operating system.	The clause stands deleted
34	21 & 24	DC and DR Storage	Annexure-8 Technical Specification	Performance: The proposed storage shall have listed benchmark for performance of more than 700,000 IOPS for 100% random read and more than 8GB/sec for segmented sequential write operations. The bidder shall provide documentary proof for it.	The clause stands deleted
35	NA	DC and DR Storage	Annexure-8 Technical Specification	Additional Clause	"The server should have 5 years and 6 Hour CTR warranty support"
36	24	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	General Features: 1.(c). Switch should have non-blocking per-slot throughput from day 1.	The amended clause is as below: "General Features: Switch should have non-blocking throughput capability on all ports from day 1."
37	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	General Features: 1.(e). The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software to optimize performance and capacity	The amended clause is as below: "General Features: The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software or Open Networking Install Environment capabilities to have 3rd party Network OS installed to optimize performance and capacity"

38	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	General Features: 1.(f). Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source	The amended clause is as below: "General Features: Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source OR The Switch should support image pre-check. The firmware installation is performed only if the result of the pre-check]successful."
39	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Performance 2. (a) Should have 16GB DRAM and 32GB Flash.	The amended clause is as below: "Should have 8GB or better DRAM and 32GB Flash."
40	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (a). The switch should support front plane stacking on uplink port or Backplane stacking and should have Stacking Performance of minimum 160 Gbps	The amended clause is as below: "The switch should support MC-LAG / vPC / MLAG to allow two switches to form a virtual chassis or have Backplane stacking and should have 200 Gbps of Virtual Chassis performance or Stacking Performance of minimum 160 Gbps"
41	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (b). The Switch should support long distance across the Rack and Floor Switch Stacking.	The amended clause is as below: "The Switch should support long distance across the Rack and Floor Switch virtual-chassis or Stacking."

42	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (c). Must support RIPv2, RIPng, EVPN, BGP, BGP4, VRF, VXLAN, EVPN,OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM-DM, PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1	The amended clause is as below: "Must support EVPN, BGP, BGP4, VRF, VXLAN, EVPN,OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM-SM / PIM-DM / PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1"
43	25	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3. (f). The switch should support STP, Trunking, Private VLAN (PVLAN), Q-in- Q, Deficit Weighted Round-Robin(DWRR) or equivalent scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port	The amended clause is as below: "STP, Trunking, Private VLAN (PVLAN) / VRF-Leaking / NAT, Q-in-Q, Shaped Round Robin (SRR)/Deficit Weighted Round-Robin (DWRR) scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port"
44	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(h). The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute	The amended clause is as below: "The switch should support SNMPv1, v2, and v3, SSL, SSHv2, ping, traceroute"
45	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(j). The switch should have Data Center Bridging (DCB), Supports lossless Ethernet networking standards to eliminate packet loss due to queue overflow, Priority Flow Control (PFC) 2 priorities per port, Enhanced Transmission Service (ETS) DCB Exchange Protocol (Pre-standard LLDP DCBX IEEE 1.01 version)	The amended clause is as below: "The switch should have Data Center Bridging (DCB), Supports lossless Ethernet networking standards to eliminate packet loss due to queue overflow, Priority Flow Control (PFC) 2 priorities per port, Enhanced Transmission Service (ETS)"
46	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(k). Switch should have SCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)	The amended clause is as below: "Switch should have SCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2)"

47	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(m). The switch should support IEEE 802.1X	The amended clause is as below: "The switch should support IEEE 802.1X or MAC filtering"
48	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(n). The switch should support Port-based authentication	The amended clause is as below: "The switch should support Port-based authentication, if solution is based on 802.1x "
49	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(o). The switch should support MAC-based authentication	The amended clause is as below: "The switch should support MAC-based authentication, if solution is based on 802.1x "
50	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(q). The switch should support Source-port filtering	The amended clause is as below: "The switch should support Source-port filtering or IP and Layer-4 port filtering"
51	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Functionality: 3.(r). The switch should support RADIUS/TACACS+, Dynamic ARP protection, Port Security, STP route guard, BPDU guard.	The amended clause is as below: "The switch should support RADIUS/TACACS+, Dynamic ARP protection or MAC filtering, Port Security, STP route root guard, BPDU guard."
52	26	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Interface Requirement i) 24 nos. of 1G/10G SFP+ ports ii) 4 nos. of 40G/100G SFP28 uplink ports	The amended clause is as below: Interface Requirement i) 24 nos. of 1G/10G SFP+ ports ii) 4 nos. of 40G/100G uplink ports

53	27	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	OEM qualification criteria, Warranty and Support: 6.(b). Switch or Switch's Operating System on different hardware platforms should be tested for EAL 2/NDPP or above under Common Criteria Certification	The amended clause is as below: "OEM qualification criteria, Warranty and Support: Switch or Switch's Operating System on different hardware platforms should be tested for EAL 2/NDPP/FIPS or above under Common Criteria Certification"
54	27	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	OEM qualification criteria, Warranty and Support: 6.(c). The OEM shall be in Leaders Quadrant of Gartner report for Wired & Wireless LAN Infrastructure for minimum 5 Consecutive Years.	The clause stands deleted
55	NA	Core Switch 24 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports	Annexure-8 Technical Specification	Additional Clause	"The server should have 5 years and 6 Hour CTR warranty support"

NOTE:

1. The bidder shall be responsible for the supply, installation and managing warranty (5) of Servers, Storage, and Switches at Delhi and Mumbai locations—as per the specifications outlined in this RFP. The delivery and installation must be completed within a maximum of six (6) weeks from the date of order placement.
2. OS installation includes virtualisation (Hyper V) and Active Directory migration/ deployment from the existing to the proposed at DC and DR.
3. A two-week extension is provided for submitting the bids, i.e. the last date of submission of the bid has been extended from 22.09.2025 to 06.10.2025 on or before 1600 Hrs.
4. Further, no Bid submission date will be extended, and no Bid queries will be accepted.
5. PNB GILTS LTD reserves the right to cancel the order at its discretion without giving any reason.