

**RA Document**

<b>RA Details</b>	
RA Technical End Date/Time	15-04-2019 21:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Punjab
Department Name	Governance Reforms Department Punjab
Organisation Name	N/a
Office Name	Punjab State E-governance Society, Mohali Hq, Punjab
Total Quantity	2
Item Category	Layer-3 Distribution Switch
MSE Exemption For Years Of Experience And Turnover	Yes
Startup Exemption For Years Of Experience And Turnover	Yes

**Layer-3 Distribution Switch ( 2 )**

**Technical Specifications**

[\\* As per GeM Category Specification](#)

<b>Specification</b>	<b>Specification Name</b>	<b>Values</b>	<b>Bid Requirement (Allowed Values)</b>
Generic	<b>No of SFP/SFP+ Ports</b>	48	16, 24, 32, 48
	<b>Type of SFP Port</b>	10G	1G, 10G
	<b>Support for 10 G SFP+ Port (Uplink)</b>	Yes	Yes, No
	<b>Number of 10G SFP+ Port (Uplink)</b>	24	Any applicable numeric value
	<b>Support for 40G (QSFP+)(Uplink)</b>	Yes	Yes, No
	<b>No. of 40 G QSFP+ Port (Uplink)</b>	2	Any applicable numeric value
	<b>Support for 100 G</b>	Yes	Yes, No

<b>QSFP+ Port (Uplink)</b>		
<b>No. of 100 G QSFP+ Port</b>	4	Any applicable numeric value
<b>Support for Active Active High Availability</b>	Yes	Yes, No
Redundant Power supply	available	*
Console Port	available	*
Management Port (RJ 45)	available	*
No. of FAN Tray	4	*
No. of Open slot for additional Interface Card	0	*
Operating System	Available	*
Stacking Port/Slot from day one	No	*
Switching Capacity (Non Blocking)(Gbps)	1760	*
Throughput (MPPS)	1320	*
Advance Layer-3 Protocol	-	*
Security Feature	-	*
Management Protocol	-	*
QoS	-	*
Wattage (Watt)	370	*
Dimension / Form Factor(RU)	1	*
Operating Temperature Range (Degree C)	-	*
Operating Humidity (RH) (%)	-	*
IPv6 Ready from day one and dully certified	Yes	*
<b>On Site OEM Warranty (Year)</b>	5	1, 3, 5

\* Bold specifications are the golden parameters.

#### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062,Department of	2	30	N/A

		Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062			
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**EMD Detail**

Required	No
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**ePBG Detail**

Required	No
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**Splitting**

RA splitting not applied.

**Buyer Specific Additional Terms and Conditions**

- 1. Scope of supply (Bid price to include all cost components) :** Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

[This RA is also governed by the General Terms and Conditions](#)

**---Thank You---**

**RA Document**

<b>RA Details</b>	
RA Technical End Date/Time	15-04-2019 16:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Punjab
Department Name	Governance Reforms Department Punjab
Organisation Name	N/a
Office Name	Punjab State E-governance Society, Mohali Hq, Punjab
Total Quantity	16
Item Category	operating system software,operating system software
MSE Exemption For Years Of Experience And Turnover	Yes
Startup Exemption For Years Of Experience And Turnover	Yes

**Operating System Software ( 8 )**

**Technical Specifications**

[\\* As per GeM Category Specification](#)

<b>Specification</b>	<b>Specification Name</b>	<b>Values</b>	<b>Bid Requirement (Allowed Values)</b>
BASIC INFORMATION OF OPERATING SYSTEM SOFTWARE(GOLDEN)	<b>Software Domain/ Type</b>	Enterprise open source, Perpetual,Subscription	Proprietary Item, Enterprise open source, Perpetual, Subscription, Renewal of licence for one year
	Name of Software	-	*
	Name of the OEM	-	*
	OEM Model / Part No.	-	*
	Product Id of OEM	-	*
	Software Version/Version Name	-	*
	Date of Launch of	-	*

	Version		
FEATURES AND FUNCTIONALITY PARAMETERS(GOLDEN)	<b>Type of Operating System</b>	Server (Network) Operating System	Desktop/ Laptop/ Personal Computers/ Work-Station Operating System, Mobile Devices/ Tablet Computers Operating System, Server (Network) Operating System, Mainframe Operating System, Super Computer Operating System, Web server Operating System
	<b>Tasking</b>	multi-tasking OS	single tasking OS, multi-tasking OS
	<b>Users</b>	Multi User	Single User, Multi User
	<b>Distributed Operating System</b>	Yes	Yes, No
	<b>Resource Access Control</b>	Yes	Yes, No
	If Yes, details of Access Control	-	*
	<b>Installation and Demonstration</b>	No	Yes, No
	<b>Supports Virtualization</b>	Yes	Yes, No
	<b>No. of days Training Provided at Site (DAYS)</b>	0	0, UPTO 5, 6 TO 10, 11 to 20
	<b>Number of Years upto which Support(Warranty) is available from OEM / Franchise online (YEARS)</b>	3	1, 2, 3, 5
FEATURES AND FUNCTIONALITY PARAMETERS(GENERIC)	Real-time Operating System	Yes	*
	Library Operating System	Yes	*
	Graphical User Interface (GUI)	Yes	*
	Supported File Systems	Disk file systems	*
	Kernel Type	Monolithic	*
	Package Management	Yes	*
	If Yes, details of Packages	Binary packages	*

	Bit-type (BITS)	64	*
	Native APIs	Yes	*
	Non-Native APIs supported through subsystems	No	*
	If Yes, details of supported APIs	-	*
	Subsystem Isolation Mechanisms	Yes	*
	If Yes, details of Isolation Mechanisms	-	*
	High availability extension	Yes	*
	Integrated Firewall	Yes	*
	If Yes, details of Firewall	-	*
	Encrypted File System	Yes	*
SUPPORTED HARDWARE REQUIREMENT PARAMETERS	Hard Disk Space required (GB)	-	*
	RAM Size required	-	*
	CPU Required	-	*
	Operating Systems supported (Driver)	-	*
	Supported Devices	-	*
	Supported Web browsers	-	*
	Supported Database	-	*
	Number of Devices Managed	-	*
GENERIC PARAMETERS OF OPERATING SYSTEM SOFTWARE	Free Upgradation to Higher Version	YES	*
	Maximum user handling capability	-	*
	Concurrent user handling capability	-	*
	Valid Licence copy to be provided	YES	*
	Software supplied through	URL Link	*
	List of items included in the package	-	*
	Hyper link to Data sheet	-	*
	No of Software sold	10000	*

Number of User Reference no. 1 with in Government Department email, phone no.Of concerned authority where Software/Appliance installed	5	*
Details of Government Department email, phone no.Of concerned authority where Software/Appliance installed for above.	-	*

\* Bold specifications are the golden parameters.

### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062,Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	8	30	N/A

### Operating System Software ( 8 )

#### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
BASIC INFORMATION OF OPERATING SYSTEM SOFTWARE(GOLDEN)	<b>Software Domain/ Type</b>	Enterprise open source, Perpetual,Subscription	Proprietary Item, Enterprise open source, Perpetual, Subscription, Renewal of licence for one year
	Name of Software	-	*
	Name of the OEM	-	*
	OEM Model / Part No.	-	*
	Product Id of OEM	-	*
	Software Version/Version Name	-	*
	Date of Launch of Version	-	*
FEATURES AND FUNCTIONALITY	<b>Type of Operating System</b>	Server (Network) Operating System	Desktop/ Laptop/ Personal Computers/

PARAMETERS(GOLDEN)			Work-Station Operating System, Mobile Devices/ Tablet Computers Operating System, Server (Network) Operating System, Mainframe Operating System, Super Computer Operating System, Web server Operating System
	<b>Tasking</b>	multi-tasking OS	single tasking OS, multi-tasking OS
	<b>Users</b>	Multi User	Single User, Multi User
	<b>Distributed Operating System</b>	Yes	Yes, No
	<b>Resource Access Control</b>	Yes	Yes, No
	If Yes, details of Access Control	-	*
	<b>Installation and Demonstration</b>	No	Yes, No
	<b>Supports Virtualization</b>	Yes	Yes, No
	<b>No. of days Training Provided at Site (DAYS)</b>	0	0, UPTO 5, 6 TO 10, 11 to 20
	<b>Number of Years upto which Support(Warranty) is available from OEM / Franchise online (YEARS)</b>	3	1, 2, 3, 5
FEATURES AND FUNCTIONALITY PARAMETERS(GENERIC)	Real-time Operating System	Yes	*
	Library Operating System	Yes	*
	Graphical User Interface (GUI)	Yes	*
	Supported File Systems	Disk file systems	*
	Kernel Type	Monolithic	*
	Package Management	Yes	*
	If Yes, details of Packages	Binary packages	*
	Bit-type (BITS)	64	*
Native APIs	Yes	*	



	Non-Native APIs supported through subsystems	No	*
	If Yes, details of supported APIs	-	*
	If Yes, details of Isolation Mechanisms	-	*
	High availability extension	Yes	*
	Integrated Firewall	Yes	*
	If Yes, details of Firewall	-	*
	Encrypted File System	Yes	*
SUPPORTED HARDWARE REQUIREMENT PARAMETERS	Hard Disk Space required (GB)	-	*
	RAM Size required	-	*
	CPU Required	-	*
	Operating Systems supported (Driver)	-	*
	Supported Devices	-	*
	Supported Web browsers	-	*
	Supported Database	-	*
	Number of Devices Managed	-	*
GENERIC PARAMETERS OF OPERATING SYSTEM SOFTWARE	Free Upgradation to Higher Version	YES	*
	Maximum user handling capability	-	*
	Concurrent user handling capability	-	*
	Valid Licence copy to be provided	YES	*
	Software supplied through	URL Link	*
	List of items included in the package	-	*
	Hyper link to Data sheet	-	*
	No of Software sold	10000	*
	Number of User Referance no. 1 with in Government Department email, phone no.Of concerned	10	*

	authority where Software/Appliance installed		
	Details of Government Department email, phone no.Of concerned authority where Software/Appliance installed for above.	-	*

\* Bold specifications are the golden parameters.

**Consignee/Reporting Officer and Quantity**

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062,Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	8	30	N/A

**EMD Detail**

Required	No
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**ePBG Detail**

Required	No
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**Splitting**

RA splitting not applied.

**Buyer Specific Additional Terms and Conditions**

- 1. Scope of supply (Bid price to include all cost components) :** Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

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**---Thank You---**

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RA Details	
RA Technical End Date/Time	15-04-2019 17:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Punjab
Department Name	Governance Reforms Department Punjab
Organisation Name	N/a
Office Name	Punjab State E-governance Society, Mohali Hq, Punjab
Total Quantity	10
Item Category	Chassis For Blade Server, Blade Server
MSE Exemption For Years Of Experience And Turnover	Yes
Startup Exemption For Years Of Experience And Turnover	Yes

**Chassis For Blade Server ( 2 )**

**Technical Specifications**

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specifications	Form Factor	Rack Mount	*
	Size of Blade Server Chassis (RU)	7	*
	Number of Bays available in Chassis (Number)	8	*
	Chassis is complete with Interconnect Modules, Power supplies, Fans & Management Modules	In Compliance	*
	Chassis Includes all the accessories so that it	In Compliance	*

can be mounted on an Industry Standard 42U Rack		
Chassis is fully populated with Power Supplies Redundancy	In Compliance	*
Chassis is fully populated with fans for cooling with adequate redundancy built in for the entire enclosure & its components	In Compliance	*
Chassis has required number of redundant Ethernet Switches/Modules to provide at least two numbers of ports of 10 Gb/s connectivity, Server to Server communication should be in 1:1 non blocking	NA	*
Chassis has Redundant fibre channel switch/modules to provide at least 2 numbers of 16 Gb/s fibre channel connectivity to the external SAN Storage, Server to Server communication should be in 1:1 non blocking	NA	*
Chassis offered with redundant converged Switches/modules/Interconnect	Yes	*
Aggregated LAN Bandwidth (In Gbps)	120	*
Aggregated SAN Bandwidth (In Gbps)	64	*
In case the external / Internal switches/modules are offered to provide connectivity to SAN & LAN, the intermediate interconnect modules should provide 1:1 non blocking architecture for server to server communication	In Compliance	*
Chassis / Blade Architecture has	In Compliance	*

redundant Management Module to provide single point of control for intelligent management of the entire console Access for all the Server Blades from the Management Module		
Report Thermal & Power Information on per Server & per Enclosure basis	In Compliance	*
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 have support for multifactor authentication	In Compliance	*
Server should support agentless management using remote management port	In Compliance	*
The server should support monitoring and recording changes in the server hardware and system configuration	In Compliance	*
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	NA	*
Should provide remote firmware update functionality Should	In Compliance	*

provide support for Java free graphical remote console		
Group Power Control Group Power Capping	In Compliance	*
System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support	In Compliance	*
Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data center It should provide an at-a-glance visual health summary of the resources user is authorized to view	In Compliance	*
The Systems Management software should provide Role-based security	In Compliance	*
Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and RedHat RHEV	In Compliance	*
Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components	In Compliance	*
The Server Management Software should be of the same brand as of the server supplier	In Compliance	*
Maximun Rated Power for Fully Populated Chassis	-	*

BIS Registration under CRS of Meity	Yes	*
BIS Registration number and validity	-	*
<b>On Site OEM Warranty (Years)</b>	5	1, 3, 5

\* Bold specifications are the golden parameters.

### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062, Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	2	30	N/A

### Blade Server ( 8 )

#### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Configuration	Type of Server	Blade	*
	<b>Maximum Number of sockets available on chipset</b>	2	1, 2, 3, 4
	<b>Maximum Number of sockets populated with processor</b>	2	1, 2, 3, 4
	<b>Processor Make</b>	Intel	Intel, AMD
	<b>No. of Cores per Processor</b>	22	*
	<b>Processor Configuration</b>	Intel Xeon Gold 6152(2.10GHz/22-core/30.25MB/140W)	*
	Chipset compatible with CPU	-	*
	Number of PCI Express Slots (Gen 3.0 or higher)	-	*
Memory	RAM Type	DDR4	*
	<b>RAM SIZE (GB)</b>	256	*
	<b>RAM upgradable</b>	3000	*

	<b>upto (GB)</b>		
	DIMM Slots (Minumum)	-	*
Storage	<b>Type of Hard Disk</b>	SSD	SAS, NL SAS, SSD, SATA
	<b>Hard disk drive Capacity (GB)</b>	2400	300 - 16000
	<b>Hard disk drive RPM (hot plug or better ) (RPM)</b>	NA	7200, 10K, 15K, NA
RAID	RAID Type	1	*
	RAID Controller Caches (GB)	2	*
Connectivity	Connectivity Ports	FC + Ethernet	*
	<b>Dual Port Network Card Bandwidth (Gbps)</b>	20	1, 10, 20, 25, 40, 50, 80, 100, NA
	<b>Infiniband Bandwidth (Gbps)</b>	NA	40, 56, 100, NA
	FC HBA Dual port card	NA	*
	FC HBA Dual port card Speed (Gbps)	NA	*
Certifications	OS Certifications, Compliance ; support by Windows, Red Hat or Novell.	Yes	*
	BIS Registration under Compulsory Registration Scheme of Meity	Yes	*
	BIS Registration Number and its Validity	-	*
	Declare SPEC int_rate_base 2006 & specfp_rate_2006 for 1,2,4,8 processor as applicable	-	*
	RoHS Compliance	Yes	*
Miscellaneous	Power Supply	230 +/- 10%, 50 Hz	*
	Operating Temperature Range (Degree C)	-	*
	Operating Humidity(RH) (%)	-	*
	<b>On Site OEM Warranty (Year)</b>	5	1, 3, 5

\* Bold specifications are the golden parameters.



### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062, Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	8	30	N/A

#### EMD Detail

Required	No
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#### ePBG Detail

Required	No
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#### Splitting

RA splitting not applied.

### Buyer Specific Additional Terms and Conditions

- 1. Scope of supply (Bid price to include all cost components) :** Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

[This RA is also governed by the General Terms and Conditions](#)

---Thank You---

### RA Document

RA Details	
RA Technical End Date/Time	15-04-2019 21:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Punjab
Department Name	Governance Reforms Department Punjab
Organisation Name	N/a
Office Name	Punjab State E-governance Society, Mohali Hq, Punjab
Total Quantity	3
Item Category	SAN Switch,Storage System
MSE Exemption For Years Of Experience And Turnover	Yes
Startup Exemption For Years Of Experience And Turnover	Yes

### SAN Switch ( 2 )

#### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
General Specification	<b>Fibre Channel Generation</b>	32Gbps	8Gbps, 16Gbps, 32Gbps, NA (Default)
	<b>Switch Type</b>	Fixed	Workgroup, Chassis, FCIP, Fixed, Fixed FCIP
	<b>Fibre Channel base ports</b>	36	4, 8, 12, 16, 24, 36, 48, 64, NA
	<b>POD License</b>	12 port	8 port, 12 port, 24 port, 12 FC & 4 IP, 24 FC & 8 IP, 40 FC & 2 IP, NA, 32 Ports
	<b>POD License Quantity</b>	1	1, 2, 3, 4, NA

<b>Scalability (Ports)</b>	48	*
<b>Fibre Channel Port Speed (Gbps)</b>	32	2, 4, 8, 16, 32, 100, 128
QSFP (FCoE)port	4 Port QSFP	*
Media Type Fibre Channel	SWL	*
Autosensing (Gbps)	8/16/32	*
<b>FCIP ports</b>	0	2, 4, 6, 8, 10, 12, 16, 0
<b>IP Port speed (Gbps)</b>	NA	1Gbps, 1Gbps/10Gbps, 10 Gbps, 1Gbps/10Gbps/40Gbps, 40Gbps, NA
Media Type, IP	SRWL	*
<b>FCIP performance (GbE)</b>	NA	1, 10, 40, NA
<b>Aggregate Switch Bandwidth FC (end to end full duplex)</b>	2 Tbps	*
<b>Aggregate Switch Bandwidth IP (end to end full duplex) (Gbps)</b>	NA	NA, 6, 16, 80, 160, 240, 384, 768, 1500
Maximum Fabric Latency (nano second) / Locally switched port latency (nano second)	700	*
Blade-to Blade Latency (microsecond)	NA	*
Maximum Frame Size	2112-byte payload	*
Maximum IP MTU size	NA	*
Frame Buffers	15360 in Gen6	*
Class of service	Class 3	*
<b>Port Types</b>	U/E/F/M/D/EX	U/E/F/M/D, U/E/F/M/D/EX, F/E/EX/M/VE, U/E/TE/F/M/D/EX/IP
Access Gateway Mode Support / NPIV support	NA	*
<b>Form factor (U)</b>	1U	1U, 2U, 8U, 9U, 14U, 26U
AC Power Supply	Dual Redundant Hot Swappable AC Power Supply	*
Support for DC Power Supply	No	*

	Airflow	Front-to-back airflow	*
	Non Blocking Architecture	Yes	*
	Redundant Control Processors/Data Processor	NA	*
	Redundant active/active core switching blades	NA	*
	Redundant WWN cards	NA	*
	Total slots per chassis	NA	*
	Number of Blade Modules Required	NA	*
	<b>Blade Module - 32 port with 16Gbps SWL SFP+ Blade Module</b>	0	*
	<b>Blade Module - 48 port with 16Gbps SWL SFP+ Blade Module</b>	0	*
	<b>Blade Module - 64 port with 16Gbps QSFP+ Blade Module</b>	0	0, 1, 2, 3, 4, 5, 6, 7, 8
	<b>Blade Module - 48 port with 32Gbps SWL SFP+ Blade Module</b>	0	*
	FCIP Blade Module	0	*
	FCIP Blade Connectivity Option (Gbps)	NA	*
License Required	ISL Trunking	No	*
	Real time Monitoring & Threshold alerts	No	*
	Extended Fabric	No	*
	Integrated Optional 10Gbps Fibre Channel for DWDM Connectivity	No	*
	Enterprise License (Trunking, Real Time Threshold alerts,Extended Fabric)	No	*
	Centralized Management Software to manage and monitor multiple Fabrics within/across multiple sites from single	NA	*

	window		
	<b>Bandwidth (Gbps/Tbps) for Interchassis connectivity</b>	NA	512Gbps, 1.024 Tbps, 2.048 Tbps, 4.096 Tbps, NA
	FCIP Trunking and Adaptive Rate Limiting	No	*
	FICON Management Server	No	*
	Advanced Accelerator for FICON	No	*
	WAN Rate Upgrade License (Enables additional WAN-side throughput to 10 Gbps and unlimited with enablement of 40 GbE ports)	No	*
Supported Fabric Services	ISL trunking	Yes	*
	In-flight compression	Yes	*
	In-flight encryption/IP Sec encryption	Yes	*
	Integrated optional 10 Gbps Fibre Channel connectivity	No	*
	VM Insight	No	*
	IO Insight	No	*
	Adaptive Networking with QoS	Yes	*
	Virtual Fabrics	Yes	*
	Extension Trunking	Yes	*
	Adaptive Rate Limiting	Yes	*
	FCIP Trunking	No	*
	Optional Fabric Services include: Integrated Routing (FCR), FICON CUP, FICON Management Server, and Advanced Accelerator for FICON	NA	*
Supported Security Features	IPsec	Yes	*
Miscellaneous	Operating Temperature Range (Degree C)	-	*
	Operating Humidity (RH%)	80	*

Maximum Power Consumption (Watt)	206	*
BIS Registration Under CRS of Meity	Yes	*
BIS Registration Number	-	*
<b>On Site OEM Warranty (Year)</b>	5	1, 2, 3, 5

\* Bold specifications are the golden parameters.

### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062, Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	2	30	N/A

### Storage System ( 1 )

#### Technical Specifications

\* [As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specification	<b>Storage System Type</b>	Enterprise SAN	SAN, Enterprise SAN, Unified Storage
Group2	<b>Storage Capacity (TB)</b>	200	10 - 5000
Group3	Hardware Form Factor of Storage System (RU)	9	*
Disk	<b>Disk Type</b>	SSD,SAS	SSD, NL-SAS, Flash Drive, SAS
	Speed of dual ported disk drive in Gbps	12	*
	Total Numbers of Drive Slots	500	*
	<b>Number of Drive Slots Populated with drives of different type in the Storage System</b>	96	Any applicable numeric value
	Total no of drive slot populated with SSD	46	*

	Total no of drive slot populated with Flash Drive	0	*
	Total no of drive slot populated with SAS	47	*
	Total no of drive slot populated with NL-SAS	0	*
	Drive Type Wise Storage Capacity of System in GB	-	*
	<b>Automated Storage tiering feature across the populated Drives types( in case of multiple drive system)</b>	Yes	Yes, No
	Automated Storage tiering Software License Included	Yes	*
	Hot Spares	Yes	*
	Number of Populated Disks per Hot Spare	20	*
	Provision for additional Capacity	Yes	*
	If Yes, Number of Drive Slots available to achieve additional capacity	-	*
Connectivity/Port	Type of Front end Ports	-	*
	<b>Number of Front end Ports</b>	8	Any applicable text(s)
	<b>Speed of front end Ports in Gbps</b>	32	Any applicable numeric value
	Type of Back end Ports	-	*
	<b>Number of Back end Ports</b>	8	Any applicable numeric value
	<b>Speed of Back end ports in Gbps</b>	12	Any applicable numeric value
	Number of Remote Replication Ports( FC/Ethernet)	2	*
Controllers	<b>Number of Controllers/VSD/ Node available in the storage System on common back plane without using external</b>	2	Above 1

	<b>switch/device OR without common backplane using switches</b>		
	RAID Level Support	0,1,5,6,10	*
	Active-Active Controllers Configured in HA	Yes	*
	Active Stand by Controller Configured in HA	No	*
System Cache	<b>Cache Availability Type</b>	Federrated	Global, Federrated, NA
	<b>Total Configurable Cache (GB)</b>	256	8 - 8192
Group4	Wide Stripping or equivalent feature	Yes	*
Group5	No of Snapshot Copies Per Volume	255	*
	License for Snapshot included	Yes	*
Data Replication	Remote Replication	Yes	*
	Remote Replication license included	Yes	*
	Synchronized Replication Support	Yes	*
	Synchronous Replication license included	No	*
	Asynchronous Replication Support	Yes	*
	Asynchronuos Replication license included	No	*
	3-DC Zero Data Loss Support	No	*
Group6	Type of Data Compression	S/W Level	*
	Type of Data Deduplication	S/W Level	*
	No Single point of Failure with Non-Disruptive replacement of Hardware	Yes	*
	The Storage provide Non disruptive Firmware /Microcode	Yes	*



	upgrade		
	Firmware upgrade without any controller reboot	Yes	*
Encryption Mode	Encryption Required	No	*
	Type of Data at Rest Encryption	NA	*
Group7	Storage management software for configuration and multi-pathing(part of the supply).	YES	*
Group8	Multi-pathing and load balancing and fail over software (part of supply) with license for windows/Linux servers or shall support native multipathing of OS.	YES	*
Group 9	Protocols Supported by the storage system from day one	-	*
Group 10	Operating System Platform and Clustering Supported by the Storage from day one	-	*
Group11	Operating Temp Range	-	*
Group12	Storage Temp Range	-	*
Group13	Operating Humidity (Rh)	-	*
Group14	Storage Humidity (Rh)	-	*
Group15	BIS Registration under CRS of MeiTY	Yes	*
	If Yes, BIS Registration No under CRS of MeiTY otherwise indicate N/A	-	*
	BIS Registration Certificate shall be furnished when demanded by the buyer	Yes	*
Group16	Storage System is compliant with IPv6	Yes	*
Group17	Standby power consumption of System in Watt	-	*
Group18	Scope of Supply	It includes installation, commissioning &	*

		integration together with all necessary software to make the system fully functional as intended.	
Group19	<b>On Site OEM Warranty</b>	5	1, 3, 5

\* Bold specifications are the golden parameters.

**Consignee/Reporting Officer and Quantity**

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062, Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	1	30	N/A

**EMD Detail**

Required	No
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**ePBG Detail**

Required	No
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**Splitting**

RA splitting not applied.

**Buyer Specific Additional Terms and Conditions**

- 1. Scope of supply (Bid price to include all cost components) :** Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

[This RA is also governed by the General Terms and Conditions](#)

**---Thank You---**

**RA Document**

<b>RA Details</b>	
RA Technical End Date/Time	15-04-2019 21:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Punjab
Department Name	Governance Reforms Department Punjab
Organisation Name	N/a
Office Name	Punjab State E-governance Society, Mohali Hq, Punjab
Total Quantity	5
Item Category	Chassis For Blade Server, Blade Server
MSE Exemption For Years Of Experience And Turnover	Yes
Startup Exemption For Years Of Experience And Turnover	Yes

**Chassis For Blade Server ( 1 )**

**Technical Specifications**

[\\* As per GeM Category Specification](#)

<b>Specification</b>	<b>Specification Name</b>	<b>Values</b>	<b>Bid Requirement (Allowed Values)</b>
Specifications	Form Factor	Rack Mount	*
	Size of Blade Server Chassis (RU)	7	*
	Number of Bays available in Chassis (Number)	8	*
	Chassis is complete with Interconnect Modules, Power supplies, Fans & Management Modules	In Compliance	*
	Chassis Includes all the accessories so that it	In Compliance	*

can be mounted on an Industry Standard 42U Rack		
Chassis is fully populated with Power Supplies Redundancy	In Compliance	*
Chassis is fully populated with fans for cooling with adequate redundancy built in for the entire enclosure & its components	In Compliance	*
Chassis has required number of redundant Ethernet Switches/Modules to provide at least two numbers of ports of 10 Gb/s connectivity, Server to Server communication should be in 1:1 non blocking	NA	*
Chassis has Redundant fibre channel switch/modules to provide at least 2 numbers of 16 Gb/s fibre channel connectivity to the external SAN Storage, Server to Server communication should be in 1:1 non blocking	NA	*
Chassis offered with redundant converged Switches/modules/Interconnect	Yes	*
Aggregated LAN Bandwidth (In Gbps)	120	*
Aggregated SAN Bandwidth (In Gbps)	64	*
In case the external / Internal switches/modules are offered to provide connectivity to SAN & LAN, the intermediate interconnect modules should provide 1:1 non blocking architecture for server to server communication	In Compliance	*
Chassis / Blade Architecture has	In Compliance	*

redundant Management Module to provide single point of control for intelligent management of the entire console Access for all the Server Blades from the Management Module		
Report Thermal & Power Information on per Server & per Enclosure basis	In Compliance	*
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 have support for multifactor authentication	In Compliance	*
Server should support agentless management using remote management port	In Compliance	*
The server should support monitoring and recording changes in the server hardware and system configuration	In Compliance	*
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	NA	*
Should provide remote firmware update functionality Should	In Compliance	*

provide support for Java free graphical remote console		
Group Power Control Group Power Capping	In Compliance	*
System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support	In Compliance	*
Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data center It should provide an at-a-glance visual health summary of the resources user is authorized to view	In Compliance	*
The Systems Management software should provide Role-based security	In Compliance	*
Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and RedHat RHEV	In Compliance	*
Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components	In Compliance	*
The Server Management Software should be of the same brand as of the server supplier	In Compliance	*
Maximun Rated Power for Fully Populated Chassis	-	*

BIS Registration under CRS of Meity	Yes	*
BIS Registration number and validity	-	*
<b>On Site OEM Warranty (Years)</b>	5	1, 3, 5

\* Bold specifications are the golden parameters.

### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062, Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	1	30	N/A

### Blade Server ( 4 )

#### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Configuration	Type of Server	Blade	*
	<b>Maximum Number of sockets available on chipset</b>	2	1, 2, 3, 4
	<b>Maximum Number of sockets populated with processor</b>	2	1, 2, 3, 4
	<b>Processor Make</b>	Intel	Intel, AMD
	<b>No. of Cores per Processor</b>	22	*
	<b>Processor Configuration</b>	Intel Xeon Gold 6152(2.10GHz/22-core/30.25MB/140W)	*
	Chipset compatible with CPU	-	*
	Number of PCI Express Slots (Gen 3.0 or higher)	-	*
Memory	RAM Type	DDR4	*
	<b>RAM SIZE (GB)</b>	256	*
	<b>RAM upgradable</b>	3000	*

	<b>upto (GB)</b>		
	DIMM Slots (Minumum)	-	*
Storage	<b>Type of Hard Disk</b>	SSD	SAS, NL SAS, SSD, SATA
	<b>Hard disk drive Capacity (GB)</b>	2400	300 - 16000
	<b>Hard disk drive RPM (hot plug or better ) (RPM)</b>	NA	7200, 10K, 15K, NA
RAID	RAID Type	1	*
	RAID Controller Caches (GB)	2	*
Connectivity	Connectivity Ports	FC + Ethernet	*
	<b>Dual Port Network Card Bandwidth (Gbps)</b>	20	1, 10, 20, 25, 40, 50, 80, 100, NA
	<b>Infiniband Bandwidth (Gbps)</b>	NA	40, 56, 100, NA
	FC HBA Dual port card	NA	*
	FC HBA Dual port card Speed (Gbps)	NA	*
Certifications	OS Certifications, Compliance ; support by Windows, Red Hat or Novell.	Yes	*
	BIS Registration under Compulsory Registration Scheme of Meity	Yes	*
	BIS Registration Number and its Validity	-	*
	Declare SPEC int_rate_base 2006 & specfp_rate_2006 for 1,2,4,8 processor as applicable	-	*
	RoHS Compliance	Yes	*
Miscellaneous	Power Supply	230 +/- 10%, 50 Hz	*
	Operating Temperature Range (Degree C)	-	*
	Operating Humidity(RH) (%)	-	*
	<b>On Site OEM Warranty (Year)</b>	5	1, 3, 5

\* Bold specifications are the golden parameters.



**Consignee/Reporting Officer and Quantity**

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Gurpreet Singh	160062, Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	4	30	N/A

**EMD Detail**

Required	No
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**ePBG Detail**

Required	No
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**Splitting**

RA splitting not applied.

**Buyer Specific Additional Terms and Conditions**

- 1. Scope of supply (Bid price to include all cost components) :** Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

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**---Thank You---**