



**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**  
**MATERIALS MANAGEMENT DIVISION**  
Powai, Mumbai 400076.

Ref. No. 22-23/22 (PR: 1000023523)

RFX. No.6100001180

**Technical Specification of Master Node and Other Items**

**1. Master Node: Qty 1**

1	Processor	2 x Intel Xeon series min. 16 Cores (Total 32 Cores)
2	Memory	Min. 96GB
3	Media	DVD Drive RW, Internal/External
4	Disk	2x400GB SSD for OS plus 3x 6TB SATA HDD (Total <b>12TB Raw</b> )
5	RAID Support	RAID 0, 1, 5
6	Network interface	1 GbE ports, Having provision for Infiniband port
7	Power Supply	Two redundant hot-swap Power Supply
8	Fans	Redundant and Hot swap
9	Systems management	Advance Failure analysis support on systems for CPU, memory, HDD, Power supply and fans. LED diagnostics on server even without Power, Automatic ServerRestart, management port.
10	Certified	TPM 1.2, Redhat Linux, Suse Linux, Windows 2008
11	OS	64 bit Linux OpenSource
12	Form Factor	1U/2U Rack-mountable.

**1. GPU Compute Node: Qty 1**

1	Processor	2 x Intel Xeon series min. 16 Cores (Total 32 Cores)
2	Memory	Min. 96GB
3	Media	DVD Drive RW, Internal/External
4	Disk	2x400GB SSD for OS plus 3x 6TB SATA HDD (Total <b>12TB Raw</b> )
5	RAID Support	RAID 0, 1, 5
6	GPU Card	4 x Nvidia 3090 GPU & 2 x Nvidia A6000 GPU
7	Network interface	1 GbE ports, Having provision for Infiniband port
8	Power Supply	Two redundant hot-swap Power Supply
9	Fans	Redundant and Hot swap
10	Systems management	Advance Failure analysis support on systems for CPU, memory, HDD, Power supply and fans. LED diagnostics on server even without Power, Automatic ServerRestart, management port.
11	Certified	TPM 1.2, Redhat Linux, Suse Linux, Windows 2008
12	OS	64 bit Linux OpenSource
13	Form Factor	1U/2U Rack-mountable.

## 2. Network Switch: Qty 1

1	Ethernet Switch	L2 , 24 ports Gigabit Ethernet switch with sufficient no of ports to connect supplied servers for management network with required no of cables
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## 3. UPS: Qty 1

1	Min. 6 kVA Online UPS with required batteries to provide a power backup up to 30 min. on full load. It would also contain all the required cables and rack mounting kit.
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## 4. Server Rack: Qty 1

1	Min. 42U Server Rack System with 600*800 with dual perforated doors at front and back.
2	Should have min. 2 PDUs along with Industrial Socket.
3	Should have keyboard tray and other required accessories.

## 5. Services & Support:

1	Installation	Installation and Commissioning of the cluster.
		Installation of all user-sought applications.
		Fine-Tuning along with Benchmark of the system performance.
2	Training	Training on cluster usage to Admin and User groups for 3-4 days.
3	Support	Support on entire HPC setup for it's hardware and software.
		Full skill level support from L1 to L3 level to maintain the infrastructure and keep it running.
4.	Warranty	<b>3 years on all products</b>