Response to vendor queries for "**Tender notification for the procurement of a CPU+GPU cluster for high performance computing**"

S. No	Query	Response
1	AMD EPYC 7542 processor is requested with code name Milan. The AMD EPYC 7542 is a 2nd Generation AMD EPYC processor which is code named as Rome.	Thanks for the correction. AMD EPYC Rome 7542 is the requested processor.
2	3200 Mhz memory frequency is the latest speed. Kindly incorporate latest technology for better performance	As mentioned in the tender, please bid for minimum 8 GB/core DDR4 RDIMMS in balance mode, 2933 Mhz or better.
3	In master node you have mentioned 32 TB 6 Gb/s Enterprise SATA HDD. The 32 TB space is required as RAW or usable after RAID configuration. Also provide us which RAID you require in the system?	The 32TB space is required as RAW (not the usable storage after RAID configuration). Support for RAID levels 0, 1, 5, 6, 50 and 60 should be available in the system.
4	How many CPU-only Compute Nodes are required?	As mentioned in the tender, the theoretical peak performance of all the CPU-only nodes (compute nodes + master node) put together should be at least 23 TFLOPs.
5	How many Gigabit NIC Ports are required in the master node, cpu only compute nodes and cpu+gpu nodes?	2 Gibagit NIC ports are required in all nodes.
6	The 100 Gbps Infiniband adapter you require in master node, cpu only compute nodes and cpu+gpu nodes should be of how many ports – single or dual?	Single port 100 Gbps Infiniband adapter in all nodes
7	How many DIMM slots you require in master node, cpu only compute nodes and cpu+gpu nodes?	As mentioned in the tender, minimum 8 GB/core DRAM is required in balanced configuration. No specification on number of DIMM slots.
8	How many RAM slots you require for future upgradation in all types of nodes?	The RAM specified should in balanced configuration. No additional RAM slots for future upgradation required.
9	How many hard drive bays you require in CPU+GPU node?	Minimum 4 HDD bays in the CPU+GPU node.
10	What form factor you require for cpu+gpu node?	Any form factor that fits in a standard rack is fine.
11	The mentioned double ton split A/C's will be provided by IISc or by Bidder?	The A/Cs would be provided by IISc. The bidder only has to provide the BTU/hr calculations for sufficiently cooling the proposed system.
12	• In this tender scenario AMD EPYC 7542 (32 Core, 2.9 GHz, 128MB Cache) Processor is compared to Intel Xeon 6248 (20 Core, 2.5	Although the individual CPUs may have different compute capabilities, the tender is for a HPC system whose overall computational capability is 23TF (for the CPU-only nodes) which would give a level

	GHz, 27.5 MB Cache). The comparison is absolutely unfair and puts one vendor (INTEL) at absolute advantage. • The memory requested is per core. So with AMD 32 Core processor being requested the total memory will also eventually increase, again it will be unfair to one vendor. • 23 TF as compute power has been requested. What is the basis of the requirement ? AMD EPYC due to higher core count , higher per core L3 cache and higher CPU to Memory bandwidth performs significantly well on most of the FEA and Structural Mechanics codes. Kindly clarify which application you are planning to run on the new HPC system ?	playing field with respect to different processors.