

Budgetary quotations are invited for the purchase of **High-performance Computing Cluster** of following specifications:

1. Master node: One (01)
  - a. Processor: 2×10 core Intel Xeon E7-2670 or higher
  - b. Cache: 30MB per processor or higher
  - c. Memory: 512GB DDR3 RAM 1333MHz or higher
  - d. Hard Disk: 5×1TB SATA HDD or higher
  - e. RAID support: RAID on motherboard, integrated 6Gbps hardware RAID-0, -1, -10
  - f. Network interface: Infiniband 4X FDR, 18-port or better
  - g. Power supply: Redundant and Hotswap with 80 PLUS Platinum compliance
  - h. Fans: Redundant and Hotswap
  - i. Media bays: DVD drive
  - j. KVM: rack-mounted 1U TFT, console with Keyboard, mouse and required accessories
  - k. Trusted platform Module: TPM 1.2 Certified
  - l. System management: IMM2, Predictive failure Analysis, Diagnostic LEDs, light path diagnostics panel, Automatic Server Restart
  - m. Rack mountable
2. Computer node: Nine (09)
  - a. Processor: 2×10 core Intel Xeon E5-2670 or higher
  - b. Cache: 30MB per processor or higher
  - c. Memory: 512GB DDR3 RAM 1333MHz or higher
  - d. Hard Disk: 500GB SATA HDD or higher
  - e. Network interface: Infiniband 4X FDR, 18-port or better
  - f. Power supply: Redundant and Hotswap with 80 PLUS Platinum compliance
  - g. Fans: Redundant and Hotswap
  - h. Trusted platform Module: TPM 1.2 Certified
  - i. Rack mountable
3. Cables: compatible power and network cables
4. Rack: 42U OEM rack
5. Software
  - a. OS: Linux
  - b. Compilers: C/C++/Fortran
  - c. Parallelization: MPI, OpenMPI
  - d. Libraries: necessary libraries for Fluent®, OpenFoam, Tecplot®
  - e. Appropriate software for system management and continuous monitoring
6. Service and support: Five (05) years on-site

### **Terms and Conditions**

1. The specifications given above are purely representative. Equivalent systems that yield better performance can also be quoted.
2. Please provide *separate quotations* for different configurations
3. Please specify the power and cooling requirement with each configuration
4. Prices should include installation and training cost, and all additional charges including freight, insurance etc.
5. Discount: maximum ***educational-discount*** to be provided and should be shown explicitly in the quotation
6. Warranty: no less than three (03) years (onsite) after installation
7. Quotation validity: no less than 90 days from the date of quotation submission
8. Quotations should carry proper certifications such as, agency certificates, proprietary certificates, printed company profile, detail technical specification, user-list with phone numbers

Kindly mention "Computer/solar: IITK/ME/kmd/2013/03" on sealed envelope carrying quotations and additional literature including technical details. The envelope, duly sealed, should reach the following address on or before 18<sup>th</sup> December, 2013. Any questions, technical or otherwise, should be directed to the undersigned via phone, fax, or e-mail.

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