**Annexure-I**

**Technical Specification of Workstation Station for Catia application**

**Technical Compliance:**

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| **Item Category** | **Description** | **Compliance (Yes/No)** | **Remarks** |
| Processor | CPU based server must adhere to below points:  a. Minimum 16 cores/32 threads per processor  b. Native support of AVX512 instructions  c. Minimum base clock frequency of CPU 2.9 GHz.  d. Support for Virtualization technology |  |  |
| Motherboard | Dual Socket MB, |  |  |
| RAM | Min 128 GB DDR 4, Min 2933 MHz or better with  Advanced ECC with multi‐bit error protection with Min. 12 Dimms |  |  |
| Storage | OS Drives: 1 x 960 GB Nvme M.2  Data Drives: 2 x 2 TB SATA 7200 RPM . |  |  |
| Management | IPMI 2.0, shared Supports KVM over LAN, Virtual Media & Remote BIOS Flash. |  |  |
| NIC | 2 x 1GbE, 1 shared with IPMI |  |  |
| Exp. Slots | Per CPU 2 x PCIe 3.0 x16, 1 x PCIe 3.0 x8 |  |  |
| Display | Onboard Display is required |  |  |
| GPU | 1 x Latest 16GB Graphic with 6144 Cuda Cores |  |  |
| Monitor | 1 x 24 Inches 2K Monitor, suitable cable compatible with GPU |  |  |
| Ports | 2 RJ45 LAN, 1 x USB 2.0 (Type A), 4 x USB 3.0 |  |  |
| Chassis | Tower (5 Internal 3.5"/2.5" & 4 External 5.25 HDD Bays) 5U Rack mountable |  |  |
| P. Supply | 1200W 80 Plus Platinum level Power Supply |  |  |
| OS | 1 x Windows 11 Pro. |  |  |
| Containerization | 1 x Containerization platform which will provide container for Gromacs 2020 with different O.S. and container should be available for CPU & GPU both |  |  |
| Compliance | “System offered must comply with MEITY Notification: F.No.43/4/2019‐IPHW‐Meity (all revisions till date). Make in India certificate must be issued by System OEM only. For Make in India Servers SMT of Motherboard/PCB must be done in India with Server OEM model/ part number embedded. |  |  |
| Suspension/ Blacklist | Vendor should not be Suspended/Blacklisted/ Barred from any Government organization within last 5 years. |  |  |
| Benchmarking | Benchmarks should be submitted as Annexure A |  |  |
| Warranty | 3 Years Onsite OEM Warranty |  |  |

**Annexure A**

Only the latest version of open-source Netlib HPL benchmarking must be used. Run on all CPUs of the system considering N = 117824 (problem size) or better.

HPL performance with Rpeak/Rmax < 60% will lead to immediate disqualification

Benchmark Analysis needs to be submitted along with the technical bid. The results should be submitted in the form of readable and downloadable ASCII Text files in a ZIP format or TARBALL format.

May download the latest version from http://www.netlib.org/benchmark/hpl

(HPL Benchmark: This is the widely used implementation of the Linpack TPP benchmark. It measures the sustained floating-point rate of execution for solving a linear system of equations in double precision (64 bits) arithmetic on distributed-memory computers. The HPL software package requires the availability on your system of an implementation of the Message Passing Interface with an implementation of either the Basic Linear Algebra Subprograms. Only the latest version of open-source Netlib HPL benchmarking must be used.)

The Cost of benchmarking and testing should be bear by bidder

(POST) of supplied workstations at end user site supplier can be asked for demonstration of benchmark results.

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| Bidder Signature |  | | |
| Name of the signatory & Title | Name | Title |
| Bidder’s Official seal |  | | |
| Place & Date | Place | DD-MM-YYYY |