

National Council of Science Museums 33 Block GN, Saltlake Sector V Bidhannagar, Kolkata 700 091

TENDER NO. I-18012/2/24(143)

Technical Specification

1) Desktop Computer

- 9 Sets

Specification:

Processor: Generation 14th Generation Intel Core i7-14700 (33MB Cache, 20 Core , 3.4GHz to 5.3GHz or higher Motherboard Chipset Series: Intel Q series chipset compatible with the above processor. Security: Discrete TPM (Trusted Platform Module) 2.0 or better

Expansion Slots: 1 full height PCIe x16, 1 full height PCIe x16 (wired x 4), 1 full height PCIe x1, 1 full height PCI

Graphics Type: Integrated Intel HD Graphics

Operating System: Factory pre-install Windows 11 Home or higher with latest Service Pack and Preloaded License. Systems Hardware drivers should be available in the OEM website against the offered model for regular update (kindly provide the link)

(OEM must support in writing to confirm that Operating system pre-loaded / pre-installed from OEM factory only)

RAM Size: Minimum 16 GB DDR5, RAM Expandability should be Minimum 128 GB

Power Supply Capacity: Minimum 260W 80 Plus certified Power supply Minimum Power Efficiency Range: 90%- 95% or more

Type of Drives used to populate the Internal Bays: SSD (NVMe) Total SATA Capacity: None Total SSD Capacity: 512 M.2 PCIe NVMe, SSD , Class 35

Wi-Fi 802.11ax and Bluetooth V 5.20
Ethernet Ports: 10/100/1000 on board Integrated Gigabit Port
4 External USB 3.0 ports (2 front, 2 rear), 6 External USB 2.0 ports (2 front, 4 rear), 1 Internal USB 2.0
1 RJ-45; 1 Serial;
1 VGA; 2 DisplayPorts;
2 Line-in (stereo/microphone),

Preferred Cabinet Form Factor: SFF (7 to 13 Litres)

OEM LED Backlit Monitor: Minimum 23.8"

OEM Keyboard & Mouse

Motherboard, Keyboard and mouse should be from the same desktop OEM

Certification and compliances

OS Certification: Windows/Linux OS certifications from the OEM of the OS must be furnished for the quoted model (model specific certification is mandatory). ROHS Compliance BEE/ Energy Star for the quoted Model should be 8.0 or latestFCC,UL,CE (for the quoted Desktop model)ISO (OEM/Bidder): ISO 9001, 14001, 27001, 45000EPEAT India Gold (for the quoted desktop model)YesTCO Certification for quoted Monitor and Desktop8.0 or latest

All components of the desktop must be supplied by the OEM and details of all parts must be available in the OEM portal against each product serial number (kindly provide the link)

Warranty: On Site Warranty for 3 Years to be provided by OEM at Ranchi, Jharkhand

OEM supplied Desktop model warranty details must be available in the OEM portal against each product serial number (kindly provide the link)

Make & Model offered:

2) Desktop Computer with 4 GB Graphics Card

- 1 Set

Specification:

Processor: Generation 14th Generation Intel Core i7-14700 (33MB Cache, 20 Core, 3.4GHz to 5.3GHz or higher Motherboard Chipset Series: Intel Q series chipset compatible with the above processor or better Security: Discrete TPM (Trusted Platform Module) 2.0 or better

Expansion Slots: 1 full height PCIe x16, 1 full height PCIe x16 (wired x 4), 1 full height PCIe x1, 1 full height PCI

Graphics: AMD Radeon RX 6500, 4 GB GDDR6.

Operating System: Factory pre-install **Windows 11 Professional** or higher with latest Service Pack and Preloaded License.

Systems Hardware drivers should be available in the OEM website against the offered model for regular update/reinstallation (kindly provide the link)

(OEM must support in writing to confirm that Operating system pre-loaded / pre-installed from OEM factory only)

RAM Size: Minimum 16 GB DDR5, RAM Expandability should be Minimum 128 GB

Power Supply Capacity: Minimum 260W 80 Plus certified Power supply Minimum Power Efficiency Range: 90%- 95% or more

Type of Drives used to populate the Internal Bays: SSD (NVMe) Total SATA Capacity: None Total SSD Capacity: Minimum 512 M.2 PCIe NVMe, SSD , Class 35

Wi-Fi 802.11ax and Bluetooth V 5.20

Ethernet Ports: 10/100/1000 on board Integrated Gigabit Port

4 External USB 3.0 ports (2 front, 2 rear), 6 External USB 2.0 ports (2 front, 4 rear), 1 Internal USB 2.0

- 1 RJ-45; 1 Serial;
- 1 VGA; 2 DisplayPorts;
- 2 Line-in (stereo/microphone),

Preferred Cabinet Form Factor: SFF (7 to 13 Litres) or better

OEM LED Backlit Monitor: Minimum 23.8"

OEM Keyboard & Mouse

Motherboard, Keyboard and mouse should be from the same desktop OEM

Certification and compliances

OS Certification: Windows/Linux OS certifications from the OEM of the OS must be furnished for the quoted model (model specific certification is mandatory). ROHS Compliance BEE/ Energy Star for the quoted Model should be 8.0 or latest FCC,UL,CE (for the quoted Desktop model) ISO (OEM/Bidder): ISO 9001, 14001, 27001, 45000 EPEAT India Gold (for the quoted desktop model) TCO Certification for quoted Monitor and Desktop: 8.0 or latest

All components of the desktop must be supplied by the OEM and details of all parts must be available in the OEM portal against each product serial number (kindly provide the link)

Warranty: On Site Warranty for 3 Years to be provided by OEM at Ranchi, Jharkhand

OEM supplied Desktop model warranty details must be available in the OEM portal against each product serial number (kindly provide the link)

Make & Model offered:

3) Line interactive UPS, 1100 VA

- 10 Nos

Specification:

Rating 1100VA, 230V Main Input Voltage : 230 V Main Output Voltage : 230 V Rated power in W: 660 W Rated power in VA : 1100 VA Number of power socket outlets : 4 Indian 2/3-pin 6A, 1 Indian 2/3-pin 6A surge Battery type : Lead-acid battery Network frequency : 45...65 Hz auto-sensing Plug standard : Indian 3-pin 6A Input voltage limits : 145...290 V Switching current capacity : 7 A Maximum configurable power in W: 660 W Output frequency : 50 Hz sync to mains UPS type : Line interactive Wave type : Stepped approximation to a sinewave Efficiency: 72 % (full load), 84 % (half load) Full load runtime : 660 W Maximum configurable power in VA : 1100 VA Transfer time 10 ms typical : 12 ms maximum Product should be BIS certified Ambient air temperature for operation : 0...40 °C Relative humidity : 0...95 % Operating altitude 0...3000 m Acoustic level : 45 dBA or better Battery recharge time : 6 h Battery: 2 SMF, 12 V, minimum 7 AH capacity

Warranty: on-site warranty for 2 years to be provided at Ranchi, Jharkhand

Make & Model offered:

Annexure F

4) LCD/DLP Ultra Short Throw Projector with Laser light source

- 1 Set

Specifications

Display technology: LCD/DLP Native Resolution: 1080p Full HD (1920x1080) Brightness: Minimum 4000 lumens Contrast ratio: Around 300,000:1 Dynamic Contrast ratio: Around 2,000,000:1 Native aspect ratio:16:9, should be compatible to 4:3 and16:9 Keystone correction horizontal: +/-5° or better Keystone correction vertical: +/-5° or better Displayable colours: 1000 Million or better Horizontal scan rate: 15KHz to 140Khz Vertical scan rate: 24 Hz to 120Hz Uniformity: 75% or better Screen size: Around 2.03 mtrs to 3.3 mtrs (80" to 130") diagonal Light source: Laser Light source life: Minimum 30000 hours

Throw ratio: 0.253:1 or better Projection distance: around 0.17m - 0.45m Focal length: around -3.70mm

Input Connections: 2 x HDMI 2.0, 1 x 3D sync Outputs Connections: 1 x USB-A power (1.5A capacity), 1 x Audio 3.5mm, Control 1 x RS232, 1 x RJ45

PC compatibility: UHD, FHD, UXGA, SXGA, WXGA, HD, XGA, SVGA, VGA, Mac Security bar, Kensington Lock, Password protected interface

Display setting language must be English Projector should be rated for 24x7 operation Projector should be compatible to ceiling mount Operating conditions 0° C to 40° C, max altitude 10,000ft Heat dissipation: around 690 BTU/hour or less Built in speaker: Minimum 15 W Battery powered Remote control Networking: Through LAN for control Power consumption: Should be not more than 250 W

Warranty:

Projector: Should be minimum three years. Light Source: Should be minimum 20000 hours of three years whichever is earlier

Make & Model offered:

- 1 Set

5) 2.0 KVA Online UPS having 30 minutes backup time

Main Input Voltage: 230V Other Input Voltage: 220 V, 240 V Input voltage limits: 110 - 280 V half load, 160 - 280 V full load Number of input connectors: Hard wire 3-wire (1P + N + E)40 - 70 Hz Network frequency: Main Output Voltage: 230 V Other Output Voltages: 220V, 240V 1600 W Rated power in W: Rated power in VA: 2000 VA **Output frequency:** 50/60 Hz +/- 3 Hz sync to mains 3 % Harmonic distortion: UPS type: Double conversion online Wave type: Sine wave Load Crest Factor: 3:1 Efficiency at Full Load: 88.0 % (full load) Bypass type: Internal bypass (automatic and manual) Minimum 3 nos. (India 3-pin 6A) Output connection type: Output connector type: Hard wire 3-wire (1P + N + E)Number of rack unit: 2U Battery Voltage: 72V Battery Type: SMF or Flooded battery compatible, internal charger 2A - 13A programmable, Should use external battery system Battery charger power: 700 W rated Batteries: 6 External 12v, 26AH (Or equivalent) Sealed maintenance free Battery with battery rack, connection cable and UPS to battery power Connector. Battery warranty: full replacement warranty for 2 years Rack-mounted with kit Mounting: USB compatible: Yes Alarm: Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm Emergency power off: Yes Multifunction LCD status and control console Control panel: Product certifications: BIS 600 J Surge energy rate:

Accessories: All accessories including batteries and racks for installation of the system

Warranty: 2 years repair or replacement to be provided at Ranchi, Jharkhand

Make & Model offered:

6) LCD/DLP Projector with Laser Light Source - 1 Set **Projector Specification** Display technology: LCD/DLP Native Resolution: Minimum 1280 x 800 Brightness: Minimum 4000 lumens Contrast ratio: Around 300000:1 Aspect ratio should be compatible with 4:3 & 16:9 Keystone correction: $+/-40^{\circ}$ vertical or better Light source: Laser Life of Light source: Minimum 30000 hours Throw ratio: Around $1.54:1 \sim 1.72:1$ Projection distance: 1m - 10m Zoom ratio: Around 1.1 Zoom type: Manual Focal length: Around 21.5 to 24.00 mm Connectivity: Inputs 2 x HDMI 1.4a, Outputs 1 x Audio 3.5mm, 1 x USB-A power 1.5A Control 1 x RS232 Compatibility: NTSC M/J, 3.58MHz, 4.43MHz PAL B/D/G/H/I/M/N, 4,43MHz SECAM B/D/G/K/K1/L, 4.25/4.4MHz 480i/p, 576i/p, 720p(50/60Hz), 1080i(50/60Hz), 1080p(50/60Hz) Projector should be operable in any orientation and capable of 24 x 7 operation Operating Temperature: 0°C to 40°C, Operating Humidity: 80%, Built in speaker: Minimum 15W Power: 100VAC to 240VAC, 50-60Hz Accessories: Remote control, AC power cord Warranty: Projector: Should be minimum three years. Light Source: Should be minimum 20000 hours of three years whichever is earlier

To be provided at Bhubaneswar, Odisha

Make & Model offered: