

Annexure E



Ministry of Culture
Government of India



NATIONAL COUNCIL OF SCIENCE MUSEUMS
SECTOR-V, BLOCK-GN, BIDHANNAGAR,
KOLKATA : 700 091.

TENDER NO. I-18012/7/26(20)

Technical Specifications of Mini PC:

Qty:07Nos.

Processor	Intel Core i5 (14th Generation) or higher
RAM	16 GB DDR5 memory, Expandable up to minimum 64 GB DDR5, 2 physical DIMM slots or higher.
Motherboard	OEM Motherboard The Motherboard of the Desktop Computer should have OEM Logo embossed / engraved / etched / metal fitted on it. TPM 2.0 integrated in the motherboard
Operating system type	64 bit or better
Operating System	Factory Preloaded Windows 11 Pro, must be installed by OEM with license key. The OEM of the Desktop should be authorized OEM of Microsoft Corporation for preloading and genuinity of Microsoft OS. OS certificate to be submitted mentioning model no
Keyboard	Standard USB Keyboard of the same OEM
Mouse	Standard USB Optical scroll Mouse of the same OEM
Network Connectivity	10/100/1000 Gigabit Ethernet or equivalent
Wireless LAN	802.11 a/b/g/n/ac or equivalent
Bluetooth	Yes
HDD Type	M.2 NVMe SSD or better
HDD Capacity	512 GB or higher
USB 3.1/3.2 Slots	4 (Required minimum 1 TypeC Gen2 Port) or more
USB 2.0 Slots	2 (minimum)or more
Ethernet (RJ45)	1 or more
HDMI	1 or more
DP/DVI	1 or more
VGA	1or more
Stereo line in/out	Combo Jack/Universal Audio Jack
Power Supply	Minimum 130W AC adapter with 85%-90% efficiency

Compliance / Certification	For OEM: Minimum ISO 9001, ISO14001, ISO 50001 For quoted Desktop model: FCC, CE, RoHS Certificate, UL / MET Certificate for safety, Energy Star, EPEAT India Certified. Operating System (Windows) and Hardware Compatibility Certifications for the quoted model will be required, which must be available in the public domain against the quoted model name (not for the quoted model series). The URL of availability of such Report online must be provided
Warranty	3 years OEM onsite comprehensive warranty (OEM supplied Desktop model warranty must be visible in the OEM website in respect to each product serial number).
OEM compliance	Compliance with the specified technical and quality requirements shall be ensured to facilitate smooth and hassle-free processing of any future warranty claims with the OEM.

Technical Specification for Desktop/Workstation

Qty: 05Nos.

Specifications	Description
Processor	Intel Ultra 7 265K (30MB Cache, 20 Core, 3.3GHz to 5.5GHz) with inbuilt NPU or equivalent
Chipset	Intel W880 chipset or higher
Memory	32GB DDR5 memory, expandable upto 128GB or higher;
Drive Controller	Integrated Intel Controller or higher
Hard Disk Drive	1x 512GB NVMe SSD or more; Workstation should support at least 4x NVMe SSDs for future expandability
Expansion Slots	4 PCIe slot with at least 1 or more PCIe Gen5 slot Min 3 M.2 slots for NVMe SSD and 1 M.2 slot for Wifi & BT
Graphic Card	NVIDIA GeForce RTX 5060, 8GB GDDR7 or higher
I/O Ports	Min 10 USB port including 1x Thunderbolt 4 and 2x USB TypeC 3.2 1x Universal Audio Jack or more
Operating System Support	Latest Windows. The workstation model should be Windows. Certificate to be added in the tender or equivalent
Networking	The workstation model should be Windows certified. Certificate to be added in the tender
Audio	Intelligent HD Audio delivers audio and mic enhancements and reduces background noise with internal speaker of higher
Power Supply	Min. 1500W Power Supply or better
OS	Windows 11 Pro for Workstations (64-bit)
Keyboard & Mouse	wired Keyboard & Mouse, should be of Same OEM make as workstation
Security	Trusted Platform Module (TPM 2.0), Chassis Intrusion Switch, Setup/BIOS Password, I/O Interface Security or equivalent
Regulatory Compliance	Energy Star, EPEAT Gold registered or equivalent
Compliance	Specification Compliance must be submitted in the OEM letter Head.
Warranty	3 Years Onsite Warranty
OEM compliance	Compliance with the specified technical and quality requirements shall be ensured to facilitate smooth and hassle-free processing of any future warranty claims with the OEM.

Technical specification for 3KVA ups with battery backup:**Qty: 03Nos.**

Parameters	Description
Rating	3 kVA
kVA	3000 VA
kW	2400 Watts or better
Operating Temperature Range	0 to 40 Degree @ 100% Load @ 50 Degree with 50% Load
Storage Temperature	-15°C~60°C
Relative Humidity	0-95% No condensates
Altitude	<1000m
Acoustic Noise	40 dBA @ 1 Meter
Cooling	Forced air cooling by the internal fans
Input Socket	IEC C13 or equivalent
Output Socket	IEC C14 or equivalent
No of output sockets	3 No's + Terminal Block
Rated Input Voltage	208/220/230/240 Vac
Maximum working input voltage range	160 to 300 Vac @ 100% Load 100 to 300 Vac @ 50% Load
Input Power Factor	0.99 or better
Input THDi%	5%
Generator Set	Yes 1.5 x UPS Capacity
Rated kVA	3000 VA
Rated kW	2400 Watts
Load type	Resistive load/ lagging load/ non-linear load/ transformer load/ lighting load
Load power factor range	0.5~1 lagging or better
Load Crest Ratio	3:1
Output wave type	Pure sine wave
Online Efficiency	>91% or better
Rated Battery Voltage	96 Vdc
Battery Type	VRLA (Valve Regulated Lead Acid Battery), 12VDC or equivalent
Battery Capacity and Number	Back UP dependent and 8 No's or more
Backup time	30 Minutes with 8 Nos of 12V 26AH battery or equivalent
Maximum charging current	10 Amps or better
ECO Mode	YES
Communication (Independent SCI)	YES
Intelligent Card slot (Independent SCI)	YES
	YES
	YES
	YES
	YES
	YES
	YES
OVCD	YES
EPO Function	YES
Intelligent Fans Speed control	YES
Auto restart function	YES
Cold start	YES

OEM Criteria	All offered UPS for the specified project should be from the same OEM. UPS OEM to have certification of Cybersecurity. Certificate to be shared (No undertaking shall be accepted) OEM must have its own 24x7 Support and toll-free No.
Charger	Adjustable Charging Current 0-10 Amps or better
Harsh Environment	All PCB board to be conformal Coated
Battery	Minimum 30min backup or more
OEM compliance	Compliance with the specified technical and quality requirements shall be ensured to facilitate smooth and hassle-free processing of any future warranty claims with the OEM.

Technical Specifications for 24-inch Touch Monitor/display:

Qty:09Nos.

Screen Size (Diagonal):	24" (60.96 cm)
Panel Type:	IPS or equivalent
Backlight Technology:	LED backlight or equivalent
Resolution:	Full HD (1920 x 1080 pixels) at 60 Hz or better
Aspect Ratio:	16:9
Brightness:	300 cd/m ² or better
Contrast Ratio:	1000:1 / 1000:1 (dynamic) or better
Response Time:	5 ms (gray-to-gray, fast mode) or better
Viewing Angle:	178° vertical / 178° horizontal or better
Touch Capability:	minimum 10-point capacitive multi-touch or better
Color Support:	99% sRGB color gamut, 16.7 million colors or better
Refresh Rate:	60 Hz or better
Voltage:	AC 100–240V, 50/60 Hz
Power Consumption:	Typical: 18W Maximum: 190W or less
Connectivity:	USB-C 3.2 Gen 1, 1 x HDMI 1.4, 1 x DisplayPort 1.2, 2 x USB 3.2 Gen 1 downstream, 2 x USB 2.0 downstream, RJ45 Ethernet Port: 1 x Gigabit Ethernet, Audio Out: 1 x 3.5mm headphone jack
Compatibility:	Windows 10 and later
Tilt:	-5° to 60°
Height Adjustment:	110mm
Swivel:	±30°
VESA Compatibility:	100 x 100 mm (wall mountable)

Warranty: 1 years onsite parts and labour warranty all over India. Compliance with the specified technical and quality requirements shall be ensured to facilitate smooth and hassle-free processing of any future warranty claims with the OEM

Technical Specifications for Camera :

Qty:05Nos

Multiple resolutions

- 1080p/30fps (up to 1920 x 1080 pixels) or better
- 720p/30fps (up to 1280 x 720 pixels) or better

Camera mega pixel:	3 or better
Focus type:	Autofocus
Lens type:	Glass
Built-in mic:	Stereo .
Mic range:	Up to 1 m
Diagonal field of view (dFoV):	78° or better
Digital zoom:	1x
USB connectivity:	USB-A plug-and-play

23.8/24inch Non-Touch Monitor –Specification**Qty:03Nos.**

Specifications	Details
Screen Size	23.8 /24 inch
Display Type	LED
Panel Type	IPS or equivalent
Resolution	Full HD (1920 × 1080) or better
Aspect Ratio	16:9 or better
Refresh Rate	60 Hz – 100 Hz or better
Brightness	250 – 300 nits or better
Contrast Ratio	1000:1 (typical) or better
Response Time	5 ms – 8 ms or better
Viewing Angle	178° or better
Surface	Anti-glare
Connectivity	HDMI
Audio	Optional (built-in speakers in some models)
Mounting	VESA Mount compatible
Stand Adjustment	Tilt (Height/Pivot in higher models)
Eye Care	Low Blue Light / Flicker-Free
Power Supply	AC 100–240V
OEM compliance	1 years onsite parts and labour warranty all over India. Compliance with the specifications shall be provided to ensure hassle-free processing of any future warranty claims with the OEM.

Technical Specification for 32” TV**Qty:04Nos.**

Display	Size	81.28CM (32)
Video	Resolution	HD 1366 X 768 or better
	HDR HDR 10	YES
	HDR HLg	YES
Audio	Audio Output	5W+5W or better
	Speaker System	20Ch or better
	Ai Sound /Pro	Ai Sound, Ai Acoustic Tuning , AI recommendation or equivalent
	Sound Sync	Yes , Required Bluetooth

Features	HDMI eARC or equivalent	YES
Wireless Connectivity	Wifi (version)	Built In Type
	Bluetooth	YES
jack Interface	HDMI In	2 or more
	Rf in	1 or more
	USB	1 or more
	RJ45	1 or more
Power(Unit watts)	Voltaz Hz	AC 100-240 V,50-60HZ
	Power Consumtions (Standard In USE)	45 W or lower
	Stand By	Under 0.5 W
Warranty	3 years onsite parts and labour warranty all over India, Compliance with the specified technical and quality requirements shall be ensured to facilitate smooth and hassle-free processing of any future warranty claims with the OEM	

Technical Specification for 42"/43" TV

Qty:03Nos.

Screen Size	42"inch/43" inch
Panel Technology	IPS/VA
Back Light Type	Direct
Refresh Rate	60 Hz or higher
Aspect Ratio	16:9 or better
Native Resolution	3,840 x 2,160 (UHD) or better
Brightness (cd/m2)	500nit or more
Contrast Ratio	1,200:1 or more

	Dynamic Contrast Ratio	10,00,000 : 1 or more
	Viewing Angle (H x V)	178° x 178° or better
	Response Time	8ms (G to G) or less
	Color gamut	DCI 80 % or better
	Color Depth	10 bit, 1.07 Billion colors or more
	Operation Hours (Hours / Days)	24 / 7
	Orientation	Landscape & Portrait
Connectivity	Input	HDMI (3, HDCP 2.2 / 1.4), USB 2.0 Type A (2) or more
	Audio Output	Yes
	External Control	RS232C In / Out (4 Pin Phone Jack), RJ45 (LAN) In
Key Feature	Internal Memory 8 GB, Built-in Wi-Fi, Temperature Sensor, Auto Brightness Sensor, Local Content Scheduling, Local Key Operation, Fail Over, Booting Logo Image, No Signal Image, Screen Share, Play via URL, Setting Data Cloning, Control Manager, Smart Energy Saving, PM Mode, Wake on LAN, BEACON, HDMI-CEC, PM mode or equivalent	
Sound	Speaker	10W + 10W or equivalent
Power	Power Supply	AC 100-240V~, 50/60Hz
	Power Type	Built-In Power or equivalent
	Power Off Consumption	0.5W or better
Certification	Safety	CB
	EMC	FCC Class "A" / CE
	Energy Star	Yes
Warranty	3 years onsite parts and labour warranty all over India, Compliance with the specified technical and quality requirements shall be ensured to facilitate smooth and hassle-free processing of any future warranty claims with the OEM.	

Technical specification for Sound speaker :

Qty: 02Nos.

Audio Performance

- **Total Power (RMS): 200W**
 - Subwoofer: 130W

- Satellites: 2 × 35W
- **Peak Power:** ~400W (marketed peak)
- **Frequency Response:** 35 Hz – 20 kHz
- **Max Sound Level:** >103 dB
- **Certification:** THX-certified (cinema-quality sound)

Speaker System

- **Type:** 2.1 channel (2 satellite + 1 subwoofer)
- **Impedance:** 4 ohms
- **Design:** Dedicated subwoofer for deep bass

Connectivity

- **Inputs:**
 - 3.5 mm AUX input
 - RCA input
- **Headphone Jack:** Yes
- **Multi-device support:** Up to 3 devices simultaneously

Controls

- Located on right satellite:
 - Power ON/OFF
 - Volume control
 - Bass control

Technical specification for Android player/Video player Qty:5nos

Play 4k supported video .

Play video in TV,Projector etc.

Supported windows 11 or higher .

Signature of the Bidder / Constituted Attorney.