Technical Specification
Desktop Computer   27 nos.

Items	Specification Name	Bid Requirement (Allowed Values)
Processor	Processor Make	Intel
	Processor Generation	12th or Higher
	Number of Cores per Processor	16 or higher
	Processor Description	Latest Generation Intel Core I7 processor support upto 5.20 Ghz or higher clock speed.
	Cache (MB)	30
Motherboard	Chipset Series	Intel Q series chipset compatible with the above processor. Motherboard make from the same desktop OEM (OEM logo must be embossed in the motherboard)
	Security	Discrete TPM 2.0
	Expansion Slots (PCIe x 16) (Number)	1
	Expansion Slots (# of M Dot 2)	3
Graphics	Graphics Type	Dedicated 4 GB Graphics
Certification	ROHS Compliance	Yes
	BEE/ Energy Star for the given Model	8.0 or latest
	FCC,UL,CE (for the quoted Desktop model not for the quoted Desktop series)	Yes (all)
	ISO (OEM/Bidder)	ISO 9001,14001,27001,45000
	EPEAT India Gold (for the quoted desktop model)	Yes
	TCO Certification for quoted Monitor and Desktop	8.0 or latest
Operating System	Operating System (Factory Pre-Loaded)	Factory pre-install Windows 11 professional (64 bit) or higher with latest Service Pack and Preloaded License, Systems Hardware driver should be available in OEM website against the offered model.OEM letter confirming that Operating system pre- loaded / pre-installed from OEM factory only.
	OS Certification	Windows and Ubuntu Linux (Both the certifications must be available in the Public Domain with the quoted Desktop model no . ** Quoted Desktop series will not accept)
Memory	RAM Size (GB)	32 GB DDR5 or more

	RAM Expandability	Minimum 128 GB
Power	Power Supply Capacity (Watt)	260W 80 Plus certified Power supply
	Minimum Power Efficiency Range (%)	85-90 % or more
Storage	Type of Drives used to populate the Internal Bays	SSD (NVMe)
	Total SATA Capacity (GB)	0
	Total SSD Capacity (GB)	512GB M.2 PCIe NVMe, SSD , Class 35
Connectivity	Wireless Connectivity	Yes
	If Yes, Type of Wireless Connectivity	Wi-Fi 802.11ax and Bluetooth V 5.20
	Number of Ethernet Ports	1
	Type of Ethernet Ports	10/100/1000 on board Integrated Gigabit Port
Ports	Number of USB Version 2.0 Ports	4
	Number of USB Version 3.2 Gen 1 Ports	4
	Number of USB Version 3.2 Type C Port	1
	Number of HDMI Ports	0,1
	Number of VGA / Display Ports	1
Cabinet	Cabinet Form Factor	Tower
Monitor (Same Desktop OEM Make)	Monitor Technology	IPS, VA, TN
	LED Backlit Monitor Size (INCHES)	21.5 or higher
	Monitor Resolution (PIXELS)	1920 x1080 Or higher
	Number of VGA Ports in the Monitor	1
	Number of HDMI Ports in the Monitor	1
	Number of Display Ports in the Monitor	1
	Type of connector cable with Monitor	HDMI / Display Port / VGA
Input Devices	Mouse Connectivity	USB Wired
	Keyboard Connectivity	USB Wired (Standard Keyboard with Rupee Symbol)
Warranty	On Site OEM Warranty (Year)	3 (OEM supplied Desktop model warranty must be visible in the OEM website in respect to each product serial number)

Make & Model Offered: ………………………………………………

(To be entered by bidder)

<u>Projector Ultra short throw</u>   4 nos.

Display Technology   DLP/LCD
Native Resolution   WUXGA 1920 x 1200 or better
Brightness   5,000 Lumens or more
Contrast   100,000:1 or more
Light Source   Laser phosphor
Light Source Life Bright   30,000 hours (Eco mode) or more
Throw Ratio   0.253:1 or less
Zoom Type   Fixed or variable
I/O Connectors   HDMI x 2 (HDCP 2.0 ; compatible with HDMI 1.4a); VGA in x 1; VGA out x 1; USB B x 1 (for service); USB Type A x 1 (for Power);
Audio in x 1 (mini Jack); Audio out x 1 (mini Jack); Microphone (mini Jack) x 1
Speaker (Watts)   10W
Keystone Correction   ±15° Vertical, ±15° Horizontal
Weight (Kg)   6.5 or less
Dimensions (W x D x H) (mm)   400 x 330 x 100 (excluded adjustment feet) or less
Aspect Ratio   16:10 Native, 16:9 and 4:3 Compatible
Features   Certified to IEC standard 60529 with an IP5X dust resistance rating, certified to IEC standard 60529 with an IP5X dust resistance rating, HDR10 compatible, Compatible with OMS, System integration and control RS232, AMX, LAN Control, Crestron Roomview, PJLink
3D Support   Full 3D
3D compatibility   Side-by-Side:1080i50 / 60, 720p50 / 60 Frame-pack: 1080p24, 720p50 / 60 Over-Under: 1080p24, 720p50 / 60
Projection Screen Size   133.5"~154.1"
Projection Distance   727 – 840 mm
Computer Compatibility   UXGA, SXGA, WXGA, HD, XGA, SVGA, VGA, Mac
Video Compatibility   PAL (B, D, G, H, I, M, N, 576i/p), NTSC (M, 4.43/3.58 MHz, 480i/p), SECAM (B, D, G, K, K1, L) HD (1080i, 720p)
Horizontal Scan Rate 15.375 – 91.146 kHz
Vertical Scan Rate   24 – 85Hz
Displayable Colors   1073.4 million colors (10 bit)
Noise Level   33 / 35dB (Eco / Bright mode)
Power Supply Universal AC 90 – 264V, 50/60Hz with PFC input
Power Consumption   328W±15% @ 110VAC (Power mode: Active); 320W±15% @ 220VAC (Power mode: Active)
Warranty on Laser Projector 3 years onsite warranty

Make & Model Offered: …………………………………………………
                    (To be entered by bidder)

1KVA UPS   7nos.

Output power capacity 1,000 VA
Output power capacity 670 Watts
Max Configurable Power 1,000 VA
Max Configurable Power 670 Watts
Nominal output voltage 230 VA
Output Voltage Note Configurable for 220 : 230 or 240
Nominal input voltage 230 V
Input frequency 50/60 Hz +/- 3 Hz (auto sensing)
Input Connection Type IEC -320 C14
Input voltage range for main
operations 160 - 286 V
Input voltage adjustable range for
main operations 151 - 302 V
Battery type
Maintenance -free sealed Lead-Acid
battery with suspended electrolyte :
Typical backup time at half load 20.6 minutes (335 Watts)
Interface port DB-9 RS-232, SmartSlot, USB
Available Smart Slot Interface
Quantity 1
Control panel
LED status display with load and battery
bar-graphs and On Line : On Battery :
Replace Battery : and Overload
Indicators
Audible alarm Alarm when on battery : distinctive low
battery alarm : configurable delays
Emergency Power Off (EPO) Optional
 Surge Protection and Filtering
Surge energy rating 320 joules
Filtering
Full time multi-pole noise filtering : 0.3%
IEEE surge let-through : zero clamping
response time : meets UL 1449
Topology: Line Interactive
Standard warranty
2 years repair or replace, optional onsite warranties available, optional
extended warranties available
 BIS registration of the product is must

Make & Model Offered: ……………………………………………
                        (To be entered by bidder)

3KVA TRUE ONLINE UPS WITH INBUILT ISOLATION TRANSFORMER   **03 nos.**

Parameter	Required Specifications
Rating	**3KVA/2400W** On-Line UPS with Inbuilt Isolation Transformer.
Input AC Parameters	
Input Voltage	160 - 280V
Frequency	50 Hz; Tolerance (45-55) Hz
Input power factor	> 0.98
Isolation Transformer (Inbuilt)	UPS should be fully isolated by double conversion and inbuilt isolation transformer within the UPS cabinet itself. External transformer shall not be considered.
Output AC Parameters	
Rated apparent/active power	3000 VA/2400W
Output Voltage	220/230 V AC
Frequency	50 +/- 0.5 Hz
Crest Factor	4:1 or higher
Over load	110% for 30 seconds, 125% for 10 seconds
Output Power Factor	0.8
Indication & Controls	
Display & Level Indications	LED mimic diagram + LCD Display with measurements (Input / Output / Bypass V & Hz, Battery V & capacity level indicator, Load% & level Indicator)
Audio Alarm operation	Suitable Alarms for Battery Operation / Overload
Communication Ports	1 x Intelligent-Slot (for SNMP), 1 x RS232 or USB Serial Port.
Battery Backup & Other Details	The system must be capable of providing requisite battery back-up time of **30minutes,** using 12V, VRLA Sealed Maintenance Free Batteries. Battery Bus Voltage: **≥72 Volt DC**
Required VAH	**2496VAH**
Battery make	EXIDE/QUANTA
Environmental	
Operating Temperature:	0 Degree C to 40 Degree C
Relative humidity	0% to 95%, non-condensing
Certifications	● CE Certification(IEC 62040-1 & IEC 62040-2)
	● ISO 9001, ISO 14001,ISO2 7001, ISO 45001,ISO 50001 certified.
	● BIS Certification
	● RoHS Compliance
	● E-Waste (EPR authorisation from CPCB, Govt of India)
	Copies of the above certifications should be submitted with the technical Bid (compulsory).
After Sales Support & Manufacturer's Credibility	● Bidder should have a dedicated Toll Free No. for service call logging & resolution ● Bidder and OEM should have manufacturing facility in INDIA and own service centre at KOLKATA ● The bidder and OEM should not have been blacklisted or debarred from business at any point of time during last 10 years by any Govt./PSU undertaking. Undertaking to this effect must be submitted.
Support	**02 Years** comprehensive warranty

Make & Model Offered: ………………………………………………………

(To be entered by bidder)