

# YADAVINDRA PUBLIC SCHOOL, PATIALA

## TENDER DOCUMENT

For Supply, Installation, Testing and Commissioning of IT Hardware, Smart Classroom Equipment, Software Licences and Allied Infrastructure

### ANNEXURE-B: Quantity Schedule / Bill of Quantities

S. No.	Item Name	Required Specification	Qty.
1	Desktop PCs	Intel Core i5 (12th Gen or higher), 16 GB RAM, 500 GB SSD, 21” LED Monitor, Windows 11, MS Office	16
2	Networking	1 Gbps Switch, LAN cabling, installation & configuration	1 Lot
3	LED Monitors	21.5” LED, Full HD, HDMI/VGA, Dell/HP/Lenovo or higher	20
4	Core i7 Desktop / Workstation	Intel Core i7 (latest), 16 GB RAM, 512 GB SSD, 21–24” display	3
5	Core i5 Desktop	Intel Core i5 (12th Gen or higher), 16 GB RAM, 512 GB SSD	2
6	LaserJet MFP Printers	LaserJet MFP (Print/Scan/Copy, Duplex, Wi-Fi/LAN) for Cyber Café, Teacher PCs, Junior Lab, Admin & Admission Office	4
7	Business Laptop	Intel Core i7, 16 GB RAM, 512 GB SSD, FHD display, Windows 11 Pro	1
8	3D Printer	FDM, multi-material, ≥250 mm build, auto bed leveling, Wi-Fi/USB	1
9	Digital Smart Podium	Built-in PC (i5), touch display, audio system, HDMI/USB/LAN	2
10	Interactive Flat Panel	4K UHD, 20-point touch, Android 11+, OPS i7, 16 GB RAM, 512 GB SSD	1
11	High-End Tower / Server Compatible System	Intel Core i9, 32 GB RAM, 1 TB SSD, expandable, server compatible	3
12	HP ProStudio 4 G1i 23.8 inch AIO Desktop AI PC	Intel Core Ultra 5/7 processor, 23.8-inch Full HD display, 16 GB/32 GB DDR5 RAM, 512 GB/1 TB SSD, integrated Intel Graphics, 5 MP camera, Wi-Fi, Bluetooth, LAN, Windows 11 Pro, keyboard and mouse	36

*Note: Quantities mentioned above are tentative and may be increased, decreased or split as per the final requirement and approval of the school authority.*

#### 1. Scope of Work

The scope of work includes supply, installation, configuration, testing, commissioning, training and warranty support of latest IT hardware, smart classroom equipment, networking equipment, software licences and allied infrastructure at Yadavindra Public School, Patiala.

The bidder shall provide only latest, branded, genuine, OEM-supported products from reputed manufacturers such as HP, Dell, Lenovo, Cisco, Aruba, TP-Link, BenQ, Promethean, ViewSonic, Canon, Brother, Bambu Lab, Creality, Flashforge, Microsoft, Sophos, CrowdStrike or equivalent reputed OEMs.

The supplied equipment shall be new, unused, factory sealed, latest generation and shall not be refurbished, reconditioned, end-of-life, end-of-sale or discontinued models.

#### ANNEXURE-A: Detailed Technical Specifications

##### Item 1: HP 280 G9 Desktop PC – Intel Core i3 14th Generation

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Make / Model</b>	HP 280 G9 Desktop / HP 280 Pro G9 Tower or latest equivalent HP business desktop
<b>Processor</b>	Intel Core i3 14th Generation or higher
<b>RAM</b>	Minimum 8 GB DDR4 / DDR5 RAM, expandable to at least 64 GB
<b>Storage</b>	Minimum 512 GB PCIe NVMe SSD
<b>Graphics</b>	Integrated Intel UHD Graphics or equivalent
<b>Operating System</b>	Genuine Windows 11 Pro / Windows 11 Pro Education
<b>Networking</b>	Integrated Gigabit Ethernet LAN; Wi-Fi 6 / Wi-Fi 6E and Bluetooth preferred
<b>Ports</b>	USB ports, audio combo jack, HDMI / VGA / DisplayPort, RJ-45 LAN
<b>Keyboard &amp; Mouse</b>	HP original USB keyboard and optical mouse
<b>Security</b>	TPM 2.0, BIOS password, Kensington lock / chassis lock support
<b>Warranty</b>	Minimum 3 years onsite OEM warranty

### Item 2: HP ProStudio 4 G1i 23.8 inch All in one Desktop AI PC

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Make / Model</b>	HP ProStudio 4 All-in-One G1i 23.8 inch Desktop AI PC or latest equivalent
<b>Processor</b>	Intel Core Ultra 5 / Core Ultra 7 processor or higher with integrated AI NPU
<b>Display</b>	23.8 inch Full HD IPS anti-glare display, minimum 1920 × 1080
<b>RAM</b>	Minimum 24 GB DDR5 RAM, Expandable upto 64 GB
<b>Storage</b>	Minimum 512 GB PCIe NVMe SSD, 1 TB preferred
<b>Camera / Audio</b>	Integrated HD / 5 MP webcam with privacy shutter, microphone and speakers
<b>Connectivity</b>	Wi-Fi 6 / Wi-Fi 6E, Bluetooth 5.2 or higher, Gigabit LAN
<b>Ports</b>	USB Type-C, USB Type-A, HDMI, RJ-45, audio ports
<b>Operating System</b>	Genuine Windows 11 Pro
<b>Warranty</b>	Minimum 3 years onsite OEM warranty

### Item 3: HP Latest Intel Core i7 Tower Desktop / Workstation

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Preferred Model</b>	HP Pro Tower 400 G9 / HP Elite Tower 800 Series / HP Z2 Tower G9 or latest equivalent
<b>Chipset</b>	Q series or higher

<b>Processor</b>	Intel Core i7 14th Generation / Intel Core Ultra 7 or higher
<b>RAM</b>	Minimum 16 GB DDR5 RAM, expandable to 64 GB or higher
<b>Storage</b>	Minimum 1 TB PCIe NVMe SSD with provision for additional HDD / SSD
<b>Graphics</b>	Integrated Intel Graphics; optional NVIDIA RTX / T-series GPU as required
<b>Operating System</b>	Genuine Windows 11 Pro
<b>Expansion</b>	PCIe expansion slots for graphics / network / capture cards
<b>Networking</b>	Integrated Gigabit Ethernet LAN; Wi-Fi 6 / Wi-Fi 6E preferred
<b>Warranty</b>	Minimum 3 years onsite OEM warranty

#### Item 4: HP Intel Core i9 Tower Server / High-End Tower Workstation System

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Preferred Model</b>	HP Z2 Tower / HP Z4 Tower / HP Workstation Tower Series or latest equivalent
<b>Processor</b>	Intel Core i9 14th Generation or higher
<b>RAM</b>	Minimum 32 GB DDR5 RAM, expandable to 128 GB or higher
<b>Storage</b>	Minimum 1 TB PCIe Gen 4 NVMe SSD + 2 TB HDD / SSD or provision
<b>RAID</b>	RAID support preferred; hardware RAID preferred
<b>Graphics</b>	NVIDIA RTX series graphics card, minimum 8 GB or higher
<b>Network</b>	Minimum Gigabit Ethernet LAN, dual LAN preferred
<b>Operating System</b>	Windows 11 Pro / Windows 11 Pro for Workstations / Windows Server compatible
<b>Warranty</b>	Minimum 3 years onsite OEM warranty

#### Item 5: HPE ProLiant Tower Server

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Preferred Model</b>	HPE ProLiant ML30 Gen11 / ML110 Gen11 or latest equivalent
<b>Processor</b>	Intel Xeon latest generation server processor
<b>RAM</b>	Minimum 32 GB ECC DDR5 RAM, expandable to 128 GB or higher
<b>Storage</b>	Minimum 1 TB NVMe / SSD boot drive with additional storage provision

<b>RAID</b>	Hardware RAID controller supporting RAID 0/1/5/10
<b>Network</b>	Minimum dual Gigabit Ethernet ports
<b>Management</b>	HPE iLO remote management
<b>Power Supply</b>	Redundant power supply preferred
<b>Warranty</b>	Minimum 3 years onsite OEM warranty

#### Item 6: Professional LED Monitors

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Screen Size</b>	21.5 inch to 22 inch or higher
<b>Panel / Resolution</b>	IPS panel, Full HD 1920 × 1080
<b>Refresh / Brightness</b>	Minimum 75 Hz preferred; minimum 250 nits
<b>Connectivity</b>	HDMI, DisplayPort / VGA as required
<b>Eye Care</b>	Flicker-free, low blue light, TÜV certification preferred
<b>Warranty</b>	Minimum 3 years onsite / replacement warranty

#### Item 7: Laser Multifunction Printers – HP 4104DW Network Enabled

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Functions</b>	Print, Scan, Copy
<b>Printing</b>	Monochrome laser, minimum 40 ppm, automatic duplex
<b>Scanner</b>	Flatbed-Duplex Scanning with ADF, minimum 50 sheets
<b>Connectivity</b>	USB, Gigabit LAN, Wi-Fi; mobile print support
<b>Duty Cycle</b>	80,000 pages per month
<b>Security</b>	Secure print, user authentication, TLS support preferred
<b>Warranty</b>	Minimum 1 year onsite OEM warranty; preference for 3 years

#### Item 8: Professional Business Laptops –HP ProBook 440 G11 /ProBook 4 G1i R Latest AI Series

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Processor</b>	Intel Core Ultra 7 / Intel Core i7 14th Gen or higher with NPU preferred
<b>RAM / Storage</b>	Minimum 16 GB DDR5; 1 TB PCIe Gen4 NVMe SSD
<b>Display</b>	14inch Full HD+ IPS anti-glare
<b>Security</b>	TPM 2.0, fingerprint reader, IR camera preferred
<b>Connectivity</b>	Wi-Fi 6E, Bluetooth 5.3, Thunderbolt 4 / USB-C
<b>Battery</b>	Minimum 8–10 hours under normal usage
<b>Warranty</b>	Minimum 3 years onsite OEM warranty
<b>Operating System</b>	Genuine Windows 11 Pro

**Item 9: Advanced Industrial 3D Printer**

Component / Parameter	Required Minimum Specification
Technology	FDM / CoreXY high-speed printing
Build Volume	Minimum 300 × 300 × 300 mm preferred
Layer Height	0.05 mm to 0.4 mm
Materials	PLA, ABS, PETG, TPU, carbon-fibre blends
Features	Auto bed levelling, filament sensor, heated / closed chamber preferred
Connectivity	Wi-Fi, USB, cloud / LAN support; camera preferred
Warranty	Minimum 1 year OEM warranty with installation and training

**Item 10: Digital Smart Podium**

Component / Parameter	Required Minimum Specification
Body	Heavy-duty lockable podium with wheels
Display	Minimum 21.5-inch interactive touch display
Integrated PC	Intel Core i5 / i7 mini-PC or OPS module
RAM / Storage	Minimum 8 GB RAM, 16 GB preferred; 256 GB SSD, 512 GB preferred
Audio	Built-in amplifier and speakers; wired / wireless microphone support
Connectivity	HDMI in/out, VGA, USB, USB-C, LAN, audio
Warranty	Minimum 3 years onsite warranty including installation, cabling and training

**Item 11: Interactive Flat Panel – 75 inch with OPS Module**

Component / Parameter	Required Minimum Specification
Display	75 inch 4K UHD 3840 × 2160 interactive display
Touch	40-point touch support (Android & Windows)
Glass / Brightness	Anti-glare toughened tempered glass; minimum 400 nits
Audio	Built-in speakers, minimum 2 × 20 W or better
OS / Software	Android 13 or latest; built-in whiteboard and wireless sharing
OPS Module	Intel Core i5 12th Gen, 16 GB RAM, 512 GB SSD, Windows 11 Pro
Warranty	Minimum 3 years onsite warranty; preference for 5 years

**Item 12: Antivirus and Endpoint Security Subscription**

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Licence Term</b>	Minimum 3 years
<b>Protection</b>	Antivirus, anti-malware, ransomware protection and EDR preferred
<b>Management</b>	Centralized cloud / on-premise console with reporting
<b>Compatibility</b>	Windows 10 / 11, Windows Server
<b>Support</b>	Vendor technical support and deployment assistance included

### Item 13: Microsoft Office Academic Licences

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Licence Type</b>	Microsoft 365 Education / Office 2021 LTSC Academic or latest
<b>Quantity</b>	As per tender requirement
<b>Applications</b>	Word, Excel, PowerPoint, Outlook, Teams, OneDrive as applicable
<b>Compliance</b>	Genuine Microsoft academic licence with documentation

### Item 14: AI Software Licences

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Software Type</b>	AI / ML / Robotics / STEM development software
<b>Components</b>	ML frameworks, IDEs, GPU drivers, dataset tools
<b>Licence Type</b>	Per-user / per-device / server-based
<b>Support</b>	Minimum 12 months updates and vendor support
<b>Training</b>	Basic user orientation to be included

### Item 15: Auditorium IT Infrastructure Upgradation / AMC

<b>Component / Parameter</b>	<b>Required Minimum Specification</b>
<b>Display System</b>	LED wall / projector / large display as per site requirement
<b>Audio System</b>	Line array / professional speakers, amplifier, DSP, microphones and mixer
<b>Control / Cabling</b>	Centralized touch panel preferred; structured AV cabling and CAT6A backbone
<b>Rack / AMC</b>	AV rack with power management; preventive maintenance and emergency support
<b>Warranty / AMC</b>	Minimum 1–3 years equipment warranty and optional 3–5 years AMC with SLA

## **2. Additional Tender Conditions for Specific HP Models**

1. The bidder must quote HP original business-class models only wherever HP-specific models are mentioned.
2. The bidder must clearly mention exact HP model number, part number and configuration.
3. The bidder must attach official HP datasheet / brochure / OEM webpage printout for each quoted HP model.
4. The quoted model must be available on the official HP website at the time of submission.
5. No assembled, refurbished, discontinued or end-of-life model shall be accepted.
6. Warranty must be verifiable on the official HP support website through serial number.

## **3. General Technical Conditions**

7. All items must be brand new, genuine, latest generation and OEM packed.
8. The bidder must mention exact make, model number, part number and country of origin for each quoted item.
9. The quoted price must include supply, transportation, loading, unloading, installation, testing, commissioning and training.
10. All electrical and data cabling work must be neat, labelled and properly dressed.
11. The final acceptance shall be subject to successful inspection and testing by the school technical committee.

## **4. Warranty and Support Conditions**

12. Warranty must be provided by the OEM / authorized service partner.
13. Onsite warranty shall be mandatory for desktops, laptops, workstations, servers, interactive panels, smart podiums and networking equipment.
14. The warranty period shall start from the date of successful installation and acceptance by the school.
15. During warranty, all defective parts shall be replaced free of cost.
16. Response time should preferably be within 24 working hours and resolution within 3–5 working days.

## **5. Installation, Testing and Commissioning**

17. Installation shall be carried out at the school premises as per instructions of the school authority.
18. All systems must be installed with genuine operating system and required drivers.
19. Servers must be configured with RAID, OS, network and management access as required.
20. All items shall be tested in the presence of the school technical committee.
21. The bidder shall submit installation report, testing report and commissioning certificate.

## **6. Documents to be Submitted by Bidder**

22. Company registration certificate, GST registration certificate and PAN card copy.
23. OEM authorization certificate (Ink signed by OEM Authorized Manager), wherever applicable.
24. Product datasheets / brochures and compliance sheet against each specification.
25. Warranty undertaking and undertaking that quoted products are new and genuine.
26. Price bid, delivery schedule, service support details and escalation matrix.

## **7. Important Tender Conditions**

27. The school reserves the right to accept or reject any quotation without assigning any reason.
28. The lowest quotation may not necessarily be accepted.
29. Rates quoted should remain valid for minimum 60–90 days.
30. All disputes shall be subject to Patiala jurisdiction.
31. The school reserves the right to split the order among multiple vendors.

## 8. Compliance Sheet Format

S. No.	Item Name	Required Specification	Offered Specification	Make & Model	Part Number	Complied Yes/No	Remarks
1	HP 280 G9 Desktop PC – Intel Core i3 14th Generation	As per tender					
2	HP ProStudio 4 All-in-One G1i 23.8 inch Desktop AI PC	As per tender					
3	HP Latest Intel Core i7 Tower Desktop / Workstation	As per tender					
4	HP Intel Core i9 Tower Server / High-End Tower Workstation System	As per tender					
5	HPE ProLiant Tower Server	As per tender					
6	Professional LED Monitors	As per tender					
7	Laser Multifunction Printers – Network Enabled	As per tender					
8	Professional Business Laptops - ProBook	As per tender					

	Latest AI Series						
9	Advanced Industrial 3D Printer	As per tender					
10	Digital Smart Podium	As per tender					
11	Interactive Flat Panel – 75 inch with OPS Module	As per tender					
12	Antivirus and Endpoint Security Subscription	As per tender					
13	Microsoft Office Academic Licences	As per tender					
14	AI Software Licences for STEM Labs	As per tender					
15	Auditorium IT Infrastructure Upgradation / AMC	As per tender					

### 9. Declaration by Bidder

We hereby certify that all items quoted by us are brand new, genuine, latest generation and as per the technical specifications mentioned in the tender document. We also confirm that the supplied items shall be covered under OEM warranty and shall be supported during the warranty period. We agree to all terms and conditions of the tender. We further certify that the quoted products are not refurbished, reconditioned, end-of-life, end-of-sale or discontinued models.

Signature of Bidder: \_\_\_\_\_

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Company Name: \_\_\_\_\_

Company Seal: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_