#### GOVERNMENT OF PUDUCHERRY ABSTRACT

Information Technology Secretariat – Procurement and AMC of IT Equipment through the Government e-Marketplace (GeM) – Revised Guidelines – Orders Issued.

#### DIRECTORATE OF INFORMATION TECHNOLOGY

G.O.Ms.No.652/DIT/D1/2025/

Puducherry, dated 15.03.2025

#### Read:

 I.D.Note P.13031/40/2024 dt.27.02.2025 of Directorate of Information Technology, Puducherry.

#### ORDER:

- 1. As per Rule 149 of GFR 2017, all Departments, Offices, Autonomous Institutions, Boards, Corporations, and Societies must procure IT equipment, including computers and accessories, exclusively through the Government e-Marketplace (GeM) portal (https://gem.gov.in).
- 2. Due to rapid technological advancements, IT equipment specifications frequently change. To ensure procurement aligns with current standards, **all previous circulars** on this matter are **hereby superseded**.
  - Procurement conforming to these revised guidelines does not require:
    - Technical clearance from this Directorate.
    - Rate Reasonability Certificate (RRC).
    - Inspection by this Directorate.
  - Officials from this Directorate are not required to be part of purchase committees for procurement via GeM, including Annual Maintenance Contracts (AMC), provided the process follows these guidelines.
- 3. The Information Technology Manual for the procurement of Desktops, Laptops, Printers, Scanners, and UPS systems, prepared by the Puducherry e-Governance Society, is now published and available at <a href="https://dit.py.gov.in/">https://dit.py.gov.in/</a>. All departments shall adhere to this manual henceforth. Model procurement exercises may be referred to if needed. For any clarifications, guidance, or support, departments may contact this Directorate.
- 4. The revised Standard Technical Specifications for commonly used IT equipment are provided in Annexure I. Procurement must comply with GFR Rule 21, Delegation of Financial Powers, and Finance Department guidelines.
- 5. The Ministry of Electronics and Information Technology (MeitY) updated the technical specifications for Desktop Computers and Laptops (W-43/4/2020-IPHW dated 19.08.2024). Based on work requirements, utilization, and mobility, **Desktop Computers and Laptops** are categorized into three levels as follows:

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### SI. No. Category / Level Pay Band / Grade Pay (as per 7th CPC)

1 Seament I / Entry Upto Level 7 (\$\frac{7}{4600})

2 Segment II / Mid Level 8 (24800) and above

3 Segment III / High-End Professionals / Developers

Departments shall procure Desktop Computers and Laptops based on the above categorization. Any deviation requires approval from the **Administrative Secretary** and concurrence from the **Finance Department**.

- 6. Technical clearance from this Directorate applies only to IT equipment and related peripherals. Procurement of EPABX systems, CCTV, and similar equipment must be justified departmentally and processed per GFR norms with the approval of the Administrative Secretary and Finance Department concurrence.
- 7. The need for an **Annual Maintenance Contract (AMC)** is integral to IT hardware procurement after the completion of the warranty period. When inviting bids for IT equipment through the GeM portal, the additional cost for an extended warranty period should also be obtained as a separate component. An extended warranty covering the equipment's lifespan would eliminate the need for separate AMC services. Price comparisons should be made using the **Life Cycle Costing (LCC)** method as per Finance Department's ID Note No. 635/FD/F3/2021-22 dated 22.11.2021, further supplemented by FD's OM No. 635/FD/2022 dated 01.09.2022, regarding discount rate determination for estimating **Net Present Value (NPV)**. Extended warranty coverage for the AMC period based on LCC principles should be sought unless unavailable for a particular IT equipment. The revised AMC guidelines are provided in **Annexure-II**.
- 8. Any **IT/ITeS hardware** requirements beyond those covered under **Annexure I** must be referred to this Directorate, along with requisite justification, for technical clearance and to the Finance Department for financial concurrence before proceeding with procurement.
- 9. The **lifespan of IT hardware**, except servers, shall be considered seven years for LCC purposes. IT products should be maintained under an extended warranty or separate AMC (if extended warranty is unavailable) for this period as per the rate norms outlined in Para 7. If the systems remain functional beyond seven years and the AMC vendor agrees to continue under the same terms and conditions, the AMC may be extended accordingly.
- 10. The **AMC rate** (whether obtained as extended warranty cost or separately priced) shall not exceed 6% of the actual purchase cost for computer systems, accessories, and UPS (except servers). The actual purchase cost excludes additional warranty, antivirus software, freight charges, handling costs, and GST. For CCTV, EPABX, FAX, LAN active components (switch, modem, etc.), and servers, the AMC amount shall not exceed 8% of the actual purchase cost. Passive LAN components (CAT cables, I/O outlets, etc.) are not included in AMC. AMC payments shall be made in four equal installments (25% each) upon completion of each quarter, subject to downtime penalty deductions.



- 11. **UPS system** specifications are provided in Annexure I. When inviting bids for online UPS systems, split-up rates for the battery bank and UPS system should be obtained. Only the UPS system shall be considered for AMC purposes.
- 12. Offices should share **printers and scanners** rather than assigning individual devices. Multifunctional printers may be procured and placed in a common area, even if physical rooms are separate.
- 13. While inviting bids for procurement of any IT equipment, bid-specific terms and conditions, could be added by the procuring entity, based on its specific needs. In this regard, the Departments could refer to <a href="https://gem.gov.in/additional-terms-and-conditions">https://gem.gov.in/additional-terms-and-conditions</a> for guidance. Some important terms and conditions that could be included as the buyer added additional terms and conditions in the bid are reproduced below:
  - Scope of Supply: Bid. price includes all cost components, including Supply, Installation, Commissioning, Testing of Goods, and Training of operators and providing required Statutory Clearances (if any).
  - (ii) Commencement of Warranty shall be the date on which installation is completed.
  - (iii) Extended warranty for the complete life cycle of 7 years may be sought. Alternatively, capital cost, including normal warranty plus AMC cost may be taken and assessed on an LCC basis.
  - (iv) Certificates: The seller shall upload a certificate certifying that the hardware and the software being offered do not contain any Embedded Malicious code that would inhibit the designed functions of the equipment, cause physical damage, etc.
- (v) Manufacturing date: The manufacturing date of the hardware shall not be more than three months from the date of supply<sup>1</sup>.

#### (vi) Service & Support:

- a) Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location. If the service center is not already there at the time of bidding, the successful bidder/OEM shall have to establish one within 30 days of the award of the contract. Payment shall be released only after the submission of documentary evidence of having a Functional Service Centre.
- Escalation Matrix for Service Support: Bidder/OEM must provide Escalation Matrix along with timeline, contact persons, mobile number, address, and e-mail for Service Support.
- c) Deficient Service: In case of deficiency in service to resolve the complaints in a pre-specified time, a penalty may be imposed on the supplier as specified in the bid document, and/or the supplier/service provider may be blacklisted.

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<sup>&</sup>lt;sup>1</sup>In this rapidly changing technological environment, this clause would ensure that stable, improved, and latest version of IT hardware is supplied.

- 14. Departments should **consolidate IT equipment requirements** from all offices under their administrative control on a half-yearly basis (1st April and 1st October) before tendering to secure bulk discounts. Ad-hoc procurements shall not be entertained.
- 15. Departments requiring Routers and Switches for network connectivity may contact the Director (IT).
- 16. **Inventory details** of IT/ITeS hardware, including new procurements, shall be reported to this Directorate biannually (1st April and 1st October) as per **Annexure III.**
- 17. Guidelines on **e-Waste Rules**, 2016, issued by the Puducherry Pollution Control Committee, are available at <a href="https://dste.py.gov.in/ppcc/waste%20management.html">https://dste.py.gov.in/ppcc/waste%20management.html</a>.
- 18. This order is issued with the concurrence of the Finance Department, Puducherry, vide I.D.No.E-20077/FC/FD/F3/A3/2024-25 dated 27.02.2025.

/By Order/

(SHIVRAJ MEENA) DIRECTOR (IT)

- 1. All Secretaries/ Secretariat Departments
- 2. All HODs/Heads of Autonomous Bodies
- 3. All SAOs/JAOs for ensuring faithful compliance
- 4. District Collector, Karaikal, Regional Administrator, Mahe and Yanam
- 5. The Dy. Accountant General, O/o the AG (Audit), Tamil Nadu and Puducherry, Puducherry Branch

#### Copy to:

The P.S. to the Chief Secretary

#### Standard Technical Specifications for Procurement of Computer Hardware and other IT Equipments

#### Note:

1. To ensure a clear understanding, desktop computers and laptops are classified into three levels—Entry (SegmentI), Mid (Segment II), and High-End (Segment III)—based on work requirements, utilization, and mobility. The detailed specifications for each category are outlined below:

SI. No.	Category / Level	Officials under Grade Pay as per CPC 7	Processor
1	Segment I / Entry	Pay Band Upto Level 7 (i.e 4600)	Intel Core i3 / AMD Ryzen 3
2	Segment II / Mid	Pay BandLevel 8. (i.e 4800)& above	Intel Core i5 / AMD Ryzen 5
3	Segment III / High- End	Professionals/ Developers	Intel Core i7 / AMD Ryzen 7

2.To ensure compliance with licensing regulations and strengthen cybersecurity, it is recommended that all desktop computers and laptops used in Government departments be pre-loaded or pre-installed with genuine, up-to-date licensed software, including Microsoft Office Professional and antivirus solutions, wherever required. This initiative aims to enforce the exclusive use of licensed software across all Government systems, ensuring legal adherence, data security, and operational reliability.

#### 1.1.ENTRY LEVEL (Segment - I) - Desktop Computers

SI. No	Parameters	Specifications
1.	Processor	Intel Core i3 (or) AMD Ryzen 3
2.	Processor Generation	12th Generation or latest
3.	Chip set	Intel H610 or B660 (or) AMD B520 or B550
4.	RAM	Size :16GB DDR4 or higher
5.	RAM Expandability	Upto 32GB
6.	Storage	512 GB M.2 NVMeSSDor Higher
7.	Graphic Card	Integrated
8.	Operating System	Windows 11 Professional /LINUX (Factory Pre-loaded)
9.	DIMM Slots	2 or higher
10.	Internal Bays	1 or higher
11.	External Bays	1 or higher
12.	Cabinet	SFF / Mini Tower / Mid Tower
13.	Network Connectivity	1 x Gigabit Ethernet
14.	Expansion Slots (PCle x 1)	1 or higher nos.
15.	Expansion Slots (PCIe x 16)	1 or higher nos.
16.	USB Port 2.0	2 or higher nos.
17.	USB Port 3.0/3.1 Gen 1 ports or better	6 or higher nos.
18.	HDMI	1
19.	No. of Display port	1



20.	Display Type	LED
21.	Display Size	21" or higher
22.	Monitor Resolution	1920 x 1080 Pixels or better
23.	Monitor Certification	TCO 8.0 or higher
24.	No. of VGA/DP ports in Monitor	1
25.	No. of HDMI ports in Monitor	1
26.	Keyboard	Of same OEM Make with Minimum 104 keys
27.	Mouse	Of same OEM Make with Optical 2/3 Button
28.	In-built Speakers	Yes
29.	Wireless Network Adapter	Yes
30.	Audio Jacks	To connect headphones, external speakers, mic, etc.
31.	Optical Drive	Optional
32.	Camera (External)	Optional, 720p or Higher
33.	Bluetooth	Optional, If Yes, v 5.0 or higher
34.	Warranty	Onsite and Comprehensive warranty for minimum Five years from OEM/Vendor, the detailed Technical Specifications of the mode with images should be available of OEM/Vendor website for verification. The part numbers/machine serial number with make and model of all items of the BOM of offered mode should be available for cross verification and to be mentioned in invoice of the seller, after sales support shall be confirmed from the OEM/Vendor side.
35.	ROHS Compliance	Yes
36.	BEE / Energy star for the given Model	Yes
37.	Security Management	Trusted Platform Module TPM 2.0 Embedded chip

### 1.2.MID LEVEL - (Segment - II) - Desktop Computers

SI. No	Parameters	Specifications
1.	Processor	Intel Core i5(or) AMD Ryzen5
2.	Processor Generation	12th Generation or latest
3.	Chip set	Intel B760 / H770 (or)AMD B550 Chipset
4.	RAM	Size :16GB DDR4 or higher
5.	RAM Expandability	Upto 32GB
6.	Storage	512 GB M.2 NVMeSSDor Higher (Expandable up to 1TB)
7.	Graphic Card	Integrated
8.	Operating System	Windows 11 Professional /LINUX (Factory Pre-loaded)
9.	DIMM Slots	2 or higher
10.	Internal Bays	1 or higher
11.	External Bays	1 or higher
12.	Cabinet	SFF / Mini Tower / Mid Tower
13.	Network Connectivity	1 x Gigabit Ethernet
14.	Expansion Slots (PCle x 1)	1 or higher nos.
15.	Expansion Slots (PCle x 16)	1 or higher nos.
16.	USB Port 2.0	2 or higher nos.
17.	USB Port 3.0/3.1 Gen 1 ports or better	6 or higher nos.
18.	HDMI	1
19.	No. of Display port	1
20.	Display Type	LED



21.	Display Size	21" or higher
22.	Monitor Resolution	1920 x 1080 Pixels or better
23.	Monitor Certification	TCO 8.0 or higher
24.	No. of VGA/DP ports in Monitor	1
25.	No. of HDMI ports in Monitor	1
26.	Keyboard	Of same OEM Make with Minimum 104 keys
27.	Mouse	Of same OEM Make with Optical 2/3 Button
28.	In-built Speakers	Yes
29.	Wireless Network Adapter	Yes
30.	Audio Jacks	To connect headphones, external speakers, mic, etc.
31.	Optical Drive	Optional
32.	Camera (External)	Optional, 720p or Higher
33.	Bluetooth	Optional, If Yes, v 5.0 or higher
34.	Warranty	Onsite and Comprehensive warranty for minimum Five years from OEM/Vendor, the detailed Technical Specifications of the mode with images should be available or OEM/Vendor website for verification. The part numbers/machine serial number with make and model of all items of the BOM of offered mode should be available for cross verification and to be mentioned in invoice of the seller, after sales support shall be confirmed from the OEM/Vendor side.
35.	ROHS Compliance	Yes
36.	BEE / Energy star for the given Model	Yes
37.	Security Management	Trusted Platform Module TPM 2.0 Embedded chip

# 1.3.MID LEVEL (Segment – II) Laptop

SI. No	Parameters	Specifications
1.	Processor	Intel Core i5(or) AMD Ryzen5
2.	Processor Generation	12th Generation or latest
3.	Chip set	Intel 700 Series (or) AMD B50
4.	RAM	Size :16GB DDR4 or higher
5.	RAM Expandability	Upto 32GB
6.	Storage	512 GB M.2 NVMeSSDor Higher (Expandable up to 1TB)
7.	Graphic Card	Integrated
8.	Operating System	Windows 11 Professional /LINUX (Factory Pre-loaded)
9.	Ports	2x USB-C, 2x USB 3.2, HDMI, 3.5 mm Combo Audio Jack, RJ-45
10.	Display Type	LED, Non-Touch
11.	Display Size	14" or higher
12.	Display Resolution	1920 x 1080 Full HD or better
13.	Keyboard& Touchpad	Backlit keyboard with Touchpad and Numpad (Optional)
14.	In-built Speakers, Mic, Camera	Integrated Microphone 720p or 1080p HD Camera Stereo Speakers with Dolby Audio
15.	Connectivity	Wi-Fi 6E, Bluetooth 5.2, 1 x Gigabit Ethernet
16.	Battery Life	Integrated Battery with minimum 6-8 Hours or Higher
17.	Battery Warranty	3 Years



18.	Warranty	3-Years onsite comprehensive warranty
19.	ROHS Compliance	Yes
20.	BEE / Energy star for the given Model	Yes
21.	Security Management	Trusted Platform Module TPM 2.0 Embedded chip

### 1.4.HIGH-END LEVEL (Segment - III) Desktop Computers

SI. No	Parameters	Specifications
1.	Processor	Intel Core i7(or) AMD Ryzen7
2.	Processor Generation	12th Generation or latest
3.	Chip set	Intel Z790 / B760 (or) AMD B650 / X670
4.	RAM	Size :16GB DDR5 or higher
5.	RAM Expandability	Upto64GB
6.	Storage	1TB M.2 NVMeSSDor Higher
7.	Graphic Card	Integrated / Dedicated
8.	Operating System	Windows 11 Professional /LINUX (Factory Pre-loaded)
9.	DIMM Slots	2 or higher
10.	Internal Bays	1 or higher
11.	External Bays	1 or higher
12.	Cabinet	SFF / Mini Tower / Mid Tower
13.	Network Connectivity	1 x 2.5G Ethernet Port
14.	Expansion Slots (PCle x 1)	1 or higher nos.
15.	Expansion Slots (PCle x 16)	1 or higher nos.
16.	USB Port 2.0	2 or higher nos.
17.	USB Port 3.0/3.1 Gen 1 ports or better	6 or higher nos.
18.	HDMI	1
19.	No. of Display port	1
20.	Display Type	LED
21.	Display Size	21" or higher
22.	Monitor Resolution	1920 x 1080 Pixels or better
23.	Monitor Certification	TCO 8.0 or higher
24.	No. of VGA/DP ports in Monitor	1
25.	No. of HDMI ports in Monitor	1
26.	Keyboard	Of same OEM Make with Minimum 104 keys
27.	Mouse	Of same OEM Make with Optical 2/3 Button
28.	In-built Speakers	Yes
29.	Wireless Network Adapter	Yes
30.	Audio Jacks	To connect headphones, external speakers, mic, etc.
31.	Optical Drive	Optional
32.	Camera & Microphone(External)	Optional, Camera1080p HD or better Microphone with Al Noise Cancellation
33.	Bluetooth	Optional, If Yes, v 5.0 or higher
34.	Warranty	Onsite and Comprehensive warranty for minimum Five years from OEM/Vendor, the detailed Technical Specifications of the model with images should be available on OEM/Vendor website for verification. The part numbers/machine seria number with make and model of all items of the BOM of offered model should be available for cross verification and to be mentioned in invoice of the seller, after sales support shall be confirmed from the OEM/Vendor side.



35.	ROHS Compliance	Yes
36.	BEE / Energy star for the given Model	Yes
37.	Security Management	Trusted Platform Module TPM 2.0 Embedded chip

# 1.5.HIGH END LEVEL (Segment - III) Laptop

SI. No	Parameters	Specifications
1.	Processor	Intel Core i7(or) AMD Ryzen7
2.	Processor Generation	12th Generation or latest
3.	Chip set	Intel HM570 / Intel 500 Series(or) AMD Ryzen 7 7XXX Series with AMD 6000/7000
4.	RAM	Size :16GB DDR4 or higher
5.	RAM Expandability	Upto64GB
6.	Storage	1 TB M.2 NVMeSSDor Higher
7.	. Graphic Card	Integrated
8	Operating System	Windows 11 Professional /LINUX (Factory Pre-loaded)
9.	Ports	2x USB-C, 2x USB 3.2, HDMI, 3.5 mm Combo Audio Jack, RJ-45
10.	Display Type	LED, Non-Touch
11.	Display Size	14" or higher
12.	Display Resolution	1920 x 1080 Full HD or better
13.	Keyboard& Touchpad	Backlit keyboard with Touchpad and Numpad (Optional)
14.	In-built Speakers, Mic, Camera	Integrated Microphone 720p or 1080p HD Camera Stereo Speakers with Dolby Audio
15.	Connectivity	Wi-Fi 6E, Bluetooth 5.2, 1 x Gigabit Ethernet
16.	Battery Life	Integrated Battery with minimum 6-8 Hours or Higher
17.	Battery Warranty	3 Years
18.	Warranty	3-Years onsite comprehensive warranty
19.	ROHS Compliance	Yes
20.	BEE / Energy star for the given Model	Yes
21.	Security Management	Trusted Platform Module TPM 2.0 Embedded chip

### 1.6.- Printer

### 1.6.1. Printer

SI. No	Parameters	Specifications
1.	Print Technology	Laser / Ink
2.	Type of Printing	Mono / Colour
3.	Paper Size	A4 / Legal
4.	Print Speed (Mono /	20 PPM or higher
	Colour)	Colour: Minimum 15 ppm
5.	Duplex Feature	Optional
6.	Network Connectivity	Yes
7.	USB Port	Yes
8.	Duty Cycle	Minimum 5000 per month
9.	Warranty	Minimum 3 years Onsite warranty
10.	Wireless Connectivity	Optional



### 1.6.2. A4 – Ink Tank MF Printer with Network and Duplex

SI. No	Parameters	Specifications
1.	Function	Print, Scan, Copy
2.	Paper Size	A4, A5, A6, B5, Legal, Letter, Custom Sizes
3.	Print Technology	Inkjet with Integrated Ink Tank System
4.	Print Speed	Monochrome (Black & White): Minimum 20 ppm
		Colour: Minimum 15 ppm
5.	First Page Out	Black: ≤10 seconds
		Colour; ≤20 seconds
6.	Print Resolution	Minimum 1200 x 1200 dpi
7.	Print Colour	Monochrome and Full Colour (CMYK)
8.	Print Languages	PCL 6, PCL 5c, HP GL/2, PostScript Level 3 emulation
9.	Duplex Printing	Automatic Duplex (Two-Sided Printing)
10.	Copy Speed	Monochrome: Up to 22 copies per minute (CPM)
		Colour: Up to 10 CPM
11.	Scan File Format	PDF, JPEG, PNG, TIFF, BMP
12.	Automatic Document Feeder (ADF) / RADF	Optional
13.	Connectivity	Wired: USB 2.0, Ethernet (10/100 Mbps)
		Wireless: Wi-Fi (802.11 b/g/n), Wi-Fi Direct
14.	Input Capacity	Paper Tray: Minimum 250 sheets
15.		ADF: Minimum 20 sheets
16.	Power Supply	Voltage: 100-240V AC, 50/60 Hz
		Consumption: Operational ≤20W, Standby ≤1W
17.	Wireless Printing	Apple Air Print, Google Cloud Print, Mopria Certification, Manufacturer-specific App Support
18.	Warranty	2-3 years onsite comprehensive warranty with extended options available
19.	Certificate	ENERGY STAR®, BIS (India), ISO 14001:2015 (Environmental Management), ISO 9001:2015 (Quality)

# 1.6.3. A4 Laser Jet Tank MF Printer with Network and Duplex

SI. No	Parameter	Specifications	
1.	Function	Print, Copy, Scan	
2.	Paper Size	A4, A5, A6, B5, Letter, Legal, Executive, Envelope (C5 DL),	
3.	Print Technology	LaserJet tank technolo	gy
4.	Print Speed	Black & white	Minimum 25 ppm
		Colour (if applicable)	Minimum 15 ppm
5.	First Page Out	Black & white	≤ 7 Seconds
		Colour (if applicable)	≤10 Seconds
6.	Print Resolution	Up to 1200 x 1200 dpi	
7.	Print Colour	Monochrome (Black & White) or Colour (Based on Model)	
8.	Print Languages	PCL 6, PCL 5, Postscr	ipt 3, PDF, XPS
9.	Duplex Printing	Automatic Duplex Print	ing
10. Copy Speed		Black & white	Up to 25 CPM
		Colour (if applicable)	Up to 18 CPM
11.	Scan File Format	PDF, JPEG, PNG, BMP, TIFF	



12.	Automatic Document Feeder / RADF	Optional	
13.	Connectivity	USB 2.0, Ethernet (10/100 Mbps), Wi-Fi (802.11 b/g/n), Wi-Fi Direct	
14.	Input Capacity	Standard Tray	Minimum 250 sheets
15.	15.	Manual Feed	1 sheet
		Output Tray	Minimum 100 sheets
16.	Power Supply	Voltage	220-240V AC, 50/60 Hz
		Power Consumption	Operating: ≤ 400W Standby: ≤ 1W Sleep Mode: ≤ 0.5 W
17.	Wireless Printing	Apple Air Print, Google Cloud Print, Mopria Certified, Dedicated App Support	
18.	Warranty	2-3 years onsite warranty with extended options available	
19.	Certificate	ENERGY STAR, Blue Angel Certified, RoHS Compliant	

### 1.6.4. A3 Mono Laser Multifunction Copier-cum-Printer with Network and Duplex

SI. No	Parameters	Specifications	
1.	Function	Print, Copy, Scan	
2.	Paper Size	A3, A4, A5, A6, B4, B5; Legal, Letter, Executive, Folio; Custom: 98 mm x 148 mm to 297 mm x 431.8 mm	
3.	Print Technology	Laser (Monochrome); High-speed single-pass engine	
4.	Print Speed	A3: Minimum 10 ppm     A4: Minimum 22 ppm	
5.	First Page Out	Less than 6.5 seconds (from ready mode)	
6.	Print Resolution	1200 x 1200 dpi	
7.	RAM Memory	Minimum 512 MB	
8.	Print Colour	Monochrome (Black & White)	
9.	Print Languages	PCL 6, PCL 5, PostScript 3, PDF Direct Print	
10.	Duplex Printing	Automatic (Standard)	
11.	Copy Speed	<ul> <li>A3: Up to 10 CPM</li> <li>A4: Up to 22 CPM;</li> </ul>	
12.	Scan File Format	PDF, JPEG, PNG, TIFF, XPS	
13.	Automatic Document Feeder / RADF	Optional	
14.	Connectivity	Gigabit Ethernet (10/100/1000 Mbps); USB 2.0/3.0 Host USB for direct printing	
15.	Wireless Printing	Optional modules: Wi-Fi Direct, Apple Air Print, Google Cloud Print, Mopria Certified	
16.	Input Capacity	Standard Tray: Minimum 200 sheets; Multipurpos Tray: 100 sheets; Expandable up to 2,000 sheets	
17.	Power Supply	Voltage: AC 220–240V, 50/60 Hz; Power Consumption: ≤600 W (Operation), ≤1.5 W (Sleep Mode)	
18.	Warranty	2-3 years onsite warranty with extended options available	



19. Certifications		Environmental: ENERGY STAR®, EPEAT®, RoHS compliant; Safety and Emissions: CE, FCC, UL certified	
20.	Stand	Optional - For heavy load Printer	

### 1.7.Scanner

### 1.7.1. Flat bed Scanner

SI. No	Parameters	Specifications	
1,	Scan Technology	CCD (Change Coupled Sensor)	Devices) or CIS (Contact Image
7		Optical Resolution	2400 x 4800 dpi or higher
2.	Scanning	Enhanced Resolution	Up to 9600 x 9600 dpi
	Resolution	Hardware Resolution	1200 x 2400 dpi (min)
		Colour	10-20 sec per page
3.	Scan Speed	Monochrome	5-10 sec per page
		High Resolution	60-120 sec per page
		A4 (210 mm x 297 mm	)
4.	Scanning Area	A3 (297 mm x 420 mm	)
		Legal (216 mm x 356 n	nm)
5.	Scan Depth	Colour Depth	48-bit internal, 24-bit external
5.	Scan Depui	Grayscale Depth	16-bit internal, 8-bit external
6.	Scan File format	JPEG, TIFF, PNG, PDF, BMP, GIF, PICT, JPG2000 etc.     OCR Support for text extraction (Optional)	
7.	Connectivity	<ul> <li>USB: USB 2.0 or USB 3.0</li> <li>Wi-Fi: Available in some models</li> <li>Cloud: Google Drive, Dropbox, etc.</li> <li>Software Integration: Adobe Acrobat, OCR tools</li> </ul>	
8.	Display and Control panel	Control Panel: Physical buttons or touchscreen     LCD Display: For settings and scan status	
9.	Operating System	Windows 7, 8, 10, 11 (32/64-bit)     Linux	
10.	Colour Management	Built-in calibration tools     ICC Profile Support for professional application     Colour correction & enhancement via software	
11.	Scan Feature	Auto Document Feeder (Optional)     Automatic Image Correction     Instant preview scan	
12.	Power Supply	Voltage	AC 100-240V, 50/60 Hz
13.	Warranty	2-3 Year onsite comprehensive warranty with extende warranty options available	
14.	Use Case	Scanning photographs, contracts, legal documents, artwork     Suitable for high-quality scans of various document types and sizes	



### 1.7.2. Sheet Fed Scanner:

SI. No	Parameters	Specifications	
1.	Scan Technology	Contact Image Sensor (CIS) or Charge Coupled Device (CCD)	
1.	Ocan reciniology	LED light source with minimal warm-up time	
		Automatic duplex scanning	
2.	Scanning	Optical: Minimum 600 x 600 dpi	
	Resolution	Enhanced: Up to 1200 dpi	
		Simplex: Minimum 25 pages per minute (ppm)	
3.	Scan Speed	Duplex: Minimum 10 images per minute (ipm)	
		Auto Document Feeder (ADF): Minimum 50 sheets (Optional)	
,	C	Maximum: A4 (8.5 x 11.7 inches)	
4.	Scanning Area	Minimum: Business card (2 x 3.5 inches)	
		Colour Depth: 24-bit	
5.	Scan Depth	Grayscale Depth: 8-bit	
0.	Court Doptin	Monochrome: 1-bit	
6.	Scan File Format	PDF (searchable and non-searchable), JPEG, PNO TIFF, BMP	
	Connectivity	USB 3.0, Ethernet (optional), Wi-Fi (optional)	
7.		Mobile connectivity via iOS/Android apps	
		Integrated LCD screen (minimum 2 inches)	
0	Display and	Scan-to-PC/USB/Cloud options	
	Control Panel	Customizable scan profiles and multi-language support	
_	3	Compatibility: Windows, macOS, Linux	
9.	Operating System	Driver Availability: TWAIN, WIA, and ISIS	
10	Colour	ICC Profile Support	
10.	Management	Automatic and manual colour calibration options	
		Built-in OCR (Optical Character Recognition)	
11.	Coop Footures	Auto page size and alignment detection	
11.	Scan Features	Image enhancement (skew correction, colour adjustment, de-speckling)	
12.	Power Supply	Input Voltage: 100–240V AC, 50/60Hz	
13.	Warranty	2-3 Year onsite comprehensive warranty with extended warranty options available	
		Office environments for document digitization	
14.	Use Case	Archival purposes for certificates and contracts	
		Workflows require high-speed, reliable scanning	
15.	Certifications	ENERGY STAR®, RoHS, FCC, CE	
10.	Sertifications	LINEITO TAINO, NOTIO, FOO, CE	



### 1.8. Uninterrupted Power Supply (UPS)

### 1.8.1. Model: 0.6 KVA Offline UPS

SI. No	Parameters	Specifications	
Electri	ical Parameters		
1.	Capacity	600 VA / 300 W	
2.	Input Voltage	Nominal: 230V AC, Operating Range: 140V At to 300V AC	
3.	Input Frequency	45-55 Hz (Autosensing)	
4.	Output Voltage	Nominal: 230V AC ± 10% (on battery)	
5.	Output Frequency	50 Hz ± 1 Hz (on battery mode)	
6.	Waveform Type	Simulated sine wave	
7.	Automatic Voltage Regulation (AVR)	Boost and buck modes to handle low and high voltages	
Backu	p and Battery		
8.	Backup Time	Minimum 10 minutes (at 50% load, ~150 W)	
9.	Battery Type	Sealed lead-acid, maintenance-free	
10.	Battery Capacity	12V, 7Ah or 12V, 9Ah (depending on model)	
11.	Recharge Time	4-6 hours to 90% capacity	
12.	Battery Replacement	User-replaceable, hot-swappable	
Protec	tion Features		
13.	Surge Protection	Built-in surge suppressor (up to 310 Joules)	
14.	Overload Protection	Automatic shutdown during overload conditions	
15.	Short Circuit Protection	Circuit breaker or internal fuse	
16.	Low Battery Alarm	Audible alert for low battery and overload conditions	
17.	Safety Standards	Complies with IEC/EN 62040-1	
Enviro	nmental Parameters		
18.	Operating Temperature	0°C to 40°C	
19.	Humidity	0-90% non-condensing	
20.	Noise Level	≤ 40 dB at 1 meter	
Design	n and Build		
21.	Indicator/Display	LED or LCD for power status, battery status, and fault conditions	
22.	Outlets	2-3 battery-backed output sockets	
Interfa	ice		
23.	Connectivity	USB or RS232 for monitoring and management (optional)	
Efficie	ncy		
24.	Normal Mode Efficiency	≥ 95%	
25.	Battery Mode Efficiency	~80%	
Warra	nty and Support		
26.	Warranty	2-3 years (UPS)	
27.	Support	On-site service or carry-in to authorized service centers	
28.	Certificate	ISO 9001, ISO 14001	
29.	Battery Certificate	EMC, RoHS Compliance, BIS	



### 1.8.2. Model: 1 KVA Online Double Conversion UPS

SI. No	Parameters	Specifications		
Backup time		1KVA Online (30 min Backup) (or) 1KVA Online (1 Hr. Backup)		
Electrical Parameters				
1.	Capacity	1000 VA / 900 W		
2.	Input Voltage	180-260 V(AC)		
3.	Input Frequency	50 Hz ± 5%		
4.	Output Voltage	220V ± 1%		
5.	Output Frequency	50 Hz ± 0.1%		
6.	Waveform Type	Pure sine Wave		
7.	Automatic Voltage Regulation (AVR)	Yes, With buck and boost functionality		
Backu	p and Battery			
. 8.	Battery Type	Sealed lead-acid or Lithium - Ion		
9.	Battery Capacity	7 Ah -9Ah (or)9 Ah – 12 Ah		
10.	Recharge Time	4-6 hours(or)6-8 hours		
11.	Battery Replacement	User-replaceable, hot-swappable		
Protec	tion Features			
12.	Surge Protection	With high surge tolerance		
13.	Overload Protection	Automatic shutdown during overload conditions		
14.	Short Circuit Protection	Automatic Shutdown		
15.	Low Battery Alarm	Audible alert for low battery		
16.	Safety Standards	CE, UL, RoHS		
Enviro	nmental Parameters			
17.	Operating Temperature	0°C to 40°C		
18.	Humidity	0-90% non-condensing		
19.	Noise Level	≤ 45 dB		
Desig	and Build			
20.	Indicator/Display	LED or LCD for power status, battery status, and fault conditions		
21.	Outlets	4-6 battery-backed, 1-2 surge-only outlets		
Interfa	ce			
22.	Connectivity	USB, Serial Port, SNMP (optional)		
Efficie				
23.	Normal Mode Efficiency	>90%		
24.	Battery Mode Efficiency	>85%		
Warra	nty and Support			
25.	Warranty	2-3 years (UPS)		
26.	Support	On-site service or carry-in to authorized service centers		
27.	Certificate	CE, UL, RoHS		
28.	Battery Certificate	EMC, RoHS Compliance, BIS		



### 1.8.3. Model: 3 KVA Online UPS

SI. No	Category	Specifications			
Backup time		3KVA Online (30 min Backup) (or)3KVA Online (1Hr. backup) (or)3KVA online (2 Hr. Backup)			
Electr	Electrical Parameters				
1.	Capacity	3000VA / 2700 W			
2.	Input Voltage	180V to 270V			
3.	Input Frequency	50 Hz 10%			
4.	Output Voltage	220V 1%			
5.	Output Frequency	50 Hz 0.1 %			
6.	Waveform Type	Pure Sine Wave			
7.	Automatic Voltage Regulation (AVR)	Yes			
Backu	p and Battery				
. 8.	Battery Type	Sealed lead-acid or Lithium - Ion			
9.	Battery Capacity	9 Ah -12Ah (or)12 Ah - 18 Ah(or)18 Ah - 24 Ah			
10.	Recharge Time	4-6 hours(or)6-8 hours(or) 8-10 hours			
11.	Battery Replacement	User-replaceable, hot-swappable			
	tion Features				
12.	Surge Protection	With high surge tolerance			
13.	Overload Protection	Automatic shutdown during overload conditions			
14.	Short Circuit Protection	Automatic Shutdown			
15.	Low Battery Alarm	Audible alert for low battery			
16.	Safety Standards	IEC, CE, UL, ISO 9001			
Enviro	onmental Parameters				
17.	Operating Temperature	0°C to 40°C			
18.	Humidity	0-90% non-condensing			
19.	Noise Level	≤ 45 dB			
Desig	n and Build				
20.	Indicator/Display	LED or LCD for power status, battery status, and fault conditions			
21.	Outlets	4-6 battery-backed, 1-2 surge-only outlets			
Interfa	ice				
22.	Connectivity	USB, RS232, Network Port			
Efficie		1 2 2 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			
23.	Normal Mode Efficiency	88% - 94%			
24.	Battery Mode Efficiency	85% - 90%			
Warra	nty and Support				
25.	Warranty	2-3 years (UPS)			
26.	Support	On-site service or carry-in to authorized service centers			
27.	Certificate	CE, UL, RoHS, ISO 9001			
28.	Battery Certificate	ISO 9001, CE			



### 1.8.4. Model: 5 KVA Online UPS

SI. No	Parameters		Specifications	
Backup time		(or)5KVA Onlin	30 min Backup) ne (1 Hr. Backup) e (2Hr. Backup)	
Electr	ical Parameters			
1.	Capacity	5000VA / 4000	W	
2.	Input Voltage	160V to 300V		
3.	Input Frequency	50 Hz 10%		
4.	Output Voltage	220V 1%		
5.	Output Frequency	50 Hz 0.1 %		
6.	Waveform Type	Pure Sine Wave	)	
7.	Automatic Voltage Regulation (AVR)	Yes		
Backu	p and Battery			
8.	Battery Type .	Sealed lead-acid	d or Lithium - Ion	
9.	Battery Capacity	7 Ah -9Ah (or) 12 Ah - 14 Ah(or)24 Ah - 28 A		24 Ah - 28 Ah
10.	Recharge Time		8 hours(or)8-10 h	
11.	Battery Replacement	User-replaceable, hot-swappable		-
Protec	tion Features			
12.	Surge Protection	With high surge tolerance		
13.	Overload Protection	Automatic shutdown during overload conditions		ad conditions
14.	Short Circuit Protection	Automatic Shutdown		
15.	Low Battery Alarm	Audible alert for low battery		
16.	Safety Standards	IEC, CE, UL, ISO 9001		
Enviro	onmental Parameters			
17.	Operating Temperature	0°C to 40°C		
18.	Humidity	0-95% non-con	densing	
19.	Noise Level	40 dB - 50 dB	45 dB – 55 dB	50 dB - 60 dB
Desig	n and Build			
20.	Indicator/Display	LED or LCD		
21.	Outlets	6 - 8 battery-bac	cked	
Interfa	ice			
22.	Connectivity	USB, RS232, SI	NMP	
Efficie	ency			
23.	Normal Mode Efficiency	92%-95%		
24.	Battery Mode Efficiency	88%-90%		
_	nty and Support			
25.	Warranty	2-3 years (UPS)		
26.	Support	On-site service or carry-in to authorized service centres		
27.	Certificate	CE, UL, RoHS, ISO 9001		
28.	Battery Certificate	ISO 9001, CE, F	RoHS	



# 1.8.5. Model: 6 KVA Online UPS

SI. No	Parameters	Specifications	
Backup time		6KVA Online (30 min Backup) (or)6KVA Online (1Hr. Backup) (or) 6KVA online(2Hr. Backup)	
Electr	ical Parameters		
1.	Capacity	6000VA / 4000 W	
2.	Input Voltage	160V to 280V AC	
3.	Input Frequency	50 Hz ± 10%	
4.	Output Voltage	220V ±1%	
5.	Output Frequency	50 Hz / 60 Hz	
6.	Waveform Type	Pure Sine Wave	
7.	Automatic Voltage Regulation (AVR)	Yes	
Backu	ip and Battery		
8.	Battery Type	Sealed lead-acid or Lithium - Ion	
9.	Battery Capacity	12 Ah -24Ah (or) 24 Ah – 36 Ah(or) 36 Ah – 48 Ah	
10.	Recharge Time	4-6 hours (or) 6-8 hours (or) 8-10 hours	
11.	Battery Replacement	User-replaceable, hot-swappable	
Protec	ction Features		
12.	Surge Protection	With high surge tolerance	
13.	Overload Protection	Automatic shutdown during overload conditions	
14.	Short Circuit Protection	Automatic Shutdown	
15.	Low Battery Alarm	Audible alert for low battery	
16.	Safety Standards	IEC, CE, UL, ISO 9001	
	onmental Parameters	F CAR TO THE CAR TO TH	
17.	Operating Temperature	0°C to 40°C	
18.	Humidity	0–95% non-condensing	
19.	Noise Level	40 dB – 60 dB	
	n and Build		
20.	Indicator/Display	LED or LCD	
21.	Outlets	6 - 10 battery-backed	
Interfa	ice		
22.	Connectivity	USB, RS232, SNMP	
Efficie	ency	*	
23.	Normal Mode Efficiency	92% - 94%	
24.	Battery Mode Efficiency	85% - 88%	
Warra	nty and Support		
25.	Warranty	2-3 years (UPS)	
26.	Support	On-site service or carry-in to authorized service centres	
27.	Certificate	CE, UL, RoHS, ISO 9001	
28.	Battery Certificate	ISO 9001, CE, RoHS	

#### 1.8.6. Model: 10 KVA Online UPS

SI. No	Parameters	Specifications	
Backup Time		10 KVA Online (60 min Backup) (or) 10 KVA Online (2 Hr. Backup) (or) 10 KVA online (4 Hr. Backup)	
Electr	ical Parameters		
1.	Capacity	10000VA	
2.	Input Voltage	220V ± 20%	
3.	Input Frequency	50 Hz ± 10%	
4.	Output Voltage	220V ±1%	
5.	Output Frequency	50 Hz ± 0.1%	
6.	Waveform Type	Pure Sine Wave	
7.	Automatic Voltage Regulation (AVR)	Yes	
Backu	p and Battery		
8.	Battery Type	Sealed lead-acid or Lithium - Ion	
9.	Battery Capacity .	120 Ah x 2 (or)240 Ah x 2 (or) 480 Ah x 2	
10.	Recharge Time	6-8 hours (or) 6-8 hours (or) 8-10 hours	
11.	Battery Replacement	User-replaceable, hot-swappable	
Protec	tion Features		
12.	Surge Protection	1500 Joules	
13.	Overload Protection	Automatic shutdown at 110%–150% of rated load	
14.	Short Circuit Protection	Automatic Shutdown	
15.	Low Battery Alarm	Audible alert for low battery	
16.	Safety Standards	IEC, CE, UL, ISO 9001	
Enviro	nmental Parameters		
17.	Operating Temperature	0°C to 40°C	
18.	Humidity	0-95% non-condensing	
19.	Noise Level	40 dB –60 dB	
Desig	n and Build		
20.	Indicator/Display	LED or LCD	
21.	Outlets	6 - 10 battery-backed	
Interfa	ce		
22.	Connectivity	USB, RS232, SNMP	
Efficie			
23.	Normal Mode Efficiency	>92	
24.	Battery Mode Efficiency	>88%	
	nty and Support		
25.	Warranty	2-3 years (UPS)	
26.	Support	On-site service or carry-in to authorized service centres	
27.	Certificate	CE, UL, RoHS, ISO 9001	
		IEC 60896, UL 1989	



#### **GUIDELINES FOR AMC**

- 1. The comprehensive AMC of IT equipments shall be provisioned through GeM with the date of commencement and the date of expiry of the contract specifically mentioned in the contract.
- 2. The **on-site comprehensive AMC**, covering both preventive as well as corrective maintenance of IT infrastructure shall be procured. The AMC may be entered with those vendors/ service providers who are having their service center at the place of service or to those vendors/ providers who shall be ready to commit to open their office at the place of service within a month of issue of the work order.
- 3. **Preventive Maintenance** activity shall include updating of service packs, drivers and operating system patches, physical clearance and testing of equipments, carrying out system diagnostic tests and taking requisite remedial action, point-to-point connectivity test, etc. At least one preventive maintenance activity should be scheduled every quarter during the maintenance period.
- 4. Under **corrective maintenance**, any defects in the IT equipments shall be rectified, and all defective components of IT equipments necessary for normal operation, except consumables such as cartridges, drum kits, batteries, etc. shall be replaced. The AMC vendor shall replace the defective products/ parts with similar or higher make/ configurations of respective OEM products/ parts.
- 5. The AMC vendor shall provide a **Service Escalation Matrix** with contact details (escalation hierarchy along with timeline, contact persons, mobile number, address, and e-mail) through which the Department/ Organization shall contact for AMC support.
- 6. The Vendor shall have a **proper complaint callregistration** procedure for logging complaint, follow-up etc., and provide traceability of all complaints from registration to call clearance; The vendor shall issue a customer service slip after every service visit, clearly indicating the time of call by the user Department, time of attendance of the fault by the AMC Vendor, nature of fault observed and whether cleared or not, If further observation needed, it would be given in writing whether the normal usage could be continued along with the details of subsequent visit for observation, closure of call, clearance of fault and any other relevant information.
- 7. **Downtime will be recorded** for faults/complaints pending beyond the prescribed time of **Table 1** after the registration of complaints by the user Department with the AMC Vendor. The AMC holder shall give a unique complaint registration number and such relevant details as to the registration process leading to timely clearance of faults within the prescribed time. For complaints pending more than the prescribed time, a downtime record will be created by the user department and a prorata deduction of the penalty amount will be affected for payments due to the AMC vendor at the end of every quarter for the number of days the computer systems was not available for use from the call registration date.



#### 8. Table 1 - Downtime Penalty:

S.No.	Type of Computer / Equipment	Downtime - Penalty
1.	If equivalent standby is given within 24 hours, DOWNTIME is NIL	"NIL" Penalty
2.	Laptop/ Desktop Computers	☐500 per day after 48 hours for every day/part thereof.
3.	Printers, Scanners, Multi-functional printers, Multimedia Projector, EPABX, Fax, Offline UPS, Digital Copier, etc.	□250 per day after 48 hours for every day/part thereof.
4.	Servers	□2000 per day after 48 hours for every day/part thereof.
5.	UPS Downtime	□300 per day after 48 hours for every day/part thereof.
6.	For computer, printer, UPS systems at Bill Collection Centres, Hospital Registration Counters, DAT counters	□500 per day after 24 hours for every day/ part thereof.

9. The IT equipments (computers, printers, scanners etc.) identified as critical for functioning shall be specifically included in the AMC contract as a separate clause, and lower downtime for them may be prescribed.

#### 10. Downtime Details Form

(i) Office Name and Location : (ii) AMC Vendor name :

(iii) AMC Vendor Local Address :

(iv) AMC Vendor Office Address : (v) Phone / Mobile Numbers :

(vi) Email-id

(vii) AMC Period – Start Date: End Date :

Type of Computer Equipment Name, make & Model	Equipment S.No.	Fault reporting date and time	Docket No. maintained in Maintenance Register	Fault Clearance Date	Downtime >48 hours or part thereof (in Days)	Penalty (□)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- 11. All the complaints need to be also sent to the AMC vendor through email. The date and time of such complaints should be recorded and mentioned in the above table.
- 12. This contract does not cover the damages to the equipment if occurred due to natural calamities, such as lightning, flood, electrical short circuit, physical damage, and rat bites.

(SHIVRAJ MEENA) Director (IT)

# Proforma for Inventory Details of IT / ITeS Hardware Equipments (Half Yearly Basis i.e. 1<sup>st</sup> April And 1<sup>st</sup> October of Every Financial Year)

#### 1. Name of the Department:

2. Type of action (New procurement / Inventory / Items condemned) (Please tick the right option):

New procurement - Any new procurement in the last six months

Inventory – Total equipments inventory as of 1st April / 1st October, including new purchase

Item condemned - Details of items condemned (or) pending condemnation (Please include remarks about the exact stage of condemnation)

SI. No	Name of the IT Equipment	Quantity	Make and Model	Specifications				Date of	Remarks
				Processor	RAM	HDD capacity	SSD capacity	Purchase	
1.	2	3	4	5	6	7	8	9	10
1.	Desktop Computer								
2.	Laptop								

SI.No.	Name of the IT Equipment	Quantity	Make and Model					
				Print Technology (Laser / Ink/ Dot matrix)	Type of Machine (Multifunctional or not)	Type of Printing (Mono / Colour)	Date of Purchase	Remarks
1	2	3	4	5	6	7	8	9
3.	Photocopier							
4.	Printer							

SI. No.	Name of the IT Equipment	Quantity	Make & Model	Type and size (Sheet fed / flat bed / Integrated both) (A4 / Legal)	Date of Purchase	Remarks
5.	Scanner					
S. No.	Name of the IT Equipment	Quantity	Type / Capacity of UPS (Standalone / Centralised)	Battery Capacity and Quantity of Batteries	Date of Purchase	Remarks
6.	UPS		Standby / Centralised			
333	Any other item					