TECHNICAL SPECIFICATIONS
FOR <u>DISTRICT HOSPITAL</u>
<u>AFTER PRE-BID</u>

INDEX

G1. (a) High End Desktop Computer

DESCRIPTION	Minimum Requirement
Mandatory Certification(s)	ISO 9001 Manufacturer, Microsoft Windows, DMI 2.0 compliance and support, Energy Star 5, UL certification
Processor	Intel Core i3 530 or higher
Core / Thread	2 Core / 4 Thread or higher
Clock Speed	2.93 GHz or higher
Cache	4 MB L2 or higher
Chipset	Intel H55 **Express** Chipset or above
Memory	2 GB DDR3 RAM 1066 MHz Upgradeable up to min. 16 GB
HDD	250 GB SATA 7200 HDD or higher
Monitor	18.5" Wide TFT Monitor or higher TCO'03 Certified
Keyboard	OEM Mechanical Key board
Mouse	Two button Optical Scroll Mouse board
Optical Device	DVD ROM
Cabinet	Micro ATX / ATX
USB	Min. 6 USB (min. 2 in front) latest version.
Network Features	10/100/1000 LAN Controller
Ports	Minimum 1 Serial, 1 Parallel and PS/2 for key board & Mouse
Multimedia	Integrated Audio Controller
Dust Cover	Quality dust cover for Monitor, CPU, Keyboard, Mouse
Antivirus	McAfee /Symantec Anti Virus with 1 years subscription with media and license
Warranty	On site comprehensive warranty for 3 yrs.

G1. (b) Low End Desktop Computer

DESCRIPTION	Minimum Requirement
Mandatory Certification(s)	ISO 9001 Manufacturer, Microsoft Windows, DMI 2.0 compliance and support, Energy Star 5, UL certification
Processor	Intel(R) Core(TM) 2 Duo Processor E7500 (2.93GHz/1066FSB/3M L2 cache) or higher
Chipset	Intel® G41 Express Chipset or higher
Memory	2GB (1x2GB) DDR3 1333MHz SDRAM Memory Upgradeable up to 4 GB
HDD	250 GB SATA 7200 HDD or higher
Monitor	18.5" Wide TFT Monitor or higher TCO'03 Certified
Keyboard	OEM Mechanical Key board
Mouse	Two button Optical Scroll Mouse board
Optical Device	DVD ROM
Cabinet	Micro ATX/ATX
USB	Min. 6 USB (min. 2 in front) latest version.
Network Features	10/100/1000 LAN Controller
Ports	Minimum 1 Serial, 1 Parallel
Multimedia	Integrated Audio Controller
Dust Cover	Quality dust cover for Monitor, CPU, Keyboard, Mouse
Antivirus	McAfee /Symantec Anti Virus with 1 years subscription with media and license
Warranty	On site comprehensive warranty for 3 yrs.

G2. (a) Workstation Xeon Based

DESCRIPTION	Minimum Requirement
Mandatory Certifications	ISO 9001 Manufacturer, Should be certified on the supplied OS version, UL certification
Processor	1 x **Intel Xeon E5503 (4M Cache/ 2.00 GHz / 4.80 GT/s Intel Qpi) or higher**
Chipset	Intel 5500
Ram/Main Memory	16 GB DDR3 Registered ECC 1066 MHz Expendable to 32 GB
Hard Disk Capacity & Type	4 x 146 GB Hot swappable 10K/15K RPM SAS
Form Factor	Rack Mountable
RAID Controller	Dual Channel Hardware Raid Controller with 256 MB cache
Monitor / Display Unit	18.5" Wide TFT Monitor or higher TCO'03 Certified
Networking	2 x 10/100/1000 Mbps
Mouse With Pad	Two button optical scroll mouse
Keyboard	OEM Mechanical Key board
Bays	6 Nos. of Hot swappable bays
Free PCI Slots	Min. 2 PCI express
Ports	4 USB port, 1 serial port, 1 VGA
Power Supply	Redundant Power Supply
Optical & external Storage	Internal latest DVD RW
Operating System & Proxy Software	Latest RHEL Standard **Edition with Three Years premium subscription support**
Power Management	Screen blanking, hard disk and system idle mode in power on, set up password, power supply surge protected and automatic server reboot.
Warranty	On site comprehensive warranty for 3 yrs.

G2. (b) Workstation Rack Specifications

42U Rack 600X1000 mm with front glass door, rear MS steel door, Vertical Cable Manager (1), fan tray with 04 fans or higher (1), 720mm depth heavy duty shelf (1), Keyboard Tray (1), 10 socket vertical PDU (1), with KVM Switch for two workstations, On site comprehensive warranty for 3 yrs.

G3. (a) 800 VA Line Interactive UPS

DESCRIPTION	Minimum Requirement
Mandatory Certification	ISO 9001 Series Manufacturer, Valid Test Certificate from any Govt. Approved Test/Certifying Agency on Tendered Specs.
Capacity	800 VA
Input	120 V TO 260 V
Output	PF 0.6
Battery Make	Exide, Panasonic, Amar Raja, HBL Nife, Sunshine, Global Yuasa, ProStarM, Amco
Battery Backup	30 minutes on full load
Cables	With necessary cable and plug
Wave form	Pure sine Wave Out put on battery mode , 220 +/- 7%
Warranty	Warranty - 3 Years on UPS & 2 yrs. on Batteries

G3. (b) 10 KVA ONLINE UPS

DESCRIPTION	Minimum Requirement
Mandatory Certification	ISO 9001 Series Manufacturer, Valid Test Certificate from any Govt. Approved Test/Certifying Agency on Tendered Specs.
Capacity	10 KVA True Online
Technology	IGBT based PWM High Frequency Technology above 20 KHz
Input Range	400 V +- 20%
Output Voltage & Waveform	230 + 1% Pure Sine Wave with Isolation Transformer in output of UPS
Power Factor Output	0.8
Input	≥ 0.93
Battery Backup	Two Hours on Full Load (**at least 24000 VAH**)
Mains & Battery	Sealed Maintenance Free Battery (with battery rack), Mains & Battery Isolation With necessary indicators, alarms and protection
Battery Make	Exide, Panasonic, Amar Raja, HBL Nife, Sunshine, Global Yuasa, ProStarM, Amco
Input Frequency	45-55 Hz
Out Put Frequency	50 Hz
Crest Factor	min. 3:1
Harmonic Distortion	< 3%
Overall Efficiency	Min. 92% on full Load
Noise Level	< 55 db
Cables	With all necessary cables & plug
Over Load Capacity	125% for 10 min. & 150% for 1 min.
LCD Display	Build in LCD display for displaying all requisite UPS & battery parameters for both input and output
Bypass	Both manual & static bypass switch should be provided
Others	Inbuilt APFC
	Fully Digital Microprocessor Based
	Input Current Harmonic Distortions Less than 10%
	SNMP Enabled
	Input three phase, output single phase
Warranty	Warranty - 3 Years on UPS & 2 yrs. on Batteries

G3. (c) 1 KVA ONLINE UPS

DESCRIPTION	Minimum Requirement
Mandatory Certification	ISO 9001 Series Manufacturer, Valid Test Certificate from any Govt. Approved Test/Certifying Agency on Tendered Specs.
Capacity	1 KVA True Online
Technology	IGBT based High Frequency PWM above 20 KHz
Input Range	230 V +- 25%
Output Voltage And Waveform	230 +- 1% Pure Sine Wave with Isolation Transformer in output of UPS
Power Factor Output	0.8
Input	≥0.94
Battery Backup	One Hour on full load (**at least 1512 VAH**)
Mains & Battery	Sealed Maintenance free battery (with MS battery Rack), Mains & Battery Isolation With necessary indicators, alarms and protection
Battery Make	Exide, Panasonic, Amar Raja, HBL Nife, Sunshine, Global Yuasa, ProStarM, Amco
Input Frequency	45- 55 Hz
Out Put Frequency	50 Hz

Crest Factor	min. 3:1
Third Harmonic Distribution	< 3%
Overall Efficiency	Min. 90% on full Load
Noise Level	< 55 db
Cables	With all necessary cables & plug
Over Load Capacity	125% for 10 min. & 150% for 1 min.
LCD Display	Built in display for all requisite UPS & battery parameters for both input and output
By Pass	Both manual & static bypass switch should be provided
Others	Inbuilt APFC
	Fully Digital Microprocessor Based
	Input Current Harmonic Distortions Less than 10%
	SNMP Enabled
Warranty	Warranty -3 Years on UPS & 2 yrs. On Batteries

G4. (a) 9 Pin 80 Column DMP printers

Description	Minimum Requirement
Pin	9 Pin
Columns	80 Column
High Speed Draft	500 CPS at 12 CPI
Draft	400 CPS at 10 CPI
Copies	1 + 5
Interface	Parallel & USB
Input Buffer	64 Kb or higher
Drivers	Win OS and Linux
Print head (Million Strokes / wire)	Min. 400
Ribbon (Million Characters)	Min. 7.5
MTBF (POH)	10000 or higher
Warranty	On site comprehensive warranty for 3 yrs.

G4. (b) 24 Pin 136 Column DMP printers

Description	Minimum Requirement
Pin	24 Pin
Columns	132 Column or higher
Print speed CPS	Min. 400 at High Speed Draft 10 CPI/ Min. 300 at Draft 10 CPI
Support	Hindi font support
Tractor type	Push, Pull & friction
Copy capability	Min. 1+4
Ribbon Life	Min. 8 Million characters
Input Buffer	Min. 100 KB
Reliability	Min. 20,000 POH
Print Direction	Bi-Directional
Interface	Parallel & USB (Both Parallel & USB Cables are to be provided)
Drivers	Win OS and Linux
Warranty	On site comprehensive warranty for 3 yrs.

G4. (c) Laser Printer

Description	Minimum Requirement
Print Speed	21 ppm (A4) or higher
Print Resolution	600X600 dpi or higher
Duplex	Optional

Interface	USB & power cable
Memory	Min. 8 MB
OS	All Win OS & Linux
Warranty	On site comprehensive warranty for 3 yrs.

G4. (c) Laser Network Multi Function Printer

DESCRIPTION	Minimum Requirement
Print speed	22 ppm (A4) or higher
Print Resolution	600 x 600 dpi or higher
Duty cycle (monthly)	8000 pages or higher
Duplex print option (A4)	Yes
Features	Print, Copy, Scan & Fax
Network Enabled	Yes
Energy Star	Yes
Standard memory	Min. 32 MB
Compatible operating systems	All Win OS & Linux
Accessories	USB & power cable
Warranty	On site comprehensive warranty for 3 yrs.

G7. (a) Bar Code Printer

DESCRIPTION	Minimum Requirement
Printing Technology	Thermal Transfer
Print Speed	2 ips
Print Width	105 mm (4.09")
Print length	1000 mm (39.33")
Ribbon	With ARCP- Automatic Ribbon Control & Positioning System – For Wrinkle free printing by automatic ribbon tension control
Label Sensor Type	Fully adjustable Sensor with Label gap, card notch & reflective black mark
Label Roll Capacity	Internal - 125 mm OD External - 200 mm OD
Memory	Flash - 2 MB DRAM - 6 MB
Interface	RS-232/Centronics Parallel Port, USB
Bar Code	1D barcodes: Min. 12 standard barcodes
	2D barcodes : Min. PDF-417, Maxicode, Datamatrix
Media Type	Roll-fed, Fanfold, Continuous, Die cut, black mark, ticket, tag
Media Width	1" to 4.1"
Cables & Interfaces	All necessary cables & interfaces for connectivity to Mains & computer.
Others	Should come with drivers (on CD/DVD) for Windows and Linux OS
Warranty	On site comprehensive warranty for 3 yrs.

G7. (b) Bar Code Reader

DESCRIPTION	Minimum Requirement
Scanner Type	Linear Imager
Light Source:	Red LED 610-650 nm
Scan Rate	270 reads/sec
Working Distance	From contact to 12" on 100%U.P.C./EAN Symbols
Print Contrast	15% minimum reflective difference
Roll (Tilt):	+/- 45 degrees
Pitch	+/- 65 degrees

Skew (Yaw):	+/- 60 degrees
Interface	USB / Keyboard wedge cable
Decode capability	Auto discriminates all standard 1D codes including GS1 DataBar, GS1 Data Bar Stacked; GS1 Data Bar Stacked Omni directional; GS1 Data Bar Expanded Stacked;
Weight	< 250 gm
Power Source	Host power or External Power supply (through Mains / Battery box)
Others	Should come with drivers (on CD/DVD) for Windows and Linux OS
Warranty	On site comprehensive warranty for 3 yrs.

G5. DG Set for Server Room 15 KVA specification :

- Diesel Engine: **air** cooled, four stroke electric start, **multi** cylinder **suitable** BHP
- Alternator: Synchronous alternator **brushless single bearing** 15 KVA suitable for continuous operation at 1500 rpm developing 415 volts, Three phase, 50 Hz, Four wire system.
- Standard AMF panel **(PLC based)** with power circuit, Automatic start/stop of the Genset in the case of AC mains failure and its restoration respectively; Set of indicators show load on DG / mains / Fault and battery charger **& bypass changeover switch of 63 Amp. 4-Pole.**
- Engine and alternator to be coupled on a common channel iron fabricated base frame.
- Fuel tank: fuel tank of 100 lit capacity, fabricated from 14 SWG sheet
- Metal complete with drain valve, inlet and outlet connection.
- Sound proof enclosure with canopy.
- To supply all accessories required for installation and commissioning.
- Fabrication of suitable foundation of DG set
- Onsite warranty for at least One Year.
- Installation and Performance demonstration at the site.
- The installation & commissioning of DG set shall also include the work of Earthing (GI Plate – 4 nos.) as per ISI specifications, Providing & Laying GI earth strip (25*3mm) between DG set & earthing, P&L 25 sqm 4 core PVC insulated Al. conductor armoured cable from DG set to server room (average length required shall be approx. 30 mtr., which may vary as per site conditions)
- Diesel Engine Makes: Cummins, Penta-volvo, Caterpillar, Ashok Leyland , KOEL
- Alternator Makes: Stampford, Leroy-somer, Kiloskar-green, CG, KEC, SAME or as per engine manufacture's standard make.
- CPCB approved

G6. (a) Computer Table

1.1   Size of the Table: 1200 X 750 x 750 mm [LxWxH]

Structure Design:
The table shall be supplied in Knock down condition for easy transportation.
Table top, shelves, drawer, vertical member, , top and bottom sections, joining members at the top, modesty, panel foot rest, key board tray etc. shall all be supplied with necessary joinery and detailed instructions to assemble.
The design be such that the user can assemble the table at his end.
The frame shall comprise of one hollow rectangular MS section of size: 50x25mm of 1.6mm thickness.

Top and bottom sections shall be welded at the rear end with a vertical member to form a stand for both sides

The vertical section shall be of C-section size: 110x22mm, 1.2mm thick with ends turned in by 20mm, made out of CRC steel sheet, conforming to IS 513-94 to accommodate cable and wire management of the computer.

Modesty Panel of size 200x17mm, 0.8mm thick shall suitably join the two side stands at the top. A foot rest of MS C-section of size 50x25mm and 1.2mm thick shall join the side stands at the bottom on the front end.

Four, level-adjusters shall be provided on the bottom of the table for an adjustment up to 10mm.

Modesty panel and the footrest shall be joined to the side stands with suitable joinery, which makes the structure firm when assembled at site.

Shelf shall be of full width with suitable end fittings made from minimum 2mm thick MS steel sheet to be mounted on the two vertical members. The vertical members shall be provided slots for assembly and for adjusting the height of shelf in steps of 32mm

The drawer shall be of size: 225x500x100mm provided with end fittings made from minimum 2mm thick MS Steel Sheet and mounted on the under side of the top at the right hand with the help of suitable brackets made from minimum 2mm thick MS Steel Sheet.

Key board tray shall be of size 530x500mm

All exposed steel sections shall be painted with powder coating

All the particle Board fixtures shall be made from pre-laminated particle board conforming to grade-II Type-II of IS: 12823-90

All specified dimensions are approximates ones (within 10%)

G6. (b) Computer Chair

Providing & supply of Standard Computer chair with PP arm with permanent back contact.

Size:-

Height of Chair	: 825mm minimum to 950mm maximum.
Overall Width of Chair	: 600mm minimum to 650 maximum.
Depth of Chair	: 600mm minimum to 650 maximum.
Seat height	: 400mm minimum to 460mm maximum.

1.1.1.1 Seat and Back:-

1.1.1.2 Half back and seat made up of minimum12mm thick hot pressed plywood BWR grade type AA to IS: 303 with molded polyurethane foam of 45 + 2 kg / m3 and hardness of 20+ 2 kg. and minimum thickness of 50mm.

Fabric:-

The fabric shall be 100% polyester filament yarn in 550 Denier, 25M2 + 7.5% mass , 220 + 5% ends and picks per dm plain weave and minimum breaking strength of 190 kg on a specimen width in each direction.

TELESCOPIC BELLOW ASSEMBLY:
The bellow shall be three piece telescopic type in injection molded black polyurethane

PEDESTAL ASSEMBLY:
It shall be made of 5x50mm HR steel (IS: 1079) and fitted with 5 nos. twin wheel castors of minimum wheel diameter 50mm. The prongs shall be welded to a central bush made from ERW steel tube with 42.9mm and 60mm length maximum. The twin wheel castors shall be injection molded in glass filled black nylon.

All specified dimensions are approximates ones (within 10%)