



Phone: .0471-2386146  
web site: [www.ideku.net](http://www.ideku.net)

E-mail: [idekeralauniversity@gmail.com](mailto:idekeralauniversity@gmail.com)

## SCHOOL OF DISTANCE EDUCATION UNIVERSITY OF KERALA

University Senate House Campus, Palayam, Thiruvananthapuram—34

*(Established as University of Travancore by the Travancore University Act in 1937 and reconstituted as University of Kerala by the Kerala University Act of 1957 and presently governed by the Kerala University Act of 1974 passed by the Kerala State Legislative Assembly)*

JR/SDE/Purchase/2014

Thiruvananthapuram, 22.02.2014

### QUOTATION NOTICE

Competitive quotations are invited for the supply of following items for use in the School of Distance Education, University of Kerala. The required specifications for the item are appended herewith.

#### Requirements:

Sl. No.	Item	Units
1.	Desktop Machines	20 Nos.
2.	Laser Printer	10 Nos.
3.	Multifunction Printer	5 Nos.
4.	Scanner	5 Nos.
5.	5KV UPS	4 Nos.
6.	Card Printer	1 No.
7.	Server	1 No.
8.	Web & Application Server	1 No.

#### Specifications:

The detailed required specifications for above listed items are attached below:

## 1. Desktop System

Desktop PC powered by Intel 3<sup>rd</sup> generation core i3 processor, Intel MB, Intel chipset, 4 GB DDR3 RAM, 500 GB or above SATA HDD, Ethernet, wired KB and mouse, USB ports, 18 “ LED, DVD R/W, Ubuntu Linux preloaded, 3 year warranty

## 2. Laser Printer

Laser Printer, Monochrome, duplex up to 35 ppm, 1200 X 1200 dpi, High Speed, USB, Networking, A4, legal media, Duty Cycle 5000 pages/month, Linux compatible. 1 year warranty

## 3. Scanner

Digital flatbed scanner, 1200 X 1200 dpi, 256 gray levels, USB connectivity, front panel buttons, Linux OS compatible, one year warranty.

## 4. Multi Function Printer

Print Speed up to 25ppm 600 X 600 dpi, USB, Ethernet Connectivity Linux OS compatible, 128 MB Memory.

Scan speed above 40, 600 X 600 dpi or above,  
Network, ADF

Copier Speed 20 Cpm, 600 X 600 dpi, 50-200 % Zoom

## 5. Server

Parameter	Specifications
Processor	Server should be quoted with Single 6 core Processor Intel Xeon E5 – 2630 95W 2.3GHz
L3 Cache	15 MB
Chipset	Intel Chipset / OEM Chipset / Or Equivalent
Memory	Server should be configured with 16 GB memory PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMMs
DIMM Slots	Server should support 24 DIMM Slots
Memory Property	DDR3 Registered Memory with Active Memory Protection
Hard Disk Drives	2 * 300 GB, 2.5 in SFF 10 K 6Gbps HS SAS HDD. Server should support up to 82.5” SAS/SATA hard disk or Solid state drives.
RAID Controller	Integrated 6 Gbps SAS hardware RAID 0,1,10 and 5 .Raid controller should support on line Raid level migration, on line capacity expansion and data scrubbing as well. The server should be quoted with 512 MB Flash for RAID 5.
Optical Drive (Optional)	DVD – ROM
Graphics Controller	16 MB DDR2 – SDRAM
Gigabit Ethernet Ports	Integrated Two Gigabit Ethernet ports with full duplex /TCP/IP/Offload Engine(TOE)
PCI Slots	2 PCIe Slots
Blower	Server to be configured with Redundant and Hot Swappable Blowers
Redundant Power Supply	Server to be configured with Redundant Power Supplies

Fiber Channel	Server to be configured with 1 number of Dual Port 8Gbps Fiber Channel Adapters
Dimensions	Height:43 mm(1.7in),width:429 mm(16.9 in),depth:734 mm(28.9 in)
Form Factor	1U
Server Management	Server should support Management features as:
	Latest OS failure screen capture.
	Graphical console redirection over LAN
	Support for IPMI v2.0 complaint management software
	SSL(Secure Socket Layer) and LDAP(Lightweight Directory ACCESS Protocol) support
	Serial Over LAN
	Highly secure remote power on /off
	System reset control
	The server should be able to alert impending failures on maximum number of components. The components covered under alerting mechanism should atleast include Processors, memory, PCIe slots, VRMs, Power supplies, fans ,hard disk drives
Server Management	Should be able to discover systems and other resources in a heterogeneous environment and Collect inventory data about hardware and software that is currently installed on systems.
	Should be able to view and manage the status, problems and events for discovered systems.
	Should be able to determine the health, compliance and performance of managed systems by viewing detailed information about the problems by inspecting the event log
	Capable of automatically send the notifications for hardware events or when thresholds are exceeded
	Should have feature like update manager for detecting and viewing out-of-date systems and also get a notification when systems are in need of updates and which updates are needed. Download, distribute and install available and requisite updates.
	Should able to do the graphical remote control tools including VNC, RDP, and web-based remote control for AMM, ILO, IMM and RSA.
	Able to discover and work with virtualized environments including. Microsoft Virtual Server, VMware, and Xen. Capable of viewing topology that shows the connections between physical and virtual resources.
	Create automation plans based on events from virtual and physical resources and automation actions such as relocating a virtual server based on critical hardware alerts
	Ability to discover network devices and review network device inventory. Able to Monitor the health and status of network devices. View network device configuration settings, and apply templates to configure devices
	Management software should have upward integration with HP OpenView, Microsoft System Center Operations Manager, CA

## 6. Web & Application Server

Parameter	Specifications
Processor/CPU	Latest 64 bit server populated with 2 No. of Quad-Core-Processor, minimum 2.0 GHZ clock speed or equivalent/subsequently better. The CPU should be of latest generation at the time of bidding. i.e. Vendor should offer the highest clock speed and cache supported on the offered model with latest supported /compatible server chipset. The server should be scalable to 4 processors.
Architecture	X86/RISC/EPIC as per OEM architecture
Operating System	Should support industry- led operating system platforms including Windows Enterprise Linux, and OS proposed by Bidder. Media and complete documentation for the system to be provided.
Main Memory	The system should be configured with minimum 64 GB RAM (ECC), scalable up-to 512 GB. Vendor should quote fastest available memory speed with the server being quoted.
Hard Disk	4X300 GB SAS 15K RPM SAS or better hot plug drives with RAID1 with Disk Mirroring features. Server should have HDD bays for future scalability.
Industry Benchmark	Should have published benchmarks for TPC-c or SAP or SPEC available. If no published benchmark result for the offered server & processor is available then the performance offered by the server will be estimated by linear extrapolation of a published result on a higher server model or a lower server model (with the same processor).
	If the OEM does not have particular benchmark on a specified server, the OEM can use an internal benchmark to build the correlation between a benchmark and proposed server. The same has to be given in the OEM's letterhead and signed by an authorized person
Clustering	Server should be configured to support for OS level clustering.
Network Interface	Dual port 10/100/1000 Mbps Ethernet Adapter ,with no single point of failure
HBA	2 No. dual ported 4 Gbps Fiber Channel Adapter with external fiber ports for redundant connectivity to external storage.
Removable drive	One DVD-RW/CD-RW Combo drive per server
Power Supply	Dual Redundant Power Supply with cooling fans
	All Items are to be Rack Mounted in Industry

Server Height	Standard 2U/4U (Rack mount)
Hot Swap components	Hard Disk Drives, Drives, Power Supplies and fans
RAID	Integrated RAID-0,1
Server Management	Firmware Update, Dynamic resource management &utilization capability, Real time System monitoring
Warranty	5 years On-site Comprehensive warranty and maintenance

### 7. UPS – 5 KVA, ONLINE

Spec. No	Particulars	Specifications
1	UPS brand	ISO certified
2	Phase	Single
3	Power factor	0.9 / Above
4	AH of battery	130 AH
5	Battery type	Tubular
6	Number of batteries	10 / above
7	Battery warranty	3 years
8	Technology used	IGBT
9	Nature of output	True sine wave
10	Backup time	2 to 3 Hrs
11	UPS warranty	3 Years

### 8. Card Printer

Spec. No	Particulars	Specifications
1	Print method	Dye-Sublimation
2	Print speed	15 cpm(mono)
3	Print mode	Duplex
4	Resolution	300 dpi

5	Card type	PVC, Composite PVC
6	Card thickness	0.2 mm to 1.2 mm
7	Card size	50 mm x 85 mm
8	Network option	Ethernet
9	Bar coding	Available
10	Font	Windows OS Compatible
11	RAM	16 MB or above
12	Interface	USB
13	Operating System	Windows Compatible
14	Input	Hopper and stacker
15	Adapter	100 – 250 V,50 Hz

**Conditions:**

1. The rate quoted should be inclusive of Tax, transportation charges and any other charges.
2. Complaints with the items supplied should be rectified / replaced to the satisfaction of the University by the suppliers at their own cost.
3. Payment will be made only after the supply of the items at our own site.
4. The undersigned reserves the right to reject / accept any quotation without assigning any reason.

The sealed quotation should be addressed to the undersigned superscribing as Quotations for the **Supply of Desktop Systems, Printers, Scanners, UPS and Servers** for use in the School of Distance Education, University of Kerala. The last date of receipt of quotations is at **05.00 pm on 10.03.2014**.

Sd/-

**DIRECTOR  
SCHOOL OF DISTANCE EDUCATION  
UNIVERSITY OF KERALA**