

**PROCEEDINGS OF THE DIRECTOR OF PUBLIC INSTRUCTION,**  
**THIRUVANANTHAPURAM**

**Sub:- General Education Department - Guidelines for procurement of ICT equipments for schools using various schemes – Orders revised-Reg.**

- Ref:-
1. GO (Rt) 5120/2007/G.Edn. Dated 9/11/2007
  2. Order No.NEP3/80281/02/DPI dated 23.02.2011.
  3. Minutes of Technical Committee meeting of IT@School Project held on 13.02.2012

**ORDER NO.NEP3/80281/07/DPI DATED 15.02.2012**

In order to ensure that quality ICT equipments with necessary software and applications are supplied to schools in a systematic and meticulous manner, Vide G.O read as first cited had constituted a Technical Committee to review and fix the minimum specification and maximum price with necessary service conditions for procurement of ICT equipments for schools in the State. Based on the recommendations of the Technical Committee thus constituted, in its meeting held on 13<sup>th</sup> February 2012 vide reference 2<sup>nd</sup> cited, the following orders are revised in connection to the Order mentioned as 3<sup>rd</sup> cited with respect to the minimum specification, maximum price and service conditions for the procurement of computers and hardware for schools using various schemes including Local Area Development funds of MLAs & MPs, Plan funds of Local Self Government institutions etc.

<b>1. Desktop Computer * – Maximum Price: Rs. 22,400/- (All Inclusive)</b>	
<b>(Minimum Specification)</b>	
Processor	Dual core,3.1 GHz, Cache 3 MB, Number of Cores to support 4 Threads
Mother board	Intel Chip set with Intel Mother Board or AMD chip set with ASUS mother board, with integrated Graphics, 10/100/1000 Ethernet, Data and power cable for HDD and DVD. Computer manufactures can use their own OEM board.
HDD	500 GB SATA 7220 rpm (Make - Seagate, Maxtor, Hitachi, Samsung, Western Digital)
Monitor	18.5" WIDE WXGA (1280x768) (Make - LG, Samsung, Aoc, Dell, Acer, Benq, HP)
Cabinet	ATX/ Mini ATX (Prime Source, Mercury, Umax , iBall ATX / MINI ATX Cabinet, with two SATA connectors, (ISO certified SMPS and connectors of industrial standard). OEMs can use their own cabinet and power supply)
CD drive	DVD Writer ( LG, Samsung, Sony )
Memory	4 GB DDR3 (1333 MHz) ( Make - Zion, Umax, Kingston, Transcend, Corsair, Micron)
Mouse	USB Optical Scroll ( Make - Logitech, Samsung, Microsoft, Acer)

Key Board	USB Key Board (Make - Logitech, Samsung, Microsoft, Acer)
Graphics & Audio	Integrated
10/100/1000 Ethernet	Integrated
Speaker	Head Phone with Mike- ( Make - Logitech, Creative)
Cover and Pad	yes
Warranty	3 Years On site Comprehensive
Operating System	IT@School Edubuntu ( All necessary drivers must be provided in CD Media )

<b>2. Laptop Computer with additional Keyboard &amp; Mouse</b>	
<b>– Maximum Price : Rs.23,300/- (All Inclusive)</b>	
<b>(Minimum Specification)</b>	
Processor	Latest Generation Dual Core 2.0 GHz, total cache 3 MB, Cores to support 4 threads , TDP - 35 W (Maximum) or 32 nm technology
Chipset	Intel/ATI/N-Vidia /AMD
Mother Board	OEM
Memory	2 GB or more DDR3-1333 MHz (Make - Zion, Umax, Kingston, Transcend, Corsair, Micron)
Hard Disk	250 GB, SATA, 5400 RPM
Display- 14 "	Active Matrix wide Screen without dead cells, 1200x800 WXGA,
Graphics	Intel-GMA / ATI-Radeon XPRESS / N-Vidia Geforce
Optical Drive	Integrated DVD Writer 8X
Net work Connectivity	802.11 b/g/n, and 10/100/1000 Fast Ethernet
Speaker	Integrated Stereo speaker.
Interface-I/O Ports	RJ- 45, 3x USB2.0, VGA port for External Monitor, Mic In, Speaker/ Headphone Out, DC In for connecting AC Adaptor
Power	230V, 50 Hz AC Supply with rechargeable 6 Cell LI-ION Battery Pack
Battery Backup time	Minimum 2 Hours under normal operation
<b>Additional items</b>	Optical Scroll Mouse (USB),Key Board (USB) (Make - Logitech, Samsung, Microsoft, Acer)
OS	IT@School Edubuntu
Warranty	3 Years On site Comprehensive including <b>battery and power adapter.</b>
Carry Case	Back Pack of standard quality
Accessories & other items	Drivers for IT@School Edubuntu. All Drivers shall be provided in CD media

<b>3. Multi Media Projector – Maximum Price : Rs.22,000/- (All Inclusive)</b>	
<b>(Minimum Specification)</b>	
Native Resolution	XGA (1024x768)
Brightness	2500 ANSI Lumens
Aspect Ratio	4:3 and 16:9 compatible
Input	VGA,S-Video, Composite A/V input to connect TV output, USB

Output	<b>Audio out</b> , Video out (Splitter attachment not acceptable)
Remote	Full Function with mouse control
Additional USB port	Optional - for accessing data from pen drive directly
Accessories	Audio, VGA and USB cables
Warranty	3 Years Comprehensive On Site (Warranty for lamp - 1 Year)

#### **4. Multi Function Mono Laser Printer– Maximum Price : Rs.7,750/- (All Inclusive)**

##### **(Minimum Specification)**

Print/Scan/Copy Speed	18 ppm
Effective output	600x600 dpi
Memory	8 MB
Duplex	Manual
Paper input capacity	150 Sheets
Monthly duty cycle	5000 Pages
Media Size	A4
Starter Toner Yield	700 Pages
Warranty	3 Years Comprehensive On Site, <b>including fuser unit</b>
OS Compatibility	IT @School Edubuntu
Interface	USB
Accessories, Software & Other items	USB data cable Power cable suitable for 5/6 A, 3 pin Indian Socket. Drivers for IT@School Edubuntu All drivers must be provided in CDs

#### **5. 3KVA UPS With Galvanic Isolation (built in isolation transformer) – Maximum Price: Rs.43,000/- (All Inclusive)**

##### **(Minimum Specification)**

<b>Input</b>	
Phase	Single
Frequency	50Hz +/- 5%
Voltage	160 V-260 V AC
<b>OUTPUT</b>	
Phase	Single
Wattage	2100W
AC Voltage	220 V +/- 5%
KW Rating	2100W ( 0.70 times of KVA rating)
Waveform	Sine Wave
Frequency	50Hz +/- 1 Hz
Transfer time, if applicable	< 6 ms
Power Factor	0.7 Lagging (greater preferable)
Efficiency	85%
APFC	Needed

Change over to inverter	<160 V and >260 V
<b>Protection:</b>	
Output	Over Voltage, Overload(cut off at 110%), Short Circuit/RF, Spike/surge
Battery	Under voltage; Cut off at 1.8V/cell
Visual Indication	Mains on, UPS on, Fault & Overload, Battery low
Audio Indication	Low battery/overload indication - Buzzer Change over to Inverter - Buzzer
Battery Charging	6 to 8 hours
Output Control	With On/Off Switch
Environment:	0-45% C, RH 90%
Battery:	SMF (4800 VAH) Maximum no of batteries - 8 Nos
Battery make:	Rocket\Panasonic\Amron\Exide\AMCO
Required	Operating manual and warranty card
Approvals	<b>Type Approval test</b> certificate of National Agencies ERTL, ETDC and SAMEER for the same model
Warranty	3 Years Comprehensive On Site <b>including Battery</b>

	* If sufficient Desktops are available, Laptops are preferred to Desktop PCs for distribution at schools owing to its huge advantages on space, power requirement, mobility etc.	
<b>X</b>	<b>Other accessories</b>	<b>As per DGS&amp;D rates</b>
<b>c.</b>	<b>Service conditions:</b>	
1	All items mentioned above will have 3 year on-site warranty	
2.	Computers/laptops shall be loaded with Free Software OS (IT@School Edubuntu). All other hardware should have their own drivers, which shall be supplied along with the hardware	
3.	Any change in technical specifications - however minor it may be- shall be informed to the directorate for obtaining its prior sanction before affecting the supply. However, supply of equipments with higher specifications at the quoted price shall be entertained.	
4.	The supplier shall demonstrate the performance of the computer systems to the satisfaction of School IT Co-ordinator (SITC/HITC) in charge of the school computer lab and HM/Principal.	
5	The following shall be clearly marked on the equipments using labels or indelible ink in the presence of school staff: <ul style="list-style-type: none"> <li>• The date of installation,</li> <li>• Period of warranty,</li> <li>• The details of service person</li> </ul>	
6	Supplier has to set up a web based portal along with a call center/Telephone number to register, monitor and rectify all the calls from schools regarding hardware and software support arising after the supply.	
7	The response time for attending an issue with the above hardware equipments shall be a maximum of 2 working days and that of closing the issue shall be maximum 5 working days, failing to which, an amount of Rupees 100/- could be levied from the Vendor as Liquidated damages per day, subject to a maximum value equal to 10% of the product value. In case of off-site maintenance, stand by unit shall be positioned at the site.	

Vide Govt. Order No. GO (Rt). No.4795/2008/G.Edn dtd 30.10.2008 M/s KELTRON, a state owned Public Sector Undertaking, has been identified as the Total Solution Provider for all ICT hardware procurements for schools in the State. On the basis of this, IT@School Project under General Education Department, Govt. of Kerala, has already entered in to an agreement with M/s. KELTRON for supply of these equipments through a national tendering process. This agreement includes specific conditions for the establishment of infrastructure for service network. The price advantage received through this bulk procurement process is thus available for all procurements for schools. Hence it is suggested that preference may be given for procurement through M/s. KELTRON at recommended rates based on the above conditions. But the purchase can also be made through any other vendors satisfying the price, quality and service conditions mentioned above observing store purchase rules and in such cases the procuring authority shall ensure the compliance in full.

This is only an interim price and specifications are valid till revision.



**Director of Public Instruction**

To

All District Collectors  
All Directors of General Education Department  
(SSA, SCERT, HSE, VHSE, SIET, SIEMAT, KSLMA, KSMSK)  
Directors of Panchayats and Urban Affairs  
All Deputy Directors of Education, All DEOs

Copy to:

Secretary, General Education Department (with c/l)  
Principal Secretary, Local Self Government Department ( with c/l)  
Secretary, Planning Department (with c/l)  
All MP's, MLA's and Secretaries of District Panchayats  
The Executive Director, IT@School Project  
The Managing Director, KELTRON.  
All members of the Technical Committee