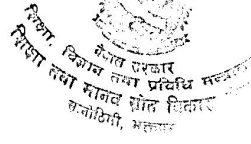


नेपाल सरकार
शिक्षा, विज्ञान तथा प्रविधि मन्त्रालय
शिक्षा तथा मानव स्रोत विकास केन्द्र

श्रव्यदृश्य शाखा

सानोठिमी, भक्तपुर



प.सं : २०७८/७९

च.नं. : ७९

मिति: २०७९।०२।०३

श्री सम्बन्धित (ICT बापत रकम प्राप्त गर्ने) विद्यालयहरू ।

विषय: राष्ट्रपति शैक्षिक सुधार कार्यक्रम अन्तर्गत विद्यालयमा IT Lab स्थापना, सुदृढीकरण
एवम् Digaial Library व्यवस्थापनमा लागि Specification सम्बन्धमा ।

उल्लेखित विषयमा आ.व. २०७८।७९ को राष्ट्रपति शैक्षिक सुधार कार्यक्रम अन्तर्गत
विद्यालयमा IT Lab स्थापना, सुदृढीकरण एवम् Digaial Library व्यवस्थापनका लागि प्राप्त
रु.६,५०,०००।- बाट सलगन Specification भन्दा कम नहुने गरी कार्य अगाडि बढाउनुहुन जानकारीका
लागि अनुरोध छ ।

(सन्तकुमार महर्जन)

रे.इ.

बोधार्थ:

सबै स्थानीय तहहरू

Instructions and Recommendations

For

Establishment of IT Lab/Upgradation and Management of Digital Library

Under Presidential Educational Improvement Program (F.Y.2078/79)

Under this program, each selected school will receive the grant amount Rs. 6,50,000 (In Words: Rupees Six Lakhs Fifty Thousand only). With this program, IT Lab is to be established or improved and necessary management including upgradation of server, networking and getting content for the digital library is to be done for its proper operation. Following activities are recommended for the program:

1. Development/Deployment of Integrated Digital Library Management System with MIS Software & Associated Hardware Devices
2. Establishment of Educational AVR System
3. Provision of All in One Computer
4. Provision of Multifunction Printer
5. Furniture Management
6. Networking and Electrical Wiring

S. K. T.

C. K. S.

M. K. S.

B. K. S.

1. Development/Deployment of Integrated Digital Library Management System with MIS Software and Associated Hardware Devices

School should develop or deploy the digital library management system with academic MIS software. Necessary server software and hosting server should be managed by the school. Digital library should content adequate digital books, digital contents and online materials. System software should support any type of hardware devices like Desktop PC, Laptop, Tab and Mobile to access centrally hosted digital contents and MIS Software in anytime, from anywhere through the internet connection. School should provide internet connection and school internal networking is subjected to activity No 6.

Following features/ specification are expected on the system (software):

- The system should be Integrated Library system which includes E-Library (Including Learning Portal developed by CEHRD) where schools' managerial and administrative functions should be available.
- The system should login by student, parents, teachers or other concern person through their user role.
- The System should be a common platform where Management/Board Member, Principal, Teachers, Parents, Teachers can access the data from system as per the authorized user wise role & can be communicated each other as per the need.
- The system should be fully Cloud Based open source or licensed Software.
- The system must run very lower bandwidth internet connections as well.

S. S. S.

Principals

Principal

B. S.

- The system should have single database for integrated outputs in future and further extensions of the system.
- The system must have customizable dashboard for monitoring administrator and user's activities.
- The system should have facility to update the school level digital content.
- The system should have School Activity Management which includes Curriculum & Lesson Plan Management, Learning Management, Course Management, E-Tracker, Event, Calendar, Time Table, Classroom etc.
- The system should help in keeping a record of books, journals, catalogs, newspapers, CDs, videos, YouTube Links, etc. in the library.
- The system should have Organization Setup, Inquiry, Online Enrollment, and Admission process.
- The system should have evaluation system with Examination Management, Online Result System, Homework Management, Assignment Management, Awards and Class/Grade Promotion.
- The system should have features to generate Student ID, Staff ID, Certificate, Report Cards, and Admit Cards.
- The system should have Account with Ledger (Double Entry System), Payroll management, Assets Management, Billing, Revenue, Inventory, Library, Vendor management, Budget Management System etc.
- The system should have facility of Online Payments with different payment gateways which are using in Nepal (like: Connect IPS, FonePay, e-Sewa, Khalti etc.)

S. J. K. i

C. K. S. P.

P. K. S. P.

B. K. S. P.

- The system should have HR system which includes students, staff, parents, management Team/ Board of directors, Vendors, Agent management.
- The System should have Upload-Download, Auto & Manual Backup system facility.
- The system should have online attendance facility for students & Staffs for daily attendance. Leave Management & leave request approval by email alert & System both.
- There should be secure connection between server and user login device.
- Development framework and database should be latest version.
- The software must be upgradable/modifiable in accordance to hardware changes including servers, biometric devices, ID card printer, Certificate Printer, Educational Printer and others.
- This Integrated Library system must be integrated with different hardware devices like; attendance device, RFID, Smart Board, Video recording Devices & many more.

Beside these, Vendor/ Service Provider should provide necessary training for the teachers to use the system and related to digital pedagogy. Following areas are needed to be covered in the training program:

- ICT Introduction- everyday usage of digital technology includes when you use a computer, tablet or mobile phone, send email, browse the internet, make a video call etc.,

S.K.

Chand

M. K.

B.

- Preparation of different type of document files and worksheets,
- Cloud Storage and Sharing Solutions,
- Use of Email, Internet & Social Media in teaching learning activities,
- Web Editing, Image Editing,
- Develop presentation file through presentation software,
- General Multimedia and Database,
- Use of Digital Library and MIS software,
- Use of different types of evaluation tools etc.

For the system procurement purpose, it is stated here that the vendor/service provider is expected to have following qualification:

- The Vendor/Service Provider could provide online or face to face Training in Group to operate the system.
- The Vendor/Service Provider should deliver the system & implement within the defined deadline by the School.
- The Vendor/Service Provider should provide 1 year of service warranty for the system.
- The Vendor/Service Provider must have more than 5 years of experience in similar field.
- The Vendor/Service Provider must be a registered company in Nepal.

2. Establishment of Educational AVR System

Those school without IT Lab need to establish the Lab as per the notice dated 2078-12-15 regarding execution of Presidential Educational Improvement Program while the school having IT Lab perform improvement with establishment of AVR System equivalent or with higher features stated below:

LED Panel	Size	75" or Higher
	Resolution	3840x2160
	Brightness	400 cd/m ²
	Response Time	6ms
	Pixel Pitch	0.429(H) mm x 0.429(V) mm

S. K. V.

Chandana

R. K. V.

B.

	Visual angle	178 (H) / 178 (V)
	Life	30,000 hrs or more
	Color	10bit
System Drive		Android System, 4G memory, 32G storage space, using Android OS
I/O Port	MINI-AV, PC Audio, VGA, TV-USB2.0, HDMI, TF Card Slot, RJ-45, USB Port	
Front side	HDMI, USB	
Camera/MIC	Built in 8 MP / MIC	
Front side Key	Aviliable	
USB Support file format	Picture: JPEG, BMP, PNG Video: MPEG1, MPEG2, MPEG4, H264 ,RM, RMVB, MOV , MJPEG, VC1, DivX, FLV Audio: WMA, MP3, M4A (AAC)	
Video Feature	3D digital comb filter, 3D image noise reduction, 3D motion adaptive comb filter, etc	
OPS PC	Pluggable OPS Mini PC standard Intel 80 pin slot	
	CPU	i7-8th.generation
	Memory RAM	8GB
	Graphics	Integrated graphics
	HDD/SSD	256G SSD and 1 TB-HDD
	Port	HDMI×1, VGA×1, USB2.0×2, USB3.0×2, RJ45×1, PCAUDIO×1, MIC×1, RS232×1
	Ethernet	Gigabit LAN
	Wireless	Support Wifi & Bluetooth (Optional)
	AUDIO	High Definition Audio
Power	Compactable	
OS System	Support Windows 7/ Windows XP/ Windows 2000 / Linux UNIX / Windows 8.1(X86)	
Important Features		

STW

Chiang

[Signature]

[Signature]

	<ul style="list-style-type: none"> * True Multi-touch points, without drift and blind spot * Supported true Multi-touch points number: 20 points * Intelligent waking up function * Supported OS: Windows 8/7/Vista/XP, Linux, Android, Mac OS X, Android etc. * Excellent fault tolerance and high reliability * With lock.
Functions	Support dual systems: fast switching between Android and windows systems, Support multiple signal source selection, Support Sleep timing, Support shutdown memory channel function, Support TV remote control function, Support F1-F12 function keys commonly used by computer keyboards, Support one-key child lock, Support automatic identification of signal sources and switching channels
Safety	Necessary arrangement for protecting Interfaces and buttons
Necessary Accessories	Remote controller, Touch pen, Wall mount and other necessary items
Applications	Writing software

3. Provision of All in One Computer

The specification equivalent to or with higher feature is recommended:

Processor	Intel® Core™ i5 8th generation
Motherboard	Intel Chipset
Graphics	Intel® UHD Graphics
LED screen	19inch LED
Storage	SSD 256G
Memory	8GB
Audio	5.1 channel output ,2 Jacks, MIC in/ Line out
LAN	100/1000M Ethernet, RJ45 port
Speaker	Built in Speaker 8Ω/3W*2
Camera	0.3M Pixel Color CMOS Sensor
WIFI	WIFI 802.11b/g/n
Keyboard	USB K/B
Mouse	USB Mouse
Power management	Compactable
I/O	1*Line out, 1*MIC in, 1*VGA Port, 2*USB2.0 Ports, 2*USB3.0 Ports, 1*LAN, 1*HDMI
OS	WIN10 Pro Genuine

SEK

Chiang

[Signature]

[Signature]

Supported Application Software	Supports MIS software
--------------------------------	-----------------------

4. Provision of Multifunction Printer

The specification equivalent or with higher feature is recommended:

Copy		
Copy Type	Monochrome laser	
Copy Speed	UP TO 18 PPM (A4)	
Copy Resolution	600*600 dpi	
Warm up (from power on)	10 secs. Or less	
Recovery time (from sleep Mode)	2secs. Or less (copy) 0.3secs. Or less (print)	
First copy time(FCOT)	12.0secs. (A4)	
Paper Source capacity	150-sheet (cassette)	
Supported Paper Weight	60 to 163g/m2 (cassette)	
Paper output	100 sheets (face down)	
Zoom	50-200% in 10% increments	
Copy size	A4/LTR	
Copy Features	2 on1, ID Card Copy	
Copy Memory	64MB (Shared)	
Print		
Print Type	Monochrome laser	
Print speed	Up to 18 ppm (A4)	
First print out time	7.8 sec (A4)	
Print Memory	64 MB (Shared)	
Print Resolution	Up to 600*600 dpi	
Scan		
Scan type	Contact Image Sensing	
Color Depth	24 bit	
Document Size	Platen	Up to A4
Output File Format	Windows	Hi Compression PDF, Searchable PDF, PDF, JPEG, TIFF, BMP
	MAC	PDF, JPEG, TIFF, BMP, PNG
Pull scan	YES, USB	
Interface / Software		
Standard Interface	USB 2.0 Hi Speed	
USB function	Print, Scan	

SE 15

Chiang

Handwritten signature

Handwritten signature

Compatible operating system	Windows 8 (32 / 64 bit) Windows 7 (32/ 64 bit) Windows Vista (32/64b Bit) Windows XP (32/64 bit) Windows 2000, Mac OS X 10.4 – 10.8 Linux* ³
General Specifications	
LCD Display	Yes
Monthly Duty Cycle	8000 Pages

5. Furniture Management

As per the requirement specified by the school.

6. Networking and Electrical Wiring

As per the requirement specified by the school.

STW

Q.12345

[Handwritten signature]

[Handwritten signature]