## Instructions regarding implementation of ICT@School Project in 628 Govt. Sr. Schools.

## **Terms & Conditions:**

a) Supply and installation of **Multimedia Educational Content of all the identified 614 Hard Spots in 628 Govt. Senior Secondary Schools list attached** for Computer Aided Teaching & Computer Aided Learning as mentioned below based on Himachal Pradesh School Education Board syllabus.

Sr. No	Class	Subject	Medium	No. of	No. of Hard
				Topics	Spots
1.	9 <sup>th</sup>	Mathematics	Hindi	11	24
		Science	Hindi	10	22
		Social Science	Hindi	13	20
		T	otal		66
2.	10 <sup>th</sup>	Mathematics	Hindi	12	24
		Science	Hindi	14	28
		Social Science	Hindi	14	18
		T	otal		70
3.	10+1	Physics	English	12	68
		Biology	English	22	70
		Mathematics	English	9	32
		Chemistry	English	14	22
		English	English	6	17
		T	otal		209
4.	10+2	Physics	English	10	100
		Biology	English	16	90
		Mathematics	English	11	44
		Chemistry	English	13	22
		English	English	7	13
		T	otal		269
		G.	Total		614

- a) Maintenance of Multimedia Educational Content and the equipments/hardware installed in the smart class rooms throughout the contract period.
- b) Provide training on each of the 614 Multimedia Educational Content to minimum 6500 teachers and internet access to Multimedia Educational Content available on the web.
- c) Refreshers, Monitoring and subsequent reports.
- d) The two rooms will be provided to the company for converting them into Smart Class Rooms.
- e) The company has to supply and install an Integrated Computer Projector in Smart Class room-I and one LCD TV and computer system in the Smart Class room-II in each of 628 schools. Refer **Table A** for the specifications
- f) The company has to provide furniture for smart class rooms which include
  - In 2<sup>nd</sup> Smart Class room-II: One Computer Table and LCD TV to be fixed at suitable height.
  - Refer **Table A** for the furniture specifications
- g) The company will ensure that the Multimedia Educational Content run properly on all the hardware installed in ICT lab and smart class rooms.
- h) The company will also provide the required power points fitting in the smart class

rooms.

i) The company will provide batteries for remote control of Integrated Computer Projector, LCD TV Remote Control etc.: As per requirements

#### Multimedia Based Educational Content.

- Supply of following items on DVD media classwise and subjectwise as follows:
  - i). Multimedia Educational Content of 614 subjectwise and classwise hard spots:-

One set in each of the 628 schools

One set in the office of Dy. DHE of each district

One set in the Directorate of Hr. Education Shimla

- ii). Support Manuals (detail of each of the hard spot in the medium in which is being developed and supplied. The Installation Manual, Manual of academic content, Administration Manual and User Reference in English):
  - a) One sets at Directorate level
  - b) One set at each of the Dy. Director of Higher Education office at district headquarter
  - c) One set in each of the 628 schools,

# These sets shall be checked and verified at Directorate level before actual delivery and installation at school level.

#### **Instructions**

- a) The company should ensure proper installation of the Multimedia Educational Content on the equipments/hardware installed in the ICT lab and two smart class rooms in each of 628 schools and their proper functioning on all the equipments. The Principal of the school concerned will certify the successful installation. The installation of Multimedia Educational Content shall be done at the risk and cost of the company.
- b) If any technical/operational defects are found in the Multimedia Educational Content at any point of time (during the period of contract), the same will have to be rectified/replaced free of cost by the company.
- c) The content developed will be the property of Government of Himachal Pradesh and it can be used by the department in other schools in the state also without seeking consent of the company and without paying any extra cost for unlimited period of time.
- d) All the equipments once installed in ICT Lab and smart class rooms will not be taken away by the company in any case. After the expiry of the contract period, the entire infrastructure supplied and installed will be transferred to the department/Government of Himachal Pradesh at zero transfer value.

## Training of Teachers and other Staff

The company will train at least 6500 teachers on usage and integration of multimedia educational content in the lesson plans. Due attention should be given to the following aspects:-

- Proper proposal including curriculum for the training will be designed and submitted by the company at the time of signing of agreement and shall be got approved by the DIRECTOR OF HIGHER EDUCATION, Himachal Pradesh.
- The training for 5 working days for about 6500 teachers for usages of Multimedia content and browsing of internet for academic content.
- There should be special emphasis on practical training (operating computers for the use of multimedia educational content, browsing of internet).

- The venue and infrastructure for the training will be provided by the DEPARTMENT OF HIGHER EDUCATION. The Department shall provide 20 to 25 venues or more as training centers located all over the State. Beside this any additional equipment required to run the multimedia educational content has to be provided by the company. The company will be allowed to take away the additional supplied hardware/equipment from the training centres after the completion of the training.
- During the training programme there will be about 40 teachers in a batch and the training schedule should be of 8 hrs per day i.e. 9:00 AM to 6:00 PM.
- Company will deploy 2 subject wise Master Trainer per training centers for a batch. The recruitment, retrenchment, reallocation and salary of the training staff is exclusive prerogative and responsibility of the contracting Company.
- After the completion of the training the concerned principal of the training centre will issue the certificate to the company whether the training is satisfactory (by taking the feedback from the trainees) and conducted as per the schedule.
- The expenditure involved in r/o of TA/DA of teachers training, will have to be borne by the company as per Govt. rates.

#### Monitoring:

The company will submit the monthly monitoring report duly signed by the concerned school Principal to Directorate of Higher Education, Shimla within one week after each month is over. The monthly monitoring reports comprises of the following:

- a. Are the teachers using the multimedia educational content in their schools?
- b. How the teachers are using the multimedia educational content in their schools?
- c. What are their difficulties/problems in using the multimedia educational contents & internet access?
- d. The benefit or improvement in teaching by multimedia educational content and internet access.
- e. The benefit to the student in learning through multimedia.
- f. Any other important aspect as per proposal of company.
- g. Status of hardware performance and maintenance by the company.
- h. Usage report on use of internet by the teacher & students.
- i. The school wise number of teachers Trained and refresher programmes conducted.

In the monitoring report the company will report the out come reflecting short comings, achievement as well as suggestions for improvement. Company will suggest monitoring formats covering points mentioned above. The Directorate of Higher Education may modify the formats as per the requirements of the department. The company shall submit the monthly monitoring reports as per the formats proposal structure approved by the Director of Higher Education. The company will provide hard copy of the monitoring format to the concerned school Principal for filling up the requisite information and keep in office record.

### **Operational Scope of the Contract:**

The Director of Higher Education may appoint a Committee at Directorate level and they will have full powers to visit the premises of the school and Training Centers to check and verify the proper implementation of the project. The decision

of the committee will be final with respect to the adherence to the scope of work and its applicability as per the schedule by the company at the target schools and accordingly the penalty will be imposed on the company.

The entire infrastructure to be provided as per requirement as a part of the project must be new and branded as per the specifications laid down in the tender document.

## **Physical Infrastructure Requirements:**

## i. Site Preparation:

The company will be provided with **1 room (grilled)**. The company has to undertake all other necessary activities required for establishing the ICT Lab in 628 Govt. Sr. Sec. Schools. Company is required to apply Plastic vinyl flooring as per the specification mentioned in the table-A in ICT Lab.

## ii. Electrical wiring and equipments:

The company has to undertake electrical wiring (of ISI marked & branded) for all electrical and IT equipments like PCs, Server, Multifunctional Printer, UPS etc. in the Schools. Electrical wiring would also include earthing arrangements. **The company is required to provide internal electric wiring and power point fittings as per the design of fixed assembly.** 

Wiring (All equipments/ appliances /fittings should be ISI/ISO certified)

#### iii. Furniture & Fixtures:

The company has to provide furniture for ICT Lab like tables, chairs etc. Furniture would include

- In One Class Room: (ICT Lab) Fixed table assembly for 9 desktop computers and 30 PVC/Plastic moulded chairs without arm rest for the students, One Table and Chair with arm rest for teacher
- Refer **Table A** for the furniture specifications.

## Power back up Arrangements

#### i. UPS:

The company has to provide a 600 VA UPS per system and 650 VA UPS for Server with at least 15-20 minutes backup Refer **Table A** for the specifications. The company will ensure that the UPS provides full rated backup throughout the contract period. Company would be responsible for maintenance/replacement of batteries whenever required during the contract period at his own cost to ensure requisite backup.

## IT Infrastructure Requirements:

## i. Computers:

The Company is required to provide 8 computers in ICT Lab in each of 628 schools, 2 computers for Directorate of Hr Education and 1 computer for each 12 Dy Director of Hr Education offices at District Headquarter for project monitoring purpose. Company may note that the scope of work includes all services (AMC /insurance /repair /maintenance /spares /instant replacement in case of theft etc). Refer **Table A** for the specifications.

#### ii. Server:

Company is required to provide one Server in ICT Lab in each of the 628 Govt. Sr. Sec. Schools. Refer **Table A** for the specifications

## iii. Printer/ Scanner/Copier/FAX:

The company has to provide 1 Multipurpose Laser Printer with facility of Print, Scan, copy & Fax in ICT Lab in each of the selected 628 Govt. Sr. Sec Schools. One Multipurpose Laserjet Printer at Directorate of Higher Education and Multipurpose Laserjet Printer at each 12 Dy Director of Hr. Education offices at Distt Headquarter for monitoring purpose. The Printer installed in ICT Lab should be on the network. Refer **Table A** for the specifications

#### iv. Web Camera:

Company has to provide one web camera in ICT Lab in each of 628 schools refer **Table A** for specification.

## v. LAN Equipment:

The company has to provide LAN equipment in each of the ICT labs of 628 Govt. Sr. Sec. Schools. Refer **Table A** for the specifications.

#### vi. LAN set up:

The company has to undertake LAN set up including cabling, I/O boxes and other allied accessories for 8 PCs and one Server and printer in each of the 628 schools.

vii. Internet: Provision of Broadband Internet connectivity (unlimited download) at ICT labs would be the responsibility of BOT operator. Monitoring and management of availability of internet will continue to be the scope of BOT operator. The capital and recurring charges for Broadband internet connection (including telephone connection if required) will be borne by the BOT Operator. BOT operator has to coordinate with school administration and ISP for the continuous availability of internet facility in ICT Lab. Wherever there is no availability of Broadband, the company has to provide the Dialup connection and whenever the feasibility of broadband exists; the company will have to replace the dialup connection with the broadband.

The company will maintain log book for the usage of Internet facility in each of the 628 schools. The report of this usage will be provided to School Principal on monthly basis.

**vii. Registers** for Fault logging cum Penalty Register, Stock Register, Internet usage Register and Cash Book etc.

## viii. Consumables:

Company will provide the following consumables in each of 628 ICT labs:

- One reams of white paper A4 size (min 60 GSM) per month per ICT lab.
- Printer Cartridge:
  - 3 refills in the 1<sup>st</sup> year and thereafter 1 new cartridge and 3 refills per year per ICT lab for Multifunctional printer.
- DVDs: Blank 5 RW DVD's per year per ICT Labl

#### ix. Softwares:

The Department will provide the software and licenses required for the functioning of ICT lab and smart class rooms. The software will be provided to the company in the form of media at a central location (Directorate of Higher Education, Shimla). Company would be required to install all the software/upgrades/patches etc. in the ICT lab and Smart class rooms as and when required during the contract period. The indicative list of softwares is mentioned in **the Table -A** 

## **Technical Specification.**

## Manpower Requirements:

## a) State Project Officer (SPO):

The company will have to provide one State Project Officer to coordinate, implement and to provide regular feedback and reporting regarding the project. The company will provide the appointment letter alongwith the eligibility documents to the Directorate of Higher Education.

## Roles and responsibilities of SPO:

- To ensure smooth implementation of the project.
- To coordinate and cooperate with the o/o the Directorate of Higher Education.
- Monitoring the performance of Cluster Coordinators.
- Infrastructure maintenance and upkeepment of Hardware, software and Multimedia Educational Content.

- To get the desired data, reports on time.
- To schedule and conduct refresher programme of teachers in consultation with the departmental authorities.
- Send monthly monitoring reports to Directorate of Higher Education after verification.

## b) Cluster Coordinators:

The company will have to provide one Cluster Coordinators per 20 Govt. Sr. Sec. Schools to coordinate, implement and to provide periodic feedback and reporting regarding the project. The Cluster Coordinators are to be bonafide Himachalis.

## Roles and responsibilities of Cluster Coordinators:

- To maintain close coordination with Dy. Director of Higher Education/Nodal Officer for the successful implementation/ running of the project.
- During the visit for collection of data, these Cluster Coordinators should be competent enough to resolve the difficulties of the teachers regarding usage of the multimedia educational contents.
- They will visit each school at least once in a month and interact with the Teachers/Principal for at least five hours.
- He will also provide 2 days' refresher training of teachers after every three months from the date of completion of 150 days of implementation schedule in all the schools covered under his jurisdiction in consultation with the concerned school principal.
- To ensure smooth implementation of the project in concerned area.
- Infrastructure, multimedia educational content and software maintenance
- To collect the desired data and reports on time from Schools.
- He will be responsible for receiving the complaints regarding scope of work as defined earlier and in response he will respond back to the concerned Principal as well as Dy DHE/Nodal Officer with compliant number and its rectification report.

The govt. shall not have any liability including litigation arising due to either recruitment or retrenchment or any other service conditions of State Project Officer/Cluster Coordinators/any other staff appointed by the company. In case of any dispute/litigation arising as a result of the service conditions, the said dispute/litigation will be the exclusive between Officer/ dispute/litigation the State **Project** Coordinators/ any other staff appointed by the company and the company. The H.P. Govt. / Department of Higher Education/Deputy Director of Higher Education of concerned district/ Principal of the concerned school or any other govt. agency will have no responsibility or liability in all such matters.

#### Services:

- i. The company has to manage and maintain in working condition the complete ICT lab and Smart Class rooms covering hardware, software, multimedia Educational Content and necessary infrastructure like UPS, furniture and fixtures etc. for the entire contract period.
- ii. Installation of softwares /upgrades/patches from time to time.
- iii. The Principal of the concerned school will be responsible for the following:-
  - Opening and closing of the ICT Lab and smart class rooms for normal school hours except Sunday/ Gazetted holidays in Himachal Pradesh
  - Day to day cleanliness, operation of hardware, software, other lab accessories, lodging of complaints and imposition of penalty for proper functioning.

- To ensure that the trainings and refreshers of concerned subject teachers are carried out as per the schedule.
- School principal or his nominee will act as Assistant Nodal Officer (ANO) to ensure that the proper stock entry has been completed in all respect, checking the functional status of all hardware and allied accessories during the contract period, ensure that the complaints regarding the defects has been logged in the complaint register and penalty has been imposed.
- The ICT lab will remain open during winter/Summer Vacations.
- iv. The company will be responsible for compliance of all the statutory labour laws w.r.t. deployment of manpower by him under the contract and any/all liabilities accruing on account of labour laws will be the responsibility of the BOT Operator
- v. in case of any complaint regarding the services, the school Principal will inform Cluster Coordinator as well as Nodal Officer of the concerned Districts. The Cluster coordinator will issue a complaint number to School Principal concerned and take necessary steps to rectify the problem at earliest. After rectification, the Nodal Officer of the concerned District will have to be informed about the same. The company will supply telephone numbers alongwith address of SPO and Cluster coordinator to the concerned school Principals/Nodal officer/Dy. Director of Hr. Education/ Directorate of Higher Education. A consolidated list containing the above details of Cluster Coordinators and State Project officer will have to be submitted to Directorate of Higher Education.

#### **Duration of Contract:**

Duration of contract would be **upto 31**st **March**, **2013**. The contract period starts after the signing of agreement with successful company.

#### Table-A

S. No		EQUIPMENT			
1.	UPS for Computer System : Uniline 600 VA				
	Quantity: 9 per so	chool			
	Type	Offline			
	Minimum Output R	Rating: VA/W 600/360, Nominal Input :230Vac / 50Hz, Mains			
	Operation:140-280V	ac, Input Frequency: 50Hz, Nominal, > 40Hz sensing: Output			
	Voltage: 230+-15%V	ac, Microprocessor based, Protections Overload – Output Trip OFF			
	<b>Battery Operation:</b>				
	Output Voltage: 210	- 240Vac   rms, Output Frequency: 50Hz , Nominal Transfer			
	, 51	Output Wave force: Stepped, approximation to Sine Wave,			
		rcuit, Overload – Output Trip OFF			
	No. of Internal Batte	,			
		Deg C, 95% RH (non condensing),			
	, ,	pical Run Time: 20Mins			
	* Molded Cabinets				
	* 3 (5PIN) Output Sockets (Indian)				
		sed on 17" or '19" TFT monitor system			
	* Black Start				
2.	<b>UPS for Server:</b> Ur	niline 650 VA			
	<b>Quantity:</b> 1 per sch	nool			

## Capacity / Output Rating

**Minimum Output Rating**: VA/W 650/390, Nominal Input :230Vac / 50Hz, Mains Operation:140–280Vac, Input Frequency: 50Hz, Nominal, > 40Hz sensing : Output Voltage: 230+-15%Vac, Microprocessor based, Protections Overload – Output Trip OFF

## **Battery Operation:**

Output Voltage: 210 - 240Vac|rms, Output Frequency: 50Hz, Nominal Transfer Time:3mSec, Typical Output Wave force: Stepped, approximation to Sine Wave,

Protections: Short Circuit, Overload - Output Trip OFF

No. of Internal Batteries 12V/7AH \* 2

Environment: 0 – 40 Deg C, 95% RH (non condensing),

Typical Load: 2 PC, Typical Run Time: 20 Mins

- \* Molded Cabinets
- \* 3 (5PIN) Output Sockets (Indian)
- \* Backup time is based on 17" or '19" TFT monitor system
- \* Black Start

2.	Server: HCL make Quantity: 1 per sch	e /Infiniti Global Line 1701GR nool
	Processor	Intel Quad Core Xeon X3430 Processor @ 2.4 GHz or Higher
	Cache	8 MB L3 Cache/8 MB total Cache for AMD Processor
	Chipset	Intel 3420 or better/ Nvidia /Broadcom chipset for AMD Processor
	Memory	4 GB DDR 3 @ 1066 MHz with ECC and extendable up to 8 GB
	LAN Card	Two Onboard integrated Gigabit Ethernet Card
	Hard Drive	Hard Drive :320 GB SATA HDD or higher with RAID 0,1 support
	Optical Drive	Optical Drive :16x or higher DVD-Writer
	I/O Ports	I/O Ports: 1x Serial, 5 x USB, 1xVGA, 2xRJ45
	Monitor	18.5" TFT colour monitor with TCO'03 Certified or higher, Resolution 1366 x 768, Contrast Ratio: 1000:1
	Keyboard	USB Keyboard
	Mouse	USB Optical Mouse
	OS Certifications	OS Certifications: Microsoft Windows Standard Server 2008,
3.	Computers: HCL, I	
	Processor	Intel® Core™ i3-540 Processor (3.06 GHz, 1333MHz FSB, 4 MB Cache) with Intel 5-series Chipset, 4GB (2x2GB) DDR3 SDRAM 1333MHz Memory, PCle x 16 512 MB or higher graphic card, dust cover
	Hard Drive	250 GB , SATA , 7200 RPM with SMART or Higher
	Optical Drive	16X or higher DVD-RW
	Speakers	Audio Card , Internal Speakers
	Memory	Onboard integrated Gigabit Ethernet Card
	I/O Ports	1 Serial, 5 USB (2.0 version), 2 PS/2 ports, 1 VGA Port,1 RJ45 LAN Port, Audio Port
	Keyboard / Mouse	USB/ PS2, 107 Keys Keyboard wired USB/ PS2, Optical 2 button scroll Mouse -wired
	Monitor	18.5" TFT colour monitor with TCO'03 Certified or higher,

Resolution 1366 x 768, Contrast Ratio: 1000:1

4. Printer/copier/scan/ fax: HP Laser Jet M1213NF MFP Quantity: 1 per school

	la a de la composição d	D. L. 14 0 W. 2 1	
	DPI, 64 MB RAM, 15	er Printer with facility of print, scan, copy, fax speed 15 PPM, 1200 50 sheet tray output) fax speed 33.6 Kbps, auto redialing, display 12 Ethernet network, copier resize 25 to 400%, copy speed upto 18	
5.	LAN Equipment : Di	igisol DG-FS1016D Quantity: 1 per school	
	16 Port Switch, 24 x 1	CAT6 Patch Panel, 9U wall mounting Rack	
6.	Web Camera: Logitec	th, C120 Quantity: 1 per school	
	Enhanced VGA sensor		
	(software enhanced) U Speed USB 2.0 certifi button for capturing p	800 x 600 pixels (software enhanced) Photos: up to 1.3 megapixels Jp to 30 frames per second video (with recommended systems), Hided, Universal clip fits notebooks, LCD or CRT monitors Snapshot photos	
<b>7.</b>	Integrated Computer	Projector :IL & FS, K-Yan Quantity: 1 per school	
	XGA: 1024 x 768, Lar Computing Engine: G4X Chipset or hi Graphics: Intel 94 SATAII@7200rpm of System Audio: (Interest active speak input TV Tuner with naticapabilities External I/O: 4x hi-1x stereo in for condocument camera, 1: Audio Output through	ghtness: 3000 ANSI Lumens, Contrast Ratio: 2000:1, Resolution: mp life: 5000 hr, Intel® Core™ 2 Duo Processor 1.6 GHz or higher with Intel igher Intel Chipset, 1GB Dual Channel DR II or higher, 45G with upto 128 MB of VRAM, Storage: 160 GB higher Optical Drive: DVD RW ternal: 30W )External: connections required for connecting ters/amplifier & speakers Microphone: Stereo Microphone ive XGA resolution, 150" Channels, recording and playback speed USB 2.0, 1xgigabit LAN, 3x RCA in from VHS/VCD player, necting microphone, 1x VGA in for connecting external XGA x RF input for cable/antenna connection h Stereo jack for external powered speakers should be compatible ws Xp, Windows Vista, Windows 7 and Linux etc.	
8.	LCD TV: Videocon, V	VRL40 Quantity: 1 per school	
	40 inches LCD or Higher (with Remote and batteries, VESA wall mounting kit with wooden casing for complete coverage of LCD TV) <b>Brightness:</b> 450 cd/sqm or higher, <b>Resolution:</b> 1920 x 1080p, <b>Aspect Ratio</b> 16:9, Compatible TV PAL, PAL/SECAM, NTSE, <b>Dynamic Contrast Ratio:</b> 10000:1 or higher, with PC Connectivity, AV In, HDMI in, USB 2.0, RGB in, antenna in, <b>Audio Type:</b> Stereo, <b>Audio output:</b> 10w+10w minimum, <b>Power consumption:</b> 230 VAC, 50 Hz, <b>Cables:</b> Power cord, D-SUB, HDMI/DVI cable, RGB cable, <b>Search features:</b> Automatic & semi-automatic search feature, Full function remote control, On/off Timer built in, programmable, auto power off should be enabled, sleep timer should be inbuilt <b>SOFTWARES: Media is to be provided by the Deptt at central location. All other softwares have been pre-loaded in the systems</b>		
9.	Operating System	Windows Starter Kit, Windows 7 OS Licences for all the	
•	-Desktops	desktops Prof Upgrade, MS Office, Visual Studio, Encarta Encyclopedia and for above PCs with PIL in PC based schools.	
10.	Server OS	Windows 2008 Standard Server (1 copy in Media) along with 10 Client Access Licences in each ICT Lab	

Anti Virus for each desktop with 3 years upgrade

11. Anti Virus

## Furniture and Fixtures Fixed Table assembly for ICT Lab: Godrej, Quantity: 1 table assembly per school

	nool
S. No.	DESCRIPTION OF ITEM
_	Supply of tile based modular workstations of overall height 1089mm as per
1	layout with following specifications and provisions
(a)	Framework:
i)	Supply of workstations in tile based modular partition system of overall thickness shall be 56mm. The frame shall comprise of 2 vertical uprights, a top horizontal tube and a bottom C channel as a welded structure. The vertical upright shall be made from 1.5mm thick CRCA M.S. Grade D formed into "C" channel of 28.4 X 40. The top horizontal shall be 1.2 mm thick M.S. tube of 38.1 X 25.4 mm (1 X 1 ½ inch). The bottom horizontal shall be 1.5 mm thick M.S. 'C' channel of size 38.1mm x 25.4 mm (1 ½ in x 1 in). The frame shall be be powder coated in standard black colour. The vertical upright shall have 4 side slots of size 60mm H X 10mm W, for passage of cables through out the width of the panel. The bottom horizontal shall have 2 slots of size 100mm L X 20mm W for entry of cables into the system. The vertical upright shall have front slits for fixing work surface brackets at a pitch of 25.4mm. To avoid passage of light through the horizontal gap of 4.4.mm between the tiles, a 0.8mm th M.S. CRCA Garde D, black powder coated C shaped light barrier shall be riveted to the frame. The light barrier shall have three slots of size 75 X 15mm for the wires to pass through.
ii)	Frame Joinery
	The frames shall be joined to each other with the help of 2 way, 3 way and 4 way joineries with the help of universal connectors at the junction of the frames. The universal connector shall be screwed to the frame using M6 X 30 long socket button head cap screws.
iii)	Trims
	Powder coated aluminum alloy (of grade He-9 – 63400) Flat trims of 53.5mm X 13mm and average wall thickness of 1.2 mm shall be fitted on the top horizontal using M6 X 55L bolts & Nut and the open vertical ends of the upright using M6 X 25L Bolt & Nut. The open vertical joinery for the configuration 2 way and 3 way shall be covered with 2 way and 3 way aluminum alloy (of grade He-9 – 63400) vertical trims of 1.2mm average thickness, which shall be powder coated and press fitted onto the universal connector made of 2mm th M.S. All the joinery shall be finished with diecast powder coated Mazak flat caps.
iv)	Prelaminated fins
	Prelaminated fins as end partitions shall be 25mm th made of plain particle board finished with laminate of approved shade and color and edge banded with hot pressed PVC lipping. The same shall be fitted to the main panel with the help of fin extrusions.  Half Prelaminated fins as intermediate partitions shall be 25mm th made of plain particle board finished with laminate of approved shade and color and edge banded with hot pressed PVC lipping. The same shall be fitted above worktop with necessary brackets & hardware.
(b)	Tiles:
i)	<b>Fabric tiles</b> : Fabric shall be upholstered on metal tiles in 0.6 mm thick M.S. CRCA Grade D as per IS:513-1994
ii)	<b>Plain Metal tiles</b> : It shall be powder coated metal tiles in 0.6 mm thick M.S. CRCA Grade D as per IS:513 - 1994
(c)	Worksurfaces
(-)	

i)	Rectangular work tops of sizes 1499mm w x 599mm d shall be made of 25mm thick Prelaminated particle board interior grade of approved shade conforming to IS:12823:1990. Bottom shall have a backing laminate of minimum 0.6 mm thickness. All the edges of work surface shall be provided with machine pressed 2
	mm thick PVC lipping glued with hotmelt EVA glue. (Make: Novapan / Merinolam)
	Computer Table for Smart Classroom
	Overall size: width-600 mm, Depth-450 mm, Height-750 mm
	Material: Melamine paper Laminated (30 GSM) Particle board
	Hardware: Castors: 2 lockable & 2 non-lockable
	Construction: Knock down construction (Flat carton), 5 ply, 180 gms, 1 carton per
	product, Finish Colour: Cherry & Honey Colour

## **PVC Flooring: Marvel Vinyl**

Quantity: As per the room size allocated for ICT lab

Sr. No.	Sub-Head & Items of Work
1.	Providing and fixing 2mm thick PVC/Rubber flooring plain. Colored /Corbel or mosaic
	or mattled or wood pattern finish, laid with approved adhesive. Wherever a minor
	repair is required for leveling the floor the same may also be carried out.

## **Seating arrangement for Students:**

• PVC/Plastic moulded 30 Chairs (make: Nilkamal Model: CHR 4001) per school without arms rest

#### Chair:

• PVC/Plastic moulded one Chair (Nilkamal, Model: Passion) per School with arms rest

## **Electrical Wiring and equipments**

# Switches & Sockets: Kinjal, Quantity: As per the requirement of fixed table assembly and Earthing

• Copper plate earthing stations making earthing with copper earth plate 600 mm x 600 mm x 3 mm thick including funnel, char-coal/coke, salt, all earth work. The earthing should be 4 feet deep or more.

## LAN Cabling: Digisol

Sr. No.	Sub-Head & Items of Work	Tentative Quantity	Per
1.	Providing and fixing computer signaling cable in PVC conduit minimum 25mm dia on surface/recess		
	including making necessary connection as approved and directed		
	(a) UTP cat-6, 4 pair		
2.	Providing and fixing patch cord 2.00 Mtr each with RJ 45 connector at both ends complete as approved and directed		
3.	Providing and fixing RJ-45 Jack wall socket with plate including making necessary connections as approved and directed(information outlet –single with SMB)	10 Nos.	Each
4.	Providing and fixing of 9U Rack Wall mounting of standard design as approved and directed	1 No.	
5.	Providing and fixing of 24 Port Patch Panel with making necessary connections and of standard design as approved and directed.	1 No.	
6.	Switch 16 Port, 10/100 Mbps speed	1 No.	

## Penalty and Termination due to Non-Fulfilment of Contract:

## (a) Penalty for failure of equipment(s):

I. No computer system (CPU, monitor, keyboard, mouse, webcam, speakers) or Integrated Computer Projector installed in the ICT Lab or smart class rooms shall be down for more than 3 working days continuously from the date of the lodging of complaint (even if computer system/ Integrated Computer Projector is down during part of a calendar day, it will be counted as one calendar day). For downtime beyond 3 working days, the penalties will be imposed as under:-

No. of days	Penalty amount per school per day per equipment
1-15	@ Rs. 500/-
16-30	@ Rs. 1000/-
31-60	@ Rs. 2000/-
61 onwards	@ Rs. 5000/- till the rectification takes place

If the rectification does not take place upto 90 days from the lodging of the complaint and if such situation occurs in 15% or more allotted Govt. Sr. Sec. Schools, then the contract shall be terminated at the risk and cost of the company.

II. The following penalty will be imposed for the non working of the equipments such as Multipurpose Printer, UPS and LCD TV/Monitor, if the problem is not rectified within 3 working days from the lodging of the complaint. The penalty will be counted from day one and will be calculated as under:-

No. of days	Penalty amount per school per day per equipment
1-15	@ Rs. 1000/-
16-30	@ Rs. 2000/-
31-60	@ Rs. 3000/-
61 onwards	@ Rs. 5000/- till the rectification takes place

If the rectification does not take place upto 90 days from the lodging of the complaint and if such situation occurs in 15% or more allotted Govt. Sr. Sec. Schools, then the contract shall be terminated at the risk and cost of the company.

III. The following Penalty will be imposed for the non working of internet, if the problem is not rectified within 3 working days from the lodging of the complaint. The penalty will be counted from day one and will be calculated as under:-

No. of Days	Penalty amount per school per day
1-15	@ Rs. 1000/-
16-30	@ Rs. 2000/-
31-60	@ Rs. 3000/-
61 onwards	@ Rs. 5000/- till the rectification takes place

The clause is not to be invoked where Internet Service Provider (ISP) is not available.

If the rectification does not take place upto 90 days from the lodging of the complaint and if such situation occurs in 15% or more allotted Govt. Sr. Sec. Schools, then the contract shall be terminated at the risk and cost of the company.

IV. The following penalty will be imposed for the non working of the networking, if the problem is not rectified within 3 working days from the lodging of the complaint. The penalty will be counted from day one and will be calculated as under:-

No. of days	Penalty amount per school per day
1-15	@ Rs. 1000/-
16-30	@ Rs. 2000/-
31-60	@ Rs. 3000/-
61 onwards	@ Rs. 5000/- till the rectification takes place

If the rectification does not take place upto 90 days from the lodging of the complaint and if such situation occurs in 15% or more allotted Govt. Sr. Sec. Schools, then the contract shall be terminated at the risk and cost of the company.

V. The following penalty will be imposed if multimedia content remains non-functional for more than three working days from the lodging of the complaint. The penalty will be counted from day one and will be calculated as under:-

No. of days	Penalty amount per school per day
1-15	@ Rs. 1000/-
16-30	@ Rs. 2000/-
31-60	@ Rs. 3000/-
61 onwards	@ Rs. 5000/- till the rectification takes place

The Penalty on multimedia educational content will be applicable only when Integrated Computer Projector/system/LCD Tv/monitor is operational and multimedia educational content is non-functional.

If the rectification does not take place upto 90 days from the lodging of the complaint and if such situation occurs in 15% or more allotted Govt. Sr. Sec. Schools, then the contract shall be terminated at the risk and cost of the company.

- VI. Penalty @ Rs 1000/- Per day per Cluster Coordinator/State Project Officer will be imposed if Cluster Coordinator or State Project Officer remains absent without written intimation and does not respond to the queries raised by the Dy. DHE & DHE.
- VII. If the company fails to conduct the refreshers course of teachers as per schedule, Penalty @ Rs 1000/-per day per school will be imposed till the company conducts the refresher courses of teachers.
- VIII. If the Company fails to submit the Monthly Monitoring Reports (MMRs) of 628 schools within a week after each month then a penalty @ Rs. 500/- per school per day will be imposed for maximum 30 days, thereafter a consolidated penalty of Rs. 1,000/- per school per day will be imposed till the submission of MMRs.
- IX. If the Monthly Monitoring Reports (MMRs) submitted by the company is not as per the specified structure and format or is observed incomplete in any respect then report in respect of that school will be considered rejected and penalty @ Rs. 500/- per MMR will be imposed till the complete MMR is submitted.
- X. If the company fails to complete all the liabilities covered under the scope of work in a school with in a stipulated period as mentioned in implementation schedule, the penalties will be imposed as under:-

No. of days	Penalty amount per school per day
1-15	@ Rs. 2000/-
16-30	@ Rs. 3000/-
31-60	@ Rs. 5000/-
61 onwards	@ Rs. 10000/-

All the furniture and fixtures and power point fittings need to be repaired/replaced, as per the requirement arise during the contract period. In case

during rectification/ repair of any equipment, the company will install a new equipment of same or higher configuration till the repaired equipment is received and installed. The company is allowed to take away the faulty equipment after replacement with a new one of same of or higher configuration.

- **(b) Termination of contract for default:** The Govt. of Himachal Pradesh without prejudice to any other remedy available for breach of contract, may terminate the contract in whole by serving 30 (thirty) days notice in writing to the company in the event of any one or all of the following:
  - i. If the company fails to implement the scheme in 15% or more than 15% of the allocated schools within the given time schedule at any point of time.
  - ii. If the company fails to provide any one or all services as per this Contract, and fails to set right the disruption in service within the 30 (thirty) days notice period or show a valid reason to Director of Higher Education for the lapse.
  - iii. If the company has engaged in corrupt or fraudulent practices in executing the Contract.
  - iv. In the event of termination of the contract for default of the company, Director of Hr. Education is entitled to invoke the Performance Bank Guarantee and the entire infrastructure installed in the 628 schools will become the property of the Govt.
  - v. If the company defaults in 15% or more than 15% of the allotted schools at any time the contract will be terminated.
  - vi. In case, the total penalty amount for all schools or any number of schools on all accounts during contract period exceeds the amount of Rs. 80 lac cumulative, then this will be counted towards default and shall lead to termination of the contract.

"In case of termination of contract at any case, entire infrastructure like instruction material, software, hardware, furniture and site installations etc. will become the property of the Govt. of Himachal Pradesh. No compensation/payment of any kind shall be made to the company. Also the EMD of the company will be forfeited and the Performance Bank Guarantee submitted by the company will be invoked by the Director of Higher Education".

#### Site Preparation and Site Survey

As per implementation plan, Department of Higher Education shall arrange the necessary minimum constructed rooms/ permanent construction for locating Computer Lab and smart class rooms for operation of the ICT Project. The space cannot be used for any purpose other than for delivering the services as contracted under the Agreement. Department of Higher Education shall arrange for necessary clearances, which shall enable the Company to undertake electrical wiring, earthing, dust free room, installation of furniture, installation of UPS equipment, network cable laying etc., at the respective school sites.

## **Acceptance Test**

The Department of higher education will provide an acceptance test proforma to the company at the time of signing of the agreement. The company will have to submit the acceptance test proforma within 10 days after the expiry of allotted time i.e. 150 days. The acceptance test proforma will be accepted only when the entire scope of work mentioned in this tender document is fully completed in all respect in respect of each school.

Any delay by the Company in the Acceptance Testing shall render the Company liable to the imposition of appropriate penalties @ 100 per day per school.

In the event the Company is not able to complete the installation at School site as defined by Department of Higher Education due to non-availability of site, Department of Higher Education at its discretion may redefine the completion dates so the Company can complete installation and conduct the Acceptance Test within the extended timelines.

Acceptance test would be duly verified by the school Principal and counter signed by the Dy DHE of the concerned district.

## **Performance Bank Guarantee for Operations**

## Performance Bank Guarantee - ICT in Government Senior Secondary Schools

Company shall furnish Performance Bank Guarantee to Department of Higher Education for an amount i.e. Rs. 60,000/- per school at the time of signing of the agreement for Scope of work. The Performance Bank Guarantee shall be valid upto 30th September, 2013. The Department of Higher Education may forfeit the Performance Bank Guarantee for any failure on part of Company to complete its obligations under the agreement. The Performance Bank Guarantee shall be denominated in Indian Rupees and shall be absolutely, irrevocably and unconditional guarantee in the form of a Performance Bank Guarantee issued by a Nationalized Bank and payable at Shimla in the format provided by Department of Higher Education. In the event of any amendments to Agreement, the Company shall within 15 days of receipt of such amendment furnish the amendment to the Performance Bank Guarantee as required.

### Force Majeure

Neither party shall be responsible to the other for any delay or failure in performance of its obligations due to any occurrence commonly known as Force Majeure which is beyond the control of any of the parties, including, but without limited to, fire, flood, explosion, acts of God, public disorder, riots, embargoes, or strikes, acts of military authority, epidemics, strikes, lockouts, insurrections, civil commotion, war, enemy actions. If a Force Majeure arises, the Company shall promptly notify department in writing of such condition and the cause thereof. Unless otherwise directed by department, the company shall continue to perform his obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. The successful company shall be excused from performance of his obligations in whole or part as long as such causes, circumstances or events shall continue to prevent or delay such performance.

## List of Schools to be covered under ICT@School Project:

CONSTITUNCY	S.NO.	NAME OF SCHOOL
1. Distt Bilaspur		
Kotkehloor		
	1	Bassi
	2	Bhakara
	3	Jagatkhana
	4	Jukhala
	5	Kallar-Patta
	6	Kothipura
	7	Namhol
	8	Sawahan

	9	Soldha
	10	Tarsu
Bilaspur		Taloa
Бпаораг	1	Auhar
	2	Bilaspur(B)
	3	Bilaspur(G)
	4	Chalehli
	5	Ghagas
	6	Kandraur
	7	
	8	Panjgain Rambag(Barmana)
	9	
Ghumarwin	9	Taliyana
Gnumarwin	1	Bharari
	3	Danger Chumarwin(P)
		Ghumarwin(B)
	4	Ghumarwin(G)
	5	Hatwar
	6	Kaphara
	7	Kuthera(Bhel)
	8	Nalti
Geharwin		D 41:
	1	Barthin
	2	Geherwin
	3	Jejwin
	4	Jhanduta
	5	Kalol
	6	Rishikesh
	7	Samoh
	8	Talai(U)
2. Distt Chamba		
Bhattiyat	-	1
	1	Chowari
	2	Dhulara
	3	kakira(B)
	4	Mehla
	5	Sihuntha
	6	Tundi
Banikhet		
	1	Banikhet
	2	Bathari
	3	Dalhausie(U)
	4	Salooni

	5	Sundla
	6	Telka(Salwan)
Rajnagar(SC)	U	Torka(Garwari)
rajnagar(00)	1	Chakloo
	2	Kiani
	3	Masroond
	4	Srikund
	5	Tissa
Chamba	<u> </u>	11000
Onamba	1	Chamba(B)
	2	Chamba(G)
	3	Chaned
	4	Chhatrari
	5	Saho
	6	Sunara
	7	Udaipur
Bharmour	·	
	1	Bharmour
	2	Holi
	3	Khani
	4	Killar
	5	Sach
3. Distt Hamirpur		
Nadaun		
	1	Amlehar
	2	Badaran
	3	Balduhak
	4	Bara
	5	Bhumpal(Sadhiyal)
	6	Dhaneta
	7	Gauna
	8	Jalari
	9	Kangoo
	10	Kashmir
	11	Nadaun(B)
	12	Nadaun(G)
	13	Naunghi(Jolslapar
	14	Rail
	15	Sanahi
	16	Sera
Hamirpur		
	1	Amroh
	2	Chabutra

	1 -	
	3	Chauri
	4	Hamirpur(B)U
	5	Hamirpur(G)U
	6	Jhagariani
	7	karot
	8	Kot
	9	Kuthera
	10	Matahani(MS to SSS
	11	Nalti
	12	Patlander
	13	Sujanpurtihra(B)U
Bamson		
	1	Badhani
	2	Bagwara
	3	Bajrol
	4	Bohni
	5	Chamboh
	6	Darbiar
	7	Jandru
	8	Jangalberri
	9	Kakkar
	10	kakriar
	11	Lambloo
	12	Pahunch
	13	Parol
	14	Tauni Devi
	15	Tikkar-khattarian
	16	Uhal
Mewa		
	1	Bhareri
	2	Bhoranj
	3	Bhota
	4	Didwin
	5	Jahu
	6	Jhiralari
	7	Kharwar
	8	Ladraur
	9	Mair
	10	Mehal
	11	Mundkhar
	12	Patta
	13	Tal
		i

Nadaunta		
HAMMAIILA	1	Bani
	2	Biar
	3	Bijhari
	4	•
		Dhangota
	5	Gallaur
	6	Garli
	7	Giaragran
	8	Jaure Amb
	9	Lower Hareta
	10	Maharal
	11	Raili Jajri
	12	Tipper
4. District Kangra		
Nurpur		
	1	Bhadwar
	2	Ganoh
	3	Giora
	4	Ladauri
	5	Nurpur(G)
	6	Nurpur(U)
	7	Raja ka Talab
	8	Rehan
	9	Sadwan
	10	Sulyali
Gangath		
	1	Basantpur at Tesra
	2	Dah kulahara
	3	Dainkwan
	4	Gangath
	5	Indora
	6	Lodhwan
	7	Mohtli
Jawali		
	1	Bahadurpur
	2	Bharmar
	3	Bhogarwan
	4	Dhameta
	5	Fatehpur
	6	Guglara
	7	Rey
	8	Sathana
Guller		

		Assists
	1	Amlela
	2	Amni
	3	Bharila-Daroka
	4	GharJarot
	5	Harsar
	6	Jawali
	7	Kotla
	8	Kuther
	9	Matlaher
	10	N.Surian
Jaswan		
	1	Bankhandi
	2	Bathu Tippri
	3	Bhatoli-phakorian
	4	Dada-siba
	5	Ghamroor
	6	Haripur
	7	kotla-behar
	8	Sansarpur-Terrace
Pragpur		
31	1	Badalthore
	2	Channaour
	3	Dhaliiara
	4	Garli
	5	Karoa
	6	Pirsaluhi
	7	Pragpur
	8	Rakkar
Jawalamukhi		Namai
VANTAIAIIIANII	1	Bharolikohala
	2	
	3	Dehragopipur Ghallaur
	4	Jawalamukhi
	5	Kathog
	6	Khundian
	7	Lagru
	8	Muhal
	9	Surani
	10	Tihari
Thural	4	A1
	1	Alampur
	2	Balakrupi
	3	Gander

	4	1 1
	4	Jaisinghpur
	5	Lambagaon
	6	Majhien
	7	Sanghol
	8	Serimolag
	9	Silh
	10	Tamber
	11	Thural
Rajgir		
	1	Banoori
	2	Bhulana
	3	Chadhiar
	4	Dagoh
	5	Jalag
	6	Koseri
	7	Majhera
	8	Makol
	9	Rajpur
Baijnath		- 71
	1	Averi
	2	Baijnath
	3	Bir
	4	Deol
	5	Kandwari
	6	Krishannagar
	7	Lohardi
	8	Paprola
	9	Sansai
		Sansal
Palamnur	10	Jansai
Palampur	1	Phawarna
		Bhawarna
	2	Bindraban
	3	Chachian (Chach)
	4	Kandi-(Badoh)
	5	Lahla
	6	Pahra
	7	Palampur(G)
	8	Palampur(Guggar)
	9	Parour
Sullah		
	1	Bhoda
i l	2	Boda

	3	Daroh
	4	Dhira
	5	Garhjamula
	6	Gharana
	7	Khera
	8	Kotloo
	9	Mundhi
	10	Naoura
	11	Rajhoon
	12	Sulah
Nagrota Bagwan		
	1	Baroh
	2	Dhaloon
	3	Nagrota-Bagwan(G)
	4	Nagrota-Bagwan(U)
	5	Pathiar
	6	Rajiana
	7	Samloti
	8	Serathana
	9	Suinhin
Shahpur		
	1	Baranj
	2	Chari
	3	Darini
	4	Harchakian
	5	Kaliara
	6	Kareri
	7	Rait
	8	Rehlu
	9	Salol
	10	Shahpur
Dharamshala		
	1	Bagli
	2	Dari
	3	Dharamshal(B)
	4	Dharamshal(G)
	5	Forsythganj(U)
	6	khanaiyara
	7	Mandal
	8	Tang narwana
Kangra		
<b>J</b>	1	Balugaloh
L		

	2	Doulotour
		Daulatpur
	3	Dhughiari
	4	Jassain
	5	Kachhiyari
	6	Kuther(Ranital)
	7	Lanj
	8	Mataour
	9	New Kangra(U)
	10	Tiyara
5. Distt. Kullu		
Anni		
	1	Anni
	2	Arsu
	3	Dalash
	4	Deogi
	5	Kungash
	6	Neether
	7	Nirmand
	8	Tandi
Banjar		
	1	Bajura
	2	Banjar
	3	Bhuntar
	4	Garsa
	5	Jallugran
	6	Jaree
	7	Sainj
Kullu		
	1	Bhutti
	2	Bran
	3	Haripur
	4	Katrain
	5	Kharahal
	6	Kullu(B)
	7	Kullu)(G)
	8	Manali
	9	Nagar
	10	Raison
	11	Goshal at Bhang
6. Distt Kinnaur	1	2 - 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	1	Kalpa
	2	Kanam
	3	Katgaon
		raigaon

	4	Nichar
	5	pooh
	6	Reckongpeo
	7	Sangla
7. Distt Lahual & Spiti	<u>'</u>	Cangia
	1	Hansa
	2	Jhalama
	3	Kaza
	4	Keylong
	5	Kibbar
	6	Udaipur
8. Distt Mandi		
Karsog		
	1	Churag
	2	Karsog
	3	Nehri
	4	Pangna
	5	Seribanglo
	6	Shakra
Chachiot		
	1	Bagshad
	2	Balichowki
	3	Chattri
	4	Gohar
	5	Janjehli
	6	Thunag
Nachan		
	1	Chailchowk
	2	Dhangiara
	3	Jaidevi
	4	Kaned
	5	Mahadev
	6	Rohanda
Sundernagar		
	1	Chah-Ka-Dora
	2	Dehar
	3	Jarol
	4	Salapar
	5	Sundernagar(B)
	6	Sundernagar(G)
	7	Taleli
Balh		
	1	Bhangrotu

	2	Dushahra
	3	
		Galgal
	4	Galma
	5	Gurukotha
	6	Hatgargh
	7	Pairi
	8	Rajgarh
	9	Rajwari
	10	Riwalsar(U)
	11	Sidhyani
Gopalpur		
	1	Baldwara
	2	Bhadarwar
	3	Bhambla
	4	Chowk
	5	Gopalpur
	6	Jamni
	7	Kashmaila
	8	Kot-Hatli
	9	Nabahi
	10	Paonta
	11	Rissa
	12	Samella
	13	Sarkaghat(U)
	14	Thona
Dharampur		
-	1	Bharari(Sujaopipli)
	2	Cholthara
	3	Dharampur
	4	Gaddidhar
	5	Hawani(Parsada)
	6	Kujja-Balh
	7	Longni
	8	Mandap
	9	Mari
	10	Sandhole
	11	Seyoh
	12	Tihra
	13	
		Dhaner Patrighat Chandosh
	14	Chandesh
	15	Heun Pehad
	16	Sidhpur

Jogindernagar		
- Ooginaanagai	1	Chontra
	2	Droobal
	3	Jogindernagar(B)
	4	Jogindernagar(G)
	5	Ladbharol
	6	Langna
	7	Makreri
	8	Matroo
	9	Pandol
	10	Utpoor
Darang	10	O C C C C C C C C C C C C C C C C C C C
Darang	1	Bhararu
	2	Darang
	3	Dhar
	4	Katindi
	5	Katoula
	6	Kufri
	7	Narla(Paddar)
	8	Panarsa
	9	Pashakot(Barot)
	10	Shivabadar
	11	Sudhar
Mandi		
	1	Baryara
	2	Karkoh
	3	Kothigehra
	4	Kotli
	5	Kot-Sadar(Tungal)
	6	Majjwar
	7	Mandi(B)-(U)
	8	Mandi(G)-(U)
	9	Pandoh(U)
	10	Saigaloo
	11	Tilii-Kehanwal
9. Distt. Shimla		
Rampur		
•	1	Dhargaoura
	2	Dutt Nagar
	3	Jeori
	4	Jhakri
	5	Khamadi

	6	Maihaati
	6	Majheoti Nankhari
	7	
	8	PadamRampur(U)
	9	Rampur-G(U)
	10	RRM Nogli
	11	Sarahan-Bushahar
	12	Takletch
Rohru		
	1	Arhal
	2	Chargaon
	3	Jangla
	4	Lowerkothi
	5	Pujarli-4
	6	Rohru(B)U
	7	Rohru(G)-U
	8	Tikker
	9	Dhamwari
Jubbal-Kotkhai		
	1.	Deori-Khaneti
	2.	Jubbal(B)-U
	3.	Kalbog
	4.	Kiari
	5.	Kotkhai(G)
	6.	Kotkhai(U)
	7.	Mahasu
	8.	Mandal
	9.	Mandhol
	10.	Melthi
	11.	Pandranu
	12.	Sarsawati-Nagar(Sawra)
Chopal		
	1.	Bamta
	2.	Bour
	3.	Chopal
	4.	Deoth
	5.	Kupvi
	6.	Mareog
	7.	Nerwa
	8.	Sarain
	9.	Tharoach
Kumarsain		
	1	Banoona
	2	Baragaon

	_	Dh#:
	3	Bhutti
	4	Birgarh
	5	Dargi
	6	Kangal
	7	Khanetisadhoch
	8	Khatnol
	9	Basantpur
	10	Kumarsain
	11	Narkanda
	12	Pahal
	13	Sunni(U)
	14	Durgapur
	15	Delath
Theog		
	1	Bagain
	2	Deha
	3	Matiana
	4	Theog(B)U
	5	Theog(G)U
	6	Sarog
Shimla		
	1.	Chhotashimla(U)
	2.	Lakkarbazar(G)-U)
	3.	Phagli(U)
	4.	Portmore(G)-U
	5.	Sanjauli(U)
	6.	Shimla(B) U
	7.	SummerHill
Kusumpti		
	1	Baldeyan
	2	Ghanahatti
	3	Halog-Dhami
	4	Junga
	5	Khalag
	6	Kohbagh
	7	Mashobra
	8	Rampur-Keonthal
	9	Shoghi
	10	Tutu(U)
10. Distt Solan		
Arki		
	1	Arki(B) U
<u> </u>	<u>'</u>	,(D) S

	2	Arki(C)
		Arki(G)
	3	Bhumti
	4	Darlaghat
	5	Dhundan
	6	Kunihar
Doon		
	1	Baddi
	2	Barotiwala
	3	Chandi
	4	Diggal
	5	Goela
	6	Gullarwala
	7	Manpura
	8	Patta Mehlog
	9	Ramshsahar
Nalagarh		
	1	Baroona
	2	Dabhota
	3	Joghon
	4	Nalagargh Girls
	5	Nalagarh(B)(U)
	6	Panjehra
Kasauli		,
	1	Chamian
	3	Dharampur
	4	Jabli
	5	Kasouli
	6	Kuthar
	7	Parwanoo(Baroti)
	8	Subathu
	9	Sultanpur
Solan		
	1	Chail
	2	Deothi
	3	Gaura
	4	Guggaghat
	5	Jaunaji
	6	Kalhog
	7	Kandaghat
	8	Kuftoo
	9	Mamlighg
	10	Ochhghat Oches (D)
	11	Solan(B)

	12	Solan(G)
	13	Salogra
11. Distt. Sirmour	10	Calogra
Pachhad		
1 acililau	1	Bhanog
	2	Fagoo
	3	Nainatikkar
	4	Narag
	5	Rajgargh(U)
	6	Srahan(U)
Renuka	0	Sianan(0)
Keliuka	1	Bhawai
	2	Bogdhar
	3	Korag
	4	Sangrah
Shillai	+	Jangian
Oilliai	1	Amboya
	2	Kaffota
	3	Shillai
Paonta Doon	3	Official
T donta Doon	1	Bhagani
	2	Kolar
	3	Majra
	4	Nagheta
	5	Paonta(B)U
	6	Paonta(G)
	7	Sataun
	8	Shivpur
Nahan		Chivpui
	1	Bankalan
	2	Bechar-ka-Bagh
	3	Dadahu
	4	Jamta
	5	Nahan(B)
	6	Nahan(G)
	7	Surla
	8	Trilokpur
12. Distt UNA		monpui
Gagrate		
	1	Ambota
	2	Badhera-Rajputan
	3	Bhadarkali
	4	Bhanjal
	_ +	Dhanjai

	_	Challata (C)
	5	Challate(G)
	6	Daulatpur (TO)
	7	Ghanari
	8	Gobdhpur Bhanera
	9	Marwari
	10	Nangal-Jariala
Chintpurni		
	1	Amb
	2	Bharwain
	3	Dharamshal-Mahantn
	4	Diara
	5	Dushara
	6	Lohara
	7	Mubarkpur
	8	PoliaPurohita
	9	Rapo-Misran
	10	Suri
	11	Thathal
Santokhgarh		
	1	Bathri
	2	Dulehar
	3	Haroli
	4	Kangar
	5	Khad
	6	Lalhari
	7	Pandoga
	8	Panjawar
	9	Pubowal
	10	Saloh
	11	Santokhgarh(B)(U)
	12	Santokhgarh(G)(U)
Una		
	1	Basal
	2	Basdehra
	3	Behdala
	4	Charatgarh
	5	Dehlan
	6	Nangran
	7	Sanouli
	8	Takka
	9	Una(B)(U)
	10	Una(G)(U)
		(-)(-)
	İ	1

Kutlehar	1	Ambehra
	2	Arloo
	3	Bangana(MS to SSS)
	4	Chauki Maniar
	5	Dhamandari
	6	Dhundla
	7	Hatli
	8	Lathiani
	9	Raipurmaidan
	10	Samoor Kalan
	11	Saroh
	12	Takoli
	13	Talmehra
	14	Thanakalan