REGD.
From

The Director General, Supplies & Disposals, Haryana,
S.C.O. No. 09 (1ˢᵗ & 2ⁿᵈ Floors), Sector-16, Panchkula.
Tel. Nos. 0172-2570121-124.
Fax No. 0172-2570121, E-mail: supplies@hry.nic.in

To

M/s Globus Infocom Limited,
A-65, Sector-4, Noida, Gautam Buddha Nagar, Uttar Pradesh.

Email- bhanu@globusinfocom.com, info@globusinfocom.com, ,

Memo No. **53/HR/RC/E-4/2019-20/** 1841
Dated Panchkula the:- 10/6/2020

Subject: -   Two Years Rate Contract for the supply of Electronics Lab Systems required by the Secondary Education Department Haryana (Sr. No. 02).

Dear Sir,

With reference to your Tender No. & dated and this office acceptance letter No. & Dated and your letter No. and Dated given in Schedule "A", on the subject noted above, I have to inform you that your offer has been accepted for the supply of stores to the terms & conditions given in the Schedule "A" and "B".

2.   I enclose herewith an agreement form in duplicate and request that the agreement may be executed on a non-judicial stamp paper of Rs.15/- signed and returned to this office within 10 days from the date of issue of this letter. One copy of the agreement will be sent to you duly executed on behalf of Governor of Haryana for your record. You may kindly send power of attorney in favour of the person/persons who is/ are authorized to signed the agreement together with/their specimen signature duly attested by a Magistrate or Oath Commissioner or Resolution of the firm authorizing the persons to sign the documents on behalf of the firm.

3.   The Contract shall come into force from the date of its issue and shall remain operative **upto Two YEARs i.e 09.06.2022.** Government reserves the right to bring any other party on the rate contract at any subsequent stage during the pendency of this rate contract.

4.   The store must confirms to the approved specification/samples as given in Schedule "A" attached, failing which the same shall be rejected at your risk and cost.

5.   The inspection of the material will be carried out by the Indenting Officers or their authorized representatives at your premises before dispatch.

6.   The supply must be completed within the stipulated delivery period failing which the risk purchase will be affected against you and the excess cost thus incurred will be recovered from you. Delayed supplies shall be accepted under penalty clause of the Schedule "B" unless the delivery period is extended by the competent authority.

7.   The Director, Supplies & Disposals, Haryana reserves to himself the right obtain contracted items of stores when available from any Govt. Deptt./ approved source without prejudice to this contract.

8.   Failure to execute agreement/effect supplies within the stipulated period, repeatedly offering supplies liable to rejection or without prior inspection may render your earnest money/security liable to forfeiture, debarring your firm in addition to other remedies as available under the terms of the contracts.

9.   All cases, where payments are not made within time, should be referred to this office for taking necessary action against the defaulters.

10.   Your attention is particularly invited to the provision of Schedule "B" regarding the compliance with requisitions, preparation and submission of bills and quarterly submission of statement of supplies.

11. **PRICE FALL CLAUSE:-** The price charged for the stores shall not exceed in any way the lowest price at which you quote/supply the stores of identical description of stores to DGS&D, New Delhi/State Govt./Central Govt./Institutions/ undertaking/any other person during the delivery period/currency period of the rate contracts. If at any time during the delivery/currency period, you reduce the rate, sale price of quoted stores to any person at the price lower than the price chargeable under this supply order/contract, you are required to inform this office and price payable under the supply order/contract for the stores supplied after the date of coming into force of such reduction of rates shall stand correspondingly reduced to that level. You shall promptly notify the reduction of rates to this office as well as to concerned Indenting Officers/ Consignees. You shall also give a certificate on your bills that the rates charged by you are not in any way higher to these quoted to the DGS&D, New Delhi and other State Govt. Central Govt. Institutions etc. during the corresponding period. The Indenting Officer shall be required to ensure that requisite certificate is given by the concerned firm on the bills before releasing their payments.

12.   All disputes will be settled only within the jurisdiction of Head Quarters of the Directorate of Supplies & Disposals, Haryana, Panchkula.

Please acknowledge the receipt of this letter.

Yours faithfully,

Assistant Director, Supplies & Disposals,
For & On behalf of Governor of Haryana

Endst. No-53/HR/RC/E-4/2019-20/ 1872   Dated

A copy (i) copy of Schedule 'A' showing the prices accepted along with conditions of supply (ii) Schedule "B" i.e. conditions of contract applications are forwarded to the Director General, Secondary Education, Haryana, Shiksha Sadan, Sector-05, Panchkula for information and necessary action.

1.   He may indent for the requirement of the goods included in the Schedule "A" attached direct on the approved contractors under intimation to this office.

2.   The security deposited by the firms would be released after two months of the termination of the contract and he is therefore, requested to send the complaints, if any, against the contractors to this office within this limit for settlement, failing which no complaint or claim will be entertained.

3.   The Inspection shall be arranged by the Indenting Officer/Consignees or their authorized representatives at destination before releasing the payment of the supplies. The

...es should be accepted only after satisfactory inspection and issue of proper inspection ...e showing the acceptance of the material as per approved specifications.

Please report all cases in which contractor fails to effect supply within the delivery period stipulated in the Schedule "A" after the expiry of stipulated delivery period to this office for effecting purchase at the risk and cost of the contractors failing which all responsibility will rest with Indenting Officers/Consignees for not effecting risk purchase within prescribed period.

Assistant Director, Supplies & Disposals,
For Director General, Supplies & Disposals, Haryana

Endst. No-53/HR/RC/E-4/2019-20/ 1843 Dated 10/6/2020

A copy is forwarded to the following for information & necessary action:-
The Deputy Excise & Taxation Commissioner, Noida.

He is requested to ensure that the GST is paid by the firm to government against this rate contract.

Assistant Director, Supplies & Disposals,
For Director General, Supplies & Disposals, Haryana

Endst. No-53/HR/RC/E-4/2019-20/ 1844-50 Dated 10/6/2020

A copy is forwarded to the following for information and action:-
1. The Accountant General (Audit), Haryana, Sector-33, Chandigarh.
2. The Controller of Stores, Punjab, Chandigarh.
3. The Controller of Stores, Himachal Pradesh Nigam Vihar, Shimla.
4. The Controller of Stores/Director of Industries and Commerce, J&K, Shrinagar.
5. St. Section O/o DGS&D, Haryana.
6. Programmer O/o DGS&D, Haryana.
7. Departmental Processing Charges branch DGS&D, Haryana

Assistant Director, Supplies & Disposals,
For Director General , Supplies & Disposals, Haryana

Accepted rates of M/s Globus Infocom Limited, A-65, Sector-4, Noida, Gautam Buddha Uttar Pradesh Email- bhanu@globusinfocom.com, info@globusinfocom.com, Offer GIL/DSND/2019-20/01 Dated 15.03.2020 and your letter No. nil dated 28.05.2020, this of acceptance letter No.1808 dated 09.06.2020 & your letter dated

1. DIGITAL BOARD :-

Sr. No. of DNIT	Description of Stores	Qty.	Rates in Rs. per piece Inclusive of GST@18%, freight & FOR Destination etc.
1.	DIGITAL BOARD Model-D8K465	700 Nos.	Rs. 2,55,000.00

SPECIFICATIONS:-

Technical Specifications for Digital Board

1	Technical Specifications of Digital Board	
	Digital Board is an integrated solution including Cabinet (Cabinet with Multimedia Controller, Visual Presenter, Biometric attendance device, UPS with casing, wireless Keyboard and Mouse & Digital Clock) & Touch Display with pre-loaded Android based Digital Multimedia Content & Platform.	
A	**Cabinet**	
	Cabinet	Wall Mounted Lockable Enclosure to house , Multimedia Controller, Visual Presenter, Biometric attendance device, UPS with casing & Digital Clock
	Material of Cabinet	Powder coated CRCA Steel Sheet of minimum 1.2mm thickness
B	**Multimedia Controller**	
	Ports on front Panel of Controller (Minimum)	VGA,HDMI,USB3.0x2,Audio IN or more
	Buttons on front Panel of Controller (Minimum)	Push buttons to control Volume Up& Down, Volume Mute and to switch sources of HDMI Visual Presenter,VGA Visual Presenter, HDMI Laptop,PC HDMI,VGA Laptop,VGA PC and Power On/Off or more
	Ports on Rear Panel of Controller (Minimum)	USB 3.0 X 2,VGA Input x 2, VGA Output x 2, RCA Audio IN X 1,RCA Audio Output x 2,HDMI Inputx2,HDMI Outputx2 or more
C	**In -Built Visual Presenter**	
	Type	Portable
	Technology	CMOS
	Image Capture Size	Minimum A4 Size (210x297 mm)
	Native Resolution	Full HD 1920 x 1080 or better
	Optical Zoom	12x or better
	Digital Zoom	8x or better
	Video Frame Rates	30 FPS or better
	Focus Arrangement	Auto Focus

	Camera Head Rotation Angle	Camera head rotation angle-180 degree in horizontal and 180 degree in vertical or better
	Light Source	White LED
D	**Biometric Attendance Device**	
	Display	Minimum 2.5" Color Display
	Fingerprint Sensor	Optical sensor for capturing fingerprints
	Failure Rate	Recognition failure better than 0.001% & Acceptance failure better than 0.1%
	Recognition Speed	less than 1 second
	Capacity	minimum 500 fingerprints
	Identification modes	EM Card, password & Fingerprint
	Communication	USB, TCP/IP
	Permissions	Minimum 50 open time, 5 groups & 10 kind of combinations to open door.
	Power	DC 12V/1A
E	**UPS**	
	Power Back up	Solution should be supplied with minimum 1 KVA UPS with inbuilt batteries with minimum 15 minutes backup time with casing.
F	**In -Built Digital Clock**	
	Digital Clock	It should show the Time, Date, Day and Current Temperature
G	**Keyboard & Mouse**	Wireless Keyboard & Mouse
H	**Touch Display**	
	Technology	DLED Backlight (IPS)
	Display size (Diagonal)	65 inches or higher
	Aspect Ratio	16:9 or better
	Resolution	3840 X 2160 or higher
	Contrast Ratio	5000:1 or higher
	Brightness	600 cd/m^2 or higher
	Display color	8 bit-16 million colors or better
	Input Ports (Minimum)	HDMI x 3, RGB/VGA x 1, Audio x 1, CVBS (AV) x 1, PC slot x 1, RS232x1
	Output Ports (Minimum)	HDMI x 1, Audio(Earphone out) x 1, Coax x 1, SPDIF x1, RS232 x1
	USB Ports (Minimum)	USB 2.0 Type A x 4, USB 3.0 Type A x 2, USB 2.0 Type B for Touch x 2
	Camera Port	Dedicated USB Based Camera Port
	Camera Plate	Camera Plate on top for screw-in Camera installation
	Communication port	RJ45 x 1 Giga LAN Port
	Built In Speakers	2.1 Stereo Sound with in-built 20 Watt x 2 speakers and 15 Watt x 1 Sub-Woofer or better
	Viewing Angle	Horizontal 178 degrees, Vertical 178 degrees or better
	Touch Technology	IR Recognition or better
	Touch Resolution	32767 x 32767 or better
	Touch Points	20 Points or Higher

Writing Points	10 Points with automatically detect pen diameter (8mm & 2mm) and write simultaneously with different colors and thicknesses.	
Pen Recognition	Dual Pen recognition with 2mm tipped pens at real-time lag free response rate.	
Split Screen	4 Way Split Screen content sharing software	
Touch on/Off	Should have touch on/off functionality	
Touch Response Time	15 ms or better	
OS Support/Embedded Player	Windows 10/ Windows 8/ Windows 7/Linux/Mac/Android Embedded Player CPU Inbuilt.	
Stylus/Pen Holder	Frame/Structure of IFPD should have inbuilt magnetic mechanism to hold up to two numbers of Stylus/Pen	
Networking	DHCP (Auto identification) and Static IP supported	
Hardness, Anti Scratch, Anti-Glare	Minimum 7 H hardness, scratch resistant, anti-glare, anti-crack resistant	
Software Features	Marker, Paint Brush, Highlighter, Laser Pen, Artificial intelligent Pen, Shape Pen, Magic Line Pen, Different sizes available with Region eraser, Shapes, Text, Generic consist of (shapes,3DShapes, Arrows & Tables), Integrated image search from internet, Search Light, Screen Curtain, inbuilt browser, screenshot, magnifier, calculator, soft keyboard, Clock, Stop Watch, Geometry Tools, Screen recording, integrated webcam, Desktop Annotation, White board with different backgrounds and colors, Cloud storage, Cloud Download, Page management system. Multiple numbers of images available with internet like nature, sport, Daily necessity, animals or documents/contents. Annotation of on video, PPT, PDF. Annotate on PC/ Laptop with the help of smart phone, New, Open, Save, Save as, Import & Export (PNG,JPG,PDF,PPTX,IWB), Print, Youtube Drag & Drop, Magnifier, Youtube integration, Canvas moving, Inbuilt Animation libraries, Follow me AI, Complete Ecosystem on mobile, web & PC, Google for Education partner, Casting in & Casting out from Remote locations via browser, Android &iOS Apps, Multi touch enable or Disable, Switching between presentation & Preparation modes.	
Save Option	Should have option to save directly to Google Drive and One Drive	
Screen Mirroring, Wireless content sharing	Data from should be shared wirelessly on multiple Phones/Tablets without any other hardware requirement. IFPD should allow user to share/mirror the content of Laptop/Desktop (Mac, Windows) and mobile device (ios,Android) wirelessly, Wireless presentation should allow user to access their Laptop/Desktop through IFPD.	
Quiz	Should have in built tool to allow participants to submit answers from their Smart Phones (Answering/Voting/Messaging)	
QR Code Scan	Should have file download feature in smart phone just by scanning the QR code	
Video Conferencing Interface	Should support USB based PTZ cameras allowing Software based Video Conferencing	

HDMI Out Mirroring (Extended Display)	Mirroring Capabilities deliver group discussion and spatial arrangement flexibility by allowing content to be mirrored on to two IFPD's simultaneously
Integrated Wireless and Bluetooth Module	It should be dual band (2.4Ghz and 5Ghz). It should deliver fast wireless internet connection for interactive displays. It should supports dual frequency of 2.4GHz and 5.0GHz bandwidth, along with the newest 802.11AC standard to provide up to 433Mbps transmission. It should also fast Bluetooth 4.0 connection with BLE (Bluetooth Low Energy) which saves power for one-to-one file and data transferring.
Certifications	BIS,CE,RoHS
Accessories	AC Power cord, User Manual, Remote control, USB interface cable, Two Stylus, Wall mount bracket
Power supply requirement	230V AC +/- 10%, 50 Hz
Max Power consumption	Maximum 105 Watts

Inbuilt Android Hardware

CPU	Dual Core 1.2GHz or Higher
Memory	2 GB or Higher Storage
Storage	16 GB eMMC or Higher
Android Version	7 or higher

I	**Android based Digital Multimedia Content & Platform**	
	Course/Digital Content	Android Platform / Digital board should have preloaded high quality 2D/3D based educational content for all Classes with Voice Over in Hindi/English Language. The digital content should have Animations, Experiments, Key Points, Live Videos, and Interactive Simulations & Work Sheets.
	Content	Subjects Coverage: Math, EVS, Science, Physics, Chemistry, Biology, Social Science (History, Civics, Geography, Political Science), Commerce (Economics, Accounts, Business Studies, Statistics) Computers, English Grammar, Hindi Vyarakan
	Class	Classes Coverage: 1st to 12th as per NCERT
	Medium	All content for 1st to 12th should be in both English and Hindi medium with transliteration of content text in Hindi
	Additional features required	Additional Content: Practice Assessments and Tests with instant feedback for Maths, Science and English for classes 1st to 10th.
		A digital book library with different category of books and can also include state board or NCERT digital books as per requirement of the project.
	Reporting Platform	Integrated usage reports on each device with auto sync to a central project reporting dashboard.
		The usage reports should sync to a central dashboard whenever the devices connect to internet. It ensures all usage data to periodically be auto collected to a central database and reports can be made available to project monitoring team regularly via web-based dashboard.

2. STUDENT RESPONSE SYSTEM:-

Sr. No. of DNIT	Description of Stores	Qty.	Rates in Rs. per pis Inclusive of GST@18%, freig & FOR Destination etc.
2.	STUDENT RESPONSE SYSTEM MODEL- GIL-SRS-3	140 Nos.	Rs. 2,53,000.00

SPECIFICATION:-

S. No.	Parameter	Specification
	Student's Clicker	
1	RFID Module	2.4 GHz
	Power Function	Power button for Power ON/OFF
	Response Function	0-9, A-F, Yes/No Input and automatic switching
	Material	ABS with Polycarbonate
	Display	ID, Signal Intensity, Battery, Operation Instructions
	Backup	More than 60,000 of Answering or up to 12 months or more
	Communication Range	Up to 100 meters or more
	No. of clickers	50
	Teacher's Clicker	
2	Material	ABS+ Polycarbonate
	Response function	Page up/down, A-D, OK
	Display	ID, Signal Intensity, Battery, Operation Instructions
	RFID Module	2.4 GHz
	Communication Distance	Minimum 30 meters or better
	Next and Back Question change Support	Yes
	Lifeline Option Support	Yes
	Question Start and End Support	Yes
	No. of Clickers	1
	Wireless Receiver Module	
3	RFID Module	2.4 GHz
	Antenna	Dual Omnidirectional External Antenna
	Indicator Light	Red and Green indicator Lights
	Wireless Range	Minimum 30 meters or more
	Material	ABS
	Data Interface	USB Type B
	Power	USB Power supply
4	**Required Operational features**	
	General Features	SRS should be Integrated with Microsoft PowerPoint

		User should be able to upload excel sheet for large no. users binding/ pairing at once
		SRS should support configurable binding/ unbinding of keypads as per user with Participants ID and name
		System should support Offline only Mode
		User should be able to Add/ Edit/ Delete Questions
		System should support Single Choice and Multiple Choice Questions
		System should support Yes/No Questions
		System should support Audience Polling (Yes/ No)
		SRS should support Voting Response
		SRS should Support Lifeline Response features
		Preset controlled participation Time
		Support quiz in PowerPoint/slide-show related software
		Competition mode
		Team Leader Board
		Fastest responder with correct Answer
		Negative marking for questions
		Option to set time & marks for each question
		Report generation within software
Reports		Report question-wise
		Report participant-wise
		Report Summary
		Report Availability on Bar-chart format
		Report Availability in Pie- chart format
		Report availability in spread-sheet format
Compatibility		Compatible with Windows App
		Cross-compatibility with any desktop/laptop systems

03. DIGITAL LANGUAGE LAB:-

Sr. No. of DNIT	Description of Stores	Qty.	Rates in Rs. per piece Inclusive of GST@18%, freight & FOR Destination etc.
3.	DIGITAL LANGUAGE LAB MODEL- DLLS	119 Nos.	Rs. 28,00,000.00

SPECIFICATIONS:-

S. No.	Feature	Description/Specifications	Quantity
	Technical Specifications for Digital Language Lab (Software and Hardware Setup)		
1	**Student AIO Computer**		
	Display	21.5" or Higher LED Backlight IPS Panel	
	Native Resolution	Resolution of 1920x1080 or higher.	
	Contrast ratio	1000:1	
	Aspect Ratio	16: 09	
	Brightness	250 nits (cd/m2)	
	Audio I/O	High Definition (HD) Audio, Realtek ALC233, two internal speakers (2W x 2)	
	Webcam	Minimum 2MP 1080P FHD /Infrared Pop-UP Camera	
	CPU	Intel Core i3 Intel (8th gen or better) with minimum 3.6 Ghz base frequency	
	RAM	4 GB RAM or better	
	Hard Disk	1 TB or better	20
	In-Built Wi-Fi / Wireless LAN Card	Should have a inbulit Wi-Fi / Wireless LAN Card	
	Ports (Minimum)	DP/HDMI x 1, USB 2.0 ports x 2, USB 3 ports x 2, LAN Port x 1	
	Standard Keyboard	Wired Keyboard	
	Optical Mouse	Wired Mouse	
	Operating System	Windows 10	
	Power supply unit	90 watts or better Internal Power Supply	
2	**Furniture**		
A	**Modular Workstation - Students**	Frame Type- Free Standing SIZE: 1500 L x 540 W x 750 H (mm) minimum Table top - 25mm thick pre-laminated particle board finished with 2mm PVC edge banding. Partition - 18mm thick pre-laminated particle board. Under-structure - 18mm thick pre-laminated particle board. Wire Management - Wire manager hole per workstation. The Booths should be in configuration of 2 Student	10

		Desk / Tables.	
B	Chairs - Students	Medium Back Chair, Nylon Base, PU Moulded Seat & Back Cushion, Fabric Tapestry in blue/ black colour, with PU Arms & no wheels. Chair Height - 825mm ± 10mm Backrest Height - 480mm ± 5mm Backrest Width - 480mm ± 5mm Seat Width - 480mm ± 5mm Seat depth - 460mm ± 5mm Seat Height - 450mm ± 5mm Arm Length - 360mm ± 10mm Arm Width - 40 ± 10mm Frame Material - CRCA 25.4 x 1.8mm Powder Coated (minimum 40 micron) Plywood in seat & backrest minimum 12mm thick Density of PU Foam in Seat & Backrest 40 ± 5 Kg/Cu. Mtr.	20

3	Online UPS		
	Phase	Single Phase with Ground	
	Capacity	6000 VA / 4800 W	
	Input		
	Nominal Voltage	200 / 208 / 220 / 230 VAC	
	Input Voltage Range	10	
	Frequency Range	46 Hz ~ 54 Hz @ 50 Hz System 56 Hz ~ 64 Hz @ 60 Hz System	
	Power Factor	≥ 0.99 @ Nominal Voltage (100% Load)	
	Output		1 No.
	Output Voltage	200 / 208 / 220 / 230 VAC	
	Voltage Regulation	± 1%	
	Frequency Range (Synchronized Range)	47~ 53 Hz or 57 ~ 63 Hz	
	Frequency Range (Batt. Mode)	50 Hz ± 0.25 Hz or 60 Hz ± 0.3 Hz	
	Overload	100% - 110% 10 min., 110% - 130% 1 min., >130% 1 sec	
	Current Crest Ratio	3:1 Max	
	Harmonic Distortion	≤ 3 % THD (Linear Load) ≤ 6 % THD (Non-Linear Load)	
	Transfer Time AC Mode to Battery Model	0 ms.	
	Transfer Time Inverter to Bypass	0 ms.	

		Waveform (Batt. Mode)	Pure Sine wave	
		Efficiency		
		AC Mode (Overall)	88%	
		Battery Mode (Inverter)	83%	
		Battery		
		Battery Type	12 V / 7 AH	
		Numbers	6	
		Typical Recharge Time	9 Hours Recover to 90% Capacity	
		Charging Current (max.)	1A ± 10%	
		Charging Voltage	218.4 VDC ± 1%	
		Environment		
		Operation Temp	0 - 40°C (Battery Life Cycle will be Shorten When Temperature is Above 25°C	
		Operation Humidity	<95 and Condensing	
		Noise Level	Less than 55 dB @ 1 meter	
		Management		
		Smart RS-232/USB	Supports Windows 2000 / 2003 / XP / Vista / 2008 / 7 / 8, Linux, Unix and MAC	
		Optional SNMP	Power Management from SNMP Manager and Web Browser	
4	Network Switch		24-Port Gigabit Switch, Gigabit Ethernet connections on all ports provide full speed of data transferring, Forwarding Mode: Store-and-Forward; Switching Capacity:48Gbps; Packet Forwarding Rate:35.7Mpps; MAC Address Table: 8K; 802.1p/DSCP QoS: Yes; Green Technology: Yes; Standards and Protocols:IEEE 802i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.1p.	1 No.
5	Network Rack with electrical connectivity		19" Wall mount 4u rack, 400mm depth, single section with front toughened glass door, strong steel end, frame embedded at top and bottom with cable entry provisions, with lock & key, PDU 19" horizontal 6 way, universal socket 5 amp with on/off switch and indicator and 2.5 mtr cable and 3 pin plug.	1 lot
6	Cat6 23AWG UTP Cable		4 Pairs Unshielded Twisted Pair (UTP) Cable Solid Bare Copper Conductor Metal, Conductor Diameter: 0.560mm (23 AWG), Insulation: 0.970mm Diameter in HDPE, Cable Diameter: 6mm, with PE Central Cross separator.	1 Lot
7	Accessories for installation		Solution shall be provided with all cables, screws, fasteners, switch board, sockets, I/O face plates, connectors, electrical accessories, conduit, baton, flexible pipes, etc. as required for installation & optimum functioning of the Digital Lab.	2 Lot
8	**Technical Specifications of Digital Board**			
	Digital Board is a integrated solution including Cabinet (Cabinet with Multimedia Controller, Visual Presenter, Biometric attendance device, UPS with casing, wireless Keyboard and Mouse & Digital Clock) & Touch Display			1 No.

	Cabinet	
	Cabinet	Wall Mounted Lockable Enclosure to house , Multimedia Controller, Visual Presenter, Biometric attendance device, UPS with casing, Digital Clock & Mini PC
	Material of Cabinet	Powder coated CRCA Steel Sheet of minimum 1.2mm thickness
B	**Multimedia Controller**	
	Ports on front Panel of Controller (Minimum)	VGA,HDMI,USB3.0x2,Audio IN or more
	Buttons on front Panel of Controller (Minimum)	Push buttons to control Volume Up& Down, Volume Mute and to switch sources of HDMI Visual Presenter,VGA Visual Presenter, HDMI Laptop,PC HDMI,VGA Laptop,VGA PC and Power On/Off or more
	Ports on Rear Panel of Controller (Minimum)	USB 3.0 X 2,VGA Input x 2, VGA Output x 2, RCA Audio IN X 1,RCA Audio Output x 2,HDMI Inputx2,HDMI Outputx2 or more
C	**In -Built Visual Presenter**	
	Type	Portable
	Technology	CMOS
	Image Capture Size	Minimum A4 Size (210x297 mm)
	Native Resolution	Full HD 1920 x 1080 or better
	Optical Zoom	12x or better
	Digital Zoom	8x or better
	Video Frame Rates	30 FPS or better
	Focus Arrangement	Auto Focus
	Camera Head Rotation Angle	Camera head rotation angle-180 degree in horizontal and 180 degree in vertical or better
	Light Source	White LED
D	**Biometric Attendance Device**	
	Display	Minimum 2.5" Color Display
	Fingerprint Sensor	Optical sensor for capturing fingerprints
	Failure Rate	Recognition failure better than 0.001% & Acceptance failure better than 0.1%
	Recognition Speed	less than 1 second
	Capacity	minimum 500 fingerprints
	Identification modes	EM Card, password & Fingerprint
	Communication	USB, TCP/IP
	Permissions	Minimum 50 open time, 5 groups & 10 kind of combinations to open door.
	Power	DC 12V/1A
E	**UPS**	
	Power Back up	Solution should be supplied with minimum 1 KVA UPS with inbuilt batteries with minimum 15 minutes backup time with casing.
F	**In -Built Digital Clock**	
	Digital Clock	It should show the Time, Date, Day and Current Temperature

G	Keyboard & Mouse	Wireless Keyboard & Mouse
H	**Touch Display**	
	Technology	DLED Backlight (IPS)
	Display size (Diagonal)	65 inches or higher
	Aspect Ratio	16:9 or better
	Resolution	3840 X 2160 or higher
	Contrast Ratio	5000:1 or higher
	Brightness	600 cd/m^2 or higher
	Display color	8 bit-16 million colors or better
	Input Ports (Minimum)	HDMI x 3, RGB/VGA x 1, Audio x 1, CVBS (AV) x 1, PC slot x 1, RS232x1
	Output Ports (Minimum)	HDMI x 1, Audio(Earphone out) x 1, Coax x 1, SPDIF x1, RS232 x1
	USB Ports (Minimum)	USB 2.0 Type A x 4, USB 3.0 Type A x 2, USB 2.0 Type B for Touch x 2
	Camera Port	Dedicated USB Based Camera Port
	Camera Plate	Camera Plate on top for screw-in camera installation
	Communication port	RJ45 x 1 Giga LAN Port
	Built In Speakers	2.1 Stereo Sound with in-built 20 Watt x 2 speakers and 15 Watt x 1 Sub-Woofer or better
	Viewing Angle	Horizontal 178 degrees, Vertical 178 degrees or better
	Touch Technology	IR Recognition or better
	Touch Resolution	32767 x 32767 or better
	Touch Points	20 Points or Higher
	Writing Points	10 Points with automatically detect pen diameter (8mm & 2mm) and write simultaneously with different colors and thicknesses.
	Pen Recognition	Dual Pen recognition with 2mm tipped pens at real-time lag free response rate.
	Split Screen	4 Way Split Screen content sharing software
	Touch on/Off	Should have touch on/off functionality
	Touch Response Time	15 ms or better
	OS Support/Embedded Player	Windows 10/ Windows 8/ Windows 7/Linux/Mac/Android Embedded Player CPU Inbuilt.
	Stylus/Pen Holder	Frame/Structure of IFPD should have inbuilt magnetic mechanism to hold up to two numbers of Stylus/Pen
	Networking	DHCP (Auto identification) and Static IP supported
	Hardness, Anti Scratch, Antiglare	Minimum 7 H hardness, scratch resistant, anti-glare, anti-crack resistant
	Software Features	Marker, Paint Brush, Highlighter, Laser Pen, Artificial intelligent Pen, Shape Pen, Magic Line Pen, Different sizes available with Region eraser, Shapes, Text, Generic consist of (shapes,3DShapes, Arrows & Tables), Integrated image search from internet, Search Light, Screen Curtain, inbuilt browser, screenshot, magnifier, calculator, soft

	keyboard, Clock, Stop Watch, Geometry Tools, Screen recording, integrated webcam, Desktop Annotation, White board with different backgrounds and colors, Cloud storage, Cloud Download, Page management system. Multiple numbers of images available with internet like nature, sport, Daily necessity, animals. ort documents/contents. Annotation of on video, PPT, PDF. Annotate on PC/ Laptop with the help of smart phone, New, Open, Save, Save as, Import & Export (PNG,JPG,PDF,PPTX,IWB), Print, YouTube Drag & Drop, Magnifier, YouTube integration, Canvas moving, Inbuilt Animation libraries, Follow me AI, Complete Ecosystem on mobile, web & PC, Google for Education partner, Casting in & Casting out from Remote locations via browser, Android &iOS Apps, Multitouch enable or Disable, Switching between presentation & Preparation modes.
Save Option	Should have option to save directly to Google Drive and One Drive
Screen Mirroring, Wireless content sharing	Data from should be shared wirelessly on multiple Phones/Tablets without any other hardware requirement. IFPD should allow user to share/mirror the content of Laptop/Desktop (Mac, Windows) and mobile device (iOS, Android) wirelessly, Wireless presentation should allow user to access their Laptop/Desktop through IFPD.
Quiz	Should have in built tool to allow participants to submit answers from their Smart Phones (Answering/Voting/Messaging)
QR Code Scan	Should have file download feature in smart phone just by scanning the QR code
Video Conferencing Interface	Should support USB based PTZ cameras allowing Software based Video Conferencing
HDMI Out Mirroring (Extended Display)	Mirroring Capabilities deliver group discussion and spatial arrangement flexibility by allowing content to be mirrored on to two IFPD's simultaneously
Integrated Wireless and Bluetooth Module	It should be dual band (2.4Ghz and 5Ghz). It should deliver fast wireless internet connection for interactive displays. It should supports dual frequency of 2.4GHz and 5.0GHz bandwidth, along with the newest 802.11AC standard to provide up to 433Mbps transmission. It should also fast Bluetooth 4.0 connection with BLE (Bluetooth Low Energy) which saves power for one-to-one file and data transferring.
InBuilt Android Hardware	
CPU	ARM Dual Core Cortex A73 1.2 GHz or Higher
Memory	2 GB or Higher Storage
Storage	16 GB eMMC or Higher
Android Version	7 or higher
Accessories	AC Power cord, User Manual, Remote control, USB interface cable, Two Stylus, Wall mount bracket

		Power supply requirement	230V AC +/- 10%, 50 Hz
		Max Power consumption	Maximum 105 Watts
I	**Mini PC**		
		Form Factor	Mini PC should be of 2 litres Volume or less
		CPU	Intel Core i3 (8th Gen or better processor) with minimum 3.1 Ghz Base frequency
		RAM	4 GB RAM
		Hard Disk	1 TB or better
		In-Built Wi-Fi / Wireless LAN Card	Should have a inbuilt Wi-Fi / Wireless LAN Card
		Ports (Minimum)	HDMI x 1, DP(Display Port) x 2, USB ports x 6, LAN Port x 1
		Operating System	Windows 10
9	**SPECIFICATIONS OF DIGITAL LANGUAGE LAB PLATFORM WITH ENGLISH HINDI & SANSKRIT LANGUAGE CONTENT**		
		Intercom	Two way intercom communication between Teacher & student. The communication should be through text, audio & Video.
		Broadcast	Provision for teacher to broadcast text message to one student or to a group of selected students.
		Audio Supervision	Provision for teacher to listen to any students recording & check their progress.
		Chat	Provision for teacher to send alerts to student through Text Chat or Audio Chat.
		Assignments	Provision for Teacher to create assignments & broadcast to the class. Provision should be there to assign same/separate tasks to different group of students. There should also be provision to assign task to students with a start and expiry date.
		Reports & Analysis	The Teacher's Dashboard should have the following features: Details about all the classes assigned to the teachers, Students performance report both in text as well as Graphical for various tasks assigned to carious classes. Provision for generating various reports to check & analyse progress of students. The language lab software should automatically generate reports giving details about each individual learner's activities performed in terms of no. of exercises attempted, time spent on each such activity on a day-to-day basis. Each student's individual report should be available to the student as well as the teacher. The language lab software should also have reports that shows the usage of the software by each of the instructor/faculty/teacher. The teachers should be able to view all the answers given (both correct and incorrect) given by the

The "1 No." appears in the right margin alongside the Reports & Analysis row.

	students during the practice sessions at any given time. They should also be able to listen to the recorded exercises of the students. Teacher should be able to give remarks to students on their audio recorded exercises both in text & audio formats. A centralized report should be available to the Administrators/Governing Bodies on the usage of content by both the instructors and students for all the language lab software licenses procured under this project. This should be web based and available to various stakeholders of the project. Provide Management with password protected login, should have the option to view the reports of both teachers and students in terms of scores, grades, graph/Bar/Pie in exercises.	
AV Lessons	Provision for teacher to create personal audio video lesson contents. Provision for teacher to assign the pre-recorded lesson for future dates.	
E-exam	Paperless e-exam with automatic submission of answer sheets on completion of timelines.	
Audio modulation	Provision to automatically generate graphical representation on the recorded audio of the learner as against the originals for self-assessment and evaluation.	
Multi Languages	The system should be compatible with multiple Languages, as content of multiple languages could be fed in to the platform. The content for all the languages English, Hindi & Sanskrit should be made available from the same dashboard and combined usage reports should be made available for all the three languages. Student should be able to use content of all the three languages from a single login ID. Enough exercises for practice should available for all the three languages to the students.	
Accent	The entire teaching - learning content should be in neutral accent.	
License	The proposed software should have Life Time Perpetual License.	
Secured Login	The main interface of the teacher with password protected login should have different options to teach effectively in a lively manner.	
Management Login	Provide Management with password protected login, should have the option to monitor the real-time activities of both teachers and students and view various reports of scores, grades, performance graph/Bar/Pie in exercises, answer sheets, teacher and student attendance reports.	
E-Books	The teacher should be able to upload PDF files (e-books) for the students to read and able to provide writing assignments to the students.	
External Media	Provision for teacher to use any external storage device (USB, CD/DVD) to play or display the content files.	

	OS & Hardware Support	The Software should support on Windows, Linux, IOS& Android. The software should seamlessly work on Desktop/Thin/Zero Client System.
	Mobile Apps	The software should have Android & IOS supported Mobile App where Teacher can assign activities, Student can do the assignments and Teacher can evaluate it.
	English Multimedia Content Learning Levels	The Language Lab Software should take into account the following features: - It should enhance the Communicative English skills of the students of class III to X. It should have 8 levels of learning: Ranging from Basic to Intermediate and Advanced with substantial content to hone the learner skills. The content should be as per the Common European Framework of Reference i.e. CEFR and should cater to all the 6 levels of CEFR viz. A1, A2, B1, B2, C1 & C2. CEFR Levels: i. A1 Beginner ii. A2 Elementary iii. B1 Intermediate iv. B2 Upper Intermediate v. C1 Advanced vi. C2 Mastery Content should purely be multimedia based and comprise of graphics, audio, video and should be highly interactive in nature.
		It should have content for strengthening all the four language skills: - Listening , Speaking, Reading & Writing It should have Model Imitation that should facilitate the student to listen to the exact pronunciation of a word and then record one's own and then compare both of them, thereby helping the student to recognize the error and amend the differences. The software should have capabilities of Listening, Recording and Comparing of Speech patterns both via audio and visual. The software should have speech spectrograph for graphical visualization. The software should be based on neutral (Indian) accent and should not use foreign accent. It should have jaw and tongue movement animations for all the sounds to facilitate learning of proper articulation of sounds.

		The software should consist of a glossary of words with correct pronunciation in the Indian context. The English language lab software should have components to work on • Intonation • Word stress • Syllables The English language lab software should cater to the basics of English grammar using animated situations and related practice exercises. It should be user friendly so that faculty can take classes with minimal of technical knowledge.	
	Teaching Pedagogy (Methodology)	The English language lab software should have the following features for proper teaching – learning of English language skills by both the faculty and the students. It should be based on the 'Blended Learning' mechanism, i.e. It should have Instructor Lead Teaching (ILT/ Classroom teaching) content as well as Computer Based Training (CBT/Lab practice) content. The software should have predefined lesson plans with detailed breakup of each session of approximately 30 minutes each. The Instructor/ Faculty / Teacher should be able to create tasks for students to perform in the language lab at a later time which can be pre-defined. The Instructor / Faculty / Teacher should have the option to assign the same task to all the students and/or different tasks to different students of the same batch.	
	Sounds	The language software should provide proper articulation for all 44 sounds of English using animation.	
	MTI	Should have a Mother Tongue Influence (MTI) removal tool	
	Self-Assessment	Provision for self-assessment & send the exercise to teacher for evaluation at conclusion of every module / lesson plan.	
	Pronunciation	Provide sample lessons, words, pronunciation sounds, videos, and comparison & assessment tools for proficiency in English pronunciation.	
	Comprehension	Provide lesson plan with focus on expressions, situational dialogues, comprehension, exercises with comparisons & assessment.	

	Resource Material & Training	Training should be imparted for one day (6 hours) and training modules should include: - • Training on usage of all the features of the language lab software • Training on the various aspects of language on its teaching pedagogy Proper detailed trainer manuals to be provided for each level on the delivery mechanism. It should be in depth with minute to minute description of the teaching procedures. Classroom reference material in the form of Flash/ Cue Cards too should be made available for each session. In depth trainer videos should be made available in the software for the teacher to refer to. These videos should also be made available to the teachers using a mobile app which should be compatible with Android and IOS smart phones. Students reference material / workbooks in accordance to the software should be made available
	Student Material	Students' material in the form work books for each level should be available. This material should be integrated with the content.
	Pre Recorded media	Provide Audio / Video recorded files from Poetry Masters, Writers, Speeches, Lectures, Documentary, Movies, News, etc. to improve comprehension of language.
	Hindi Multimedia Content	Multimedia content covering Hindi Vowels and Consonants, Combination of letters, Commonly used Words, Greetings, etc.
	Hindi through English	Content for learning Hindi Alphabets, Pronunciation, Anuswara& Nasalization, Accent, Pronouns & Nouns, Adjectives & Verbs, Tenses, Adverbs, Conjunctions, Voice & Construction, Order of Words, Standard Devanagari Script, Standardization of Hindi Spelling
	Hindi Literature	Content with reference to Hindi literature, poetry, poems, etc.
	Hindi Grammar	Content for covering all components of Hindi grammar like: Alankar, Chand, Pad Parichay, Vachay, Idioms, Synonyms, etc.
	Picture Gallery	Multimedia gallery in Hindi for relating to day to day things like: Animals, Body Parts, Colors, Communications, Costumes, Festivals, Musical Instruments, Religious, Professionals, Relations, Sports, Stationary, Trees, Universe, Week, etc.
	Knowledge bank on Indian Culture & Heritage	Knowledge bank having details on Indian culture & heritage, sharing knowledge about: Indian Geography, Economy, Vedas, Upanishad, Ramayana, Mahabharata, ShrimadBhagvataGeeta, other Literatures, Dance, Music, Ayurveda, Yoga, Spirituality, Food, etc.

Sanskrit language content concept	Software to help in learning Sanskrit from basics and go on to making simple sentences. Introduction to concepts, skills and a section to self-assess your learning. Self-paced, activity based learning software, contains 250+ activities.
Vocabulary Builder	Provide flash card based learning Should have multiple categories with 200+ words and synonyms. Provide meanings for words in English and Hindi. Categories should include Sanskrit words for Gods, Animals, Birds, Fruits, Vegetables, and Parts of the body, Colours, Food, Relations, Professions, Emotions, Public Places, Sports, Grains, Computer, Musical Instruments, Time, Natural Occurrences and many more. Provide Brain Games for exercising Sanskrit.
Sanskrit Language Lesson Plan	Lesson plan covering noun forms, 200+ Sanskrit words, Learning mode and the Practice mode. Covering Sanskrit Sandhis through animations, charts, tables, interactive exercises, examples and games. Practice the language skills (LSRW) Build your Vocabulary for using the language. Master your communication skills. Build and Re-in force Foundation in grammar. Apply Language skills + Grammar through simple text and for school.
Licensed User Terminals	License to be provided for 21 terminals (Students & Teacher both included).

4. BYOD TECHNOLOGY LAB:-

Sr. No. of DNIT	Description of Stores	Qty.	Rates in Rs. per p Inclusive of GST@18%, frei & FOR Destination etc.
4.	BYOD TECHNOLOGY LAB MODEL- GL-MTLB 01	119 Nos.	Rs. 12,00,000.00

SPECIFICATIONS:-

Technical Specification of BYOD Technology Lab		
Parameters	**Specifications**	**Qty.**
Student Tablet		
Processor	2.0 GHz or better	
Operating System	Android 9.0 or better	
Memory	2 GB LPDDR3 or better	
Battery	Up to 8.5 hours or more	
Display	10.1" HD (1280 x 800) IPS display	
Storage	32 GB internal storage + 64 GB micro SD card	
Connectivity	IEEE 802.11a/b/g/n/ac	20
Cameras	2 MP fixed-focus front and 5 MP auto-focus rear cameras	
Audio	Dual front-facing speakers with Dolby Audio or better	
Ports	micro SD slot, combo audio jack	
Accessories:		
Storage	Should have minimum 64 GB Micro SD Card or more	
Ear Phone	Should supplied with Earphone	
Screen protection	Should supply with Screen Guard / Tempered Glass	
Cover	Protective book cover for Tablet should supply.	
Auto Charging Trolley		
Capacity	Minimum 20 Tablet	
Charging & safety	Multiple Tablets should be charged simultaneously and should be locked together safely in a charging cart	
Power stabilizing	Charging cart should have power stabilizing facility	1
Accessories Storage	Charging cart should have space to keep the accessories including headphones	
Portability	Charging Trolley should have movable castor wheels	
Android Based Digital Multimedia Content		
Content	Should have integrated Educational content	
Offline working	Education content should be available offline on SD Card placed inside the Tab	
Reports	Report generation feature should be available	20
Password	User password option must be available	
Content integration	Content should be integrated with different categories of learning content including videos, projects, a digital book library and practice assessments, tests with student wise reports in offline mode	

Offline Learning Management System	Multi category platform bringing together different types of content on the same dashboard. Enables students to access content of junior classes Auto sync to reporting dashboard with offline reports on the tablets
Reporting	Student wise usage and learning reports saved offline Sync to a cloud based reporting dashboard Easily downloadable reports with graphical analytics
Course/Digital Content	Android Platform / Digital board should have preloaded high quality 2D/3D based educational content for all Classes with Voice Over in Hindi/English Language. The digital content should have Animations, Experiments, Key Points, Live Videos, and Interactive Simulations & Work Sheets.
Content	Subjects Coverage: Math, EVS, Science, Physics, Chemistry, Biology, Social Science (History, Civics, Geography, Political Science), Commerce (Economics, Accounts, Business Studies, Statistics) Computers, English Grammar, Hindi Vyarakan
Class	Classes Coverage: 1st to 12th as per NCERT
Medium	All content for 1st to 12th should be in both English and Hindi medium with transliteration of content text in Hindi
Additional features required	Additional Content: Practice Assessments and Tests with instant feedback for Maths, Science and English for classes 1st to 10th.
	A digital book library with different category of books and can also include state board or NCERT digital books as per requirement of the project.
Reporting Platform	Integrated usage reports on each device with auto sync to a central project reporting dashboard.
	The usage reports should sync to a central dashboard whenever the devices connect to internet. It ensures all usage data to periodically be auto collected to a central database and reports can be made available to project monitoring team regularly via web-based dashboard.
Furniture	
Modular Workstation - Students	Frame Type- Free Standing SIZE: 1500 L x 540 W x 750 H (mm) minimum Table top - 25mm thick pre-laminated particle board finished with 2mm PVC edge banding. Partition - 18mm thick pre-laminated particle board. Under-structure - 18mm thick pre-laminated particle board. Wire Management - Wire manager hole per workstation. The Booths should be in configuration of 2 Student Desk / Tables.

10

| Chairs - Students | Medium Back Chair, Nylon Base, PU Molded Seat & Back Cushion, Fabric Tapestry in blue/ black color, with PU Arms & no wheels.
Chair Height - 825mm ± 10mm
Backrest Height - 480mm ± 5mm
Backrest Width - 480mm ± 5mm
Seat Width - 480mm ± 5mm
Seat depth - 460mm ± 5mm
Seat Height - 450mm ± 5mm
Arm Length - 360mm ± 10mm
Arm Width - 40 ± 10mm
Frame Material - CRCA 25.4 x 1.8mm
Powder Coated (minimum 40 micron)
Plywood in seat & backrest minimum 12mm thick
Density of PU Foam in Seat & Backrest 40 ± 5 Kg/Cu. Mtr. |

20

Touch Display

Technology	DLED Backlight (IPS)
Display size (Diagonal)	65 inches or higher
Aspect Ratio	16:9 or better
Resolution	3840 X 2160 or higher
Contrast Ratio	5000:1 or higher
Brightness	600 cd/m^2 or higher
Display color	8 bit-16 million colors or better
Input Ports (Minimum)	HDMI x 3, RGB/VGA x 1, Audio x 1, CVBS (AV) x 1, PC slot x 1, RS232x1
Output Ports (Minimum)	HDMI x 1, Audio(Earphone out) x 1, Coax x 1, SPDIF x1, RS232 x1
USB Ports (Minimum)	USB 2.0 Type A x 4, USB 3.0 Type A x 2, USB 2.0 Type B for Touch x 2
Camera Port	Dedicated USB Based Camera Port
Camera Plate	Camera Plate on top for screw-in camera installation
Communication port	RJ45 x 1 Giga LAN Port
Built In Speakers	2.1 Stereo Sound with in-built 20 Watt x 2 speakers and 15 Watt x 1 Sub-Woofer or better
Viewing Angle	Horizontal 178 degrees, Vertical 178 degrees or better
Touch Technology	IR Recognition or better
Touch Resolution	32767 x 32767 or better
Touch Points	20 Points or Higher
Writing Points	10 Points with automatically detect pen diameter (8mm & 2mm) and write simultaneously with different colors and thicknesses.
Pen Recognition	Dual Pen recognition with 2mm tipped pens at real-time lag free response rate.
Split Screen	4 Way Split Screen content sharing software
Touch on/Off	Should have touch on/off functionality
Touch Response Time	15 ms or better
OS Support/Embedded	Windows 10/ Windows 8/ Windows 7/Linux/Mac/Android Embedded Player CPU Inbuilt.

1

Stylus/Pen Holder	Frame/Structure of IFPD should have inbuilt magnetic mechanism to hold up to two numbers of Stylus/Pen
Networking	DHCP (Auto identification) and Static IP supported
Hardness, Anti Scratch, Anti-Glare	Minimum 7 H hardness, scratch resistant, anti-glare, anti-crack resistant
Software Features	Marker, Paint Brush, Highlighter, Laser Pen, Artificial intelligent Pen, Shape Pen, Magic Line Pen, Different sizes available with Region eraser, Shapes, Text, Generic consist of (shapes,3DShapes, Arrows & Tables), Integrated image search from internet, Search Light, Screen Curtain, inbuilt browser, screenshot, magnifier, calculator, soft keyboard, Clock, Stop Watch, Geometry Tools, Screen recording, integrated webcam, Desktop Annotation, White board with different backgrounds and colors, Cloud storage, Cloud Download, Page management system. Multiple numbers of images available with internet like nature, sport, Daily necessity, animals. or documents/contents. Annotation of on video, PPT, PDF. Annotate on PC/ Laptop with the help of smart phone, New, Open, Save, Save as, Import & Export (PNG,JPG,PDF,PPTX,IWB), print, YouTube Drag & Drop, Magnifier, Youtube integration, Canvas moving, Inbuilt Animation libraries, Follow me AI, Complete Ecosystem on mobile, web & PC, Google for Education partner, Casting in & Casting out from Remote locations via browser, Android &iOSApps,Multitouch enable or Disable, Switching between presentation & Preparation modes.
Save Option	Should have option to save directly to Google Drive and One Drive
Screen Mirroring, Wireless content sharing	Data from should be shared wirelessly on multiple Phones/Tablets without any other hardware requirement. IFPD should allow user to share/mirror the content of Laptop/Desktop (Mac, Windows) and mobile device (ios,Android) wirelessly, Wireless presentation should allow user to access their Laptop/Desktop through IFPD.
Quiz	Should have in built tool to allow participants to submit answers from their Smart Phones (Answering/Voting/Messaging)
QR Code Scan	Should have file download feature in smart phone just by scanning the QR code
Video Conferencing Interface	Should support USB based PTZ cameras allowing Software based Video Conferencing
HDMI Out Mirroring (Extended Display)	Mirroring Capabilities deliver group discussion and spatial arrangement flexibility by allowing content to be mirrored on to two IFPD's simultaneously
Integrated Wireless and Bluetooth Module	It should be dual band (2.4Ghz and 5Ghz). It should deliver fast wireless internet connection for interactive displays. It should supports dual frequency of 2.4GHz and 5.0GHz bandwidth, along with the newest 802.11AC standard to provide up to 433Mbps transmission. It should also fast Bluetooth 4.0 connection with BLE (Bluetooth Low Energy) which saves power for one-to-one file and

	data transferring.
Certifications	CE,RoHS,BIS
Accessories	AC Power cord, User Manual, Remote control, USB interface cable, Two Stylus, Wall mount bracket
Power supply requirement	230V AC +/- 10%, 50 Hz
Max Power consumption	Maximum 105 Watts
Inbuilt Android Hardware	
CPU	ARM Dual Core Cortex A73 1.2 GHz or Higher
Memory	2 GB or Higher Storage
Storage	16 GB eMMC or Higher
Android Version	7 or higher

AUDIO ROSTRUM:-

Sr. No. of DNIT	Description of Stores	Qty.	Rates in Rs. per piece Inclusive of GST@18%, freight & FOR Destination etc.
5.	AUDIO ROSTRUM MODEL- GIL-AP4	119 Nos.	Rs. 1,21,000.00

SPECIFICATIONS:-

Technical specifications of Audio Rostrum	
Parameters	Specifications
Construction	Wooden Top Assembly should available with 1 Gooseneck Phantom Powered Microphone and 1 LED Lamp. It should have Metallic Base supporting the whole system and balancing the overall weight uniformly.
Speaker Stand	Should have inbuilt Speaker Stand consists of minimum 3 Speakers on front side.
VHF Wireless Mic	Two VHF wireless handheld microphones of 50 Metres range
Gooseneck Microphone	Available
Gooseneck Lamp	Available
In-Built Speakers	Two speakers of 50 watt each with 20 watt sub-woofer
Output Wattage	120W
Input/ Output	One Line RCA input, One Microphone Input, 1 Line RCA Output.
Input Sensitivity	Microphone1: 10MV/680Ω, Microphone2: 10MV/600Ω, Aux: 350MV/10KΩ
Pre-Output	1V/0dB
Digital Amplifier	Class-D
Audio Format Support	Mp3
Maximum Support Capacity	Dedicated USB port and Micro SD slot with Maximum 32GB drive capacity support
Sound Quality Control	Bass 10dB/Treble 10dB
Frequency Response	100-16KHz(+1dB,-3dB)
Wireless Transmission Distance	30-50M

Antenna Integration	Support for two Dedicated Wireless UHF high gain antennas
Power Supply	AC 220V / 50Hz
Power Consumption	140W
Logo	Should available proper space to fix the department logo on Front side.
Audio Receiver Functionality	Support to play loss less audio, LCD screen, support to display Audio track name -Four function modes: USB / PLAYING / Bluetooth / FM -Six manual buttons: previous song, play/pause, next song, mode selection, MP3 playback loop mode, recording. -Exquisite dot matrix LCD screen, can display the song name, song format, current USB playback cycle mode, the total number of songs and which songs are currently read, EQ mode. - Support wireless remote control - Long press mode selection button to automatically switch on and off - Support FM function, can receive 95 radio stations - Support USB disk, Mico SD card function, read storage media below 32G, support MP3/WAV/ WMA/ AEC/FLAC format decoding - Support for recording function, press the recording button on the left lower foot under PLAYING mode to record sound in U disk - With USB disk / Micro SD card to play the current track memory function and the current function mode two kinds of memory - Support mobile phone Bluetooth function, can play audio from mobile wirelessly - In the USB/Micro SD card/Bluetooth mode, press the remote control "EQ" button to select different EQ modes: Classical, Normal, PoP, Rock, Jazz, country

SMART PODIUM:-

Sr. No. of DNIT	Description of Stores	Qty.	Rates in Rs. per piece Inclusive of GST@18%, freight & FOR Destination etc.
6.	SMART PODIUM MODEL- DP-208L	70 Nos.	Rs. 2,70,000.00

SPECIFICATIONS:-

S. No.	Parameters	Specifications
	Technical Specification of Smart Podium	
1	Type/Mounting	FreeStanding
2	Construction	The enclosure should be made of Polycarbonate Body and Steel Frame with Soft wheels. The Top sliding(Opening/Closing) cover should be made of Polycarbonate Body. The construction of the podium should be such that, while the podium is locked and not in use, there should not be any port exposed on the outer body for breakage/mishandling.
3	Display	Built-inhighlysensitiveInteractivePanelwithadjustable Motorizedtilt&amechanismto makethePanelstablesothatitdoesnotshakewhilewritingwithfollowingminimumfeatures-
(a)	Technology	Interactive Panel should have both EMR (Electro magnetic resonance) & P-CAP touch technologies to have finger and 2 mm thick touch stylus
(b)	ScreenType	LED
(c)	Size	53.0cm(21inches)orhigher
(d)	Resolution	1920x1080orhigher
(e)	Aspectratio	16:09
(f)	Computerinterface	OneUSB,OneVGA/DVI/HDMIPort
(g)	Interactive Resolution	4000Lpi(linesperinch)
(h)	ResponseTime	5ms
(i)	ViewingAngles	170(H);160(V)
(j)	Touch	FingerandStylus
(k)	Readingaccuracy	±0.5mm(center)
(l)	Trackingspeed	Approximately200pointspersecond
(m)	PenPressure sensitivity	1024Levels
4	SystemDetails	
(a)	Processor	Intel Core i3 (8th Gen or better processor) with minimum 3.1 Ghz Base frequency
(b)	SmallFormFactor	Computershouldbeof2litersVolumeorless
(c)	In-BuiltWi-Fi/WirelessLANCard	ShouldhaveainbulitWi-Fi/WirelessLANCard
(d)	RAM	4 GB
(e)	HardDisk	1TBorbetter

(f)	Ports(Min.)	HDMI x 1, DP(Display Port) x 2, USB ports x 6, LAN Port x 1
(g)	Keyboard&Mouse	Wireless
(h)	OperatingSystem	Windows10
(i)	Antivirus	NortonAntiVirus/Mcafeeorequivalentwith1yearlicense
5	**Multimedia Controller**	
(a)	Ports on front Panel of Controller (Minimum)	VGA,HDMI,USB3.0x2,Audio IN, Input Power Point or more
(b)	Buttons on front Panel of Controller (Minimum)	Push buttons to control Volume Up& Down, Volume Mute and to switch sources of HDMI Visual Presenter,VGA Visual Presenter,HDMI Laptop,PC HDMI,VGA Laptop,VGA PC and Power On/Off or more
(c)	Ports on Rear Panel of Controller (Minimum)	USB 3.0 X 2,VGA Input x 2, VGA Output x 2, RCA Audio IN X 1,RCA Audio Output x 2,HDMI Inputx2,HDMI Outputx2 or more
(d)	Power	5 V DC (Suitable Adaptor should be supplied with controller)
6	**Builtindevices**	
(a)	Gooseneck Microphone	GooseneckMicrophonewithXLRoutput. ItshouldbePhantompoweredsothat thereisnorequirementofbatteriestherebyeliminatingconsumablecost. Thegoosenecklengthshouldbeat least21.5cmwithON/OFFswitchandwithLEDlightindicatingON/OFFstat us.Thegooseneckmicrophoneshallbepermanentlypolarisedcondenser, highlydirectionalfeaturinghyper cardioid/lobardirectivity.
(b)	Amplifier	200 Wattsminimum
(c)	Speakers	FourspeakersofMinimum 50 Weachshallbeapartofstandardsupply.
(d)	Wireless Microphone Units	Onehandheld MicrophoneandOneLapelMicrophone with single receiver shouldbesuppliedwitharangeof10meters.
7	**SlidingTrays**	ProvisionforkeepinglaptopandKeyboard&Mouse
8	**PowerSupply**	180 -240V,50Hz,ACSupply

SCIENCE TABLE:-

Sr. No. of DNIT	Description of Stores	Qty.	Rates in Rs. per piece Inclusive of GST@18%, freight & FOR Destination etc.
7.	SCIENCE TABLE MODEL- GIL-DST55	119 Nos.	Rs. 4,55,000.00

SPECIFICATIONS:-

Technical Specification for Digital Science Table	
Technical Specifications	
Construction	The Multi Touch Table should be strong steel case with a toughened touch screen protection glass, it should include a proactive cooling and dust free protection system that helps to protect the components from overheating, dust or vandalism. It should come with detachable legs for easy transportation.
Technology	LED (Light Emitting Diode) Backlit Display
Display size (Diagonal)	55 inch or Higher
Aspect Ratio	16:9
Resolution	3840 × 2160 (UHD) or higher
Contrast Ratio	5000:1 or higher
Brightness	350 cd/m² or higher
Viewing Angle	178 (Horizontal); 178 (Vertical)
Response Time	8 ms or better
Audio	Inbuilt speakers of minimum 2x 10 Watts each
Duty Cycle	24 x 7
Touch	
Detection Method	Projected Capacitive Touch Sensor
Cover Glass	Tempered Glass, 3T, AG or better
Detect Area	Should be minimum 919 mm (W) × 517 mm (H) or better
Touch Points	Multi touch 10 Points or better
Power supply requirement	AC 100-240V, 50/60 Hz
Input / output Ports	

Display port	3x HDMI, 1x Display port, 1x VGA, 1x AV, 1x YP
Other ports	2x LAN port,1x USB 2.0, 1x USB 3.0, 1x Touch USB Type B, 1x RS232C
Control Buttons	Power On/Off, Home,UP/Down, Vol +/-, Menu buttons
System Details	
Processor	Minimum 64 bit 4 Core or better
Memory	Minimum 2 GB or better
Storage	Minimum 8 GB or better
Android Version	Minimum 5.1.1 or Latest
Science Content	
Digital educational content	High quality 2D/3D based Science content is in both English and Hindi medium
Subject Lessons	Physics, Chemistry, Biology based on NCERT
Content integration	Science videos, Animations, Experiments & projects
Digital book	Physics, Chemistry, Biology based on
Practice Assessments	Practice Assessments and Tests with instant feedback for Science

(AS PER SAMPLE SUBMITTED BY YOU AND APPROVED BY THIS OFFICE)

TERMS AND CONDITIONS:-

1. **F.O.R.**:- The above rates are FOR destination anywhere in Haryana at supplier's risk.
2. **GST :-** Inclusive in above rates.
3. **FREIGHT CHARGES:-**Inclusive.
4. **DELIVERY PERIOD**:- Delivery & Installation within 90 days at all locations from the date of placement of supply order.
5. **Warrantee:-** One year ons-ite warranty, including delivery, on-site installation and on-site training from the date of supply/installation.
6. **PAYMENT TERMS** ;- 90 % payment will be released within 15 days after physical delivery of inspected /accepted goods in physically good condition at consignee godown. Remaining 10 percent will be released after satisfactory installation/ working of the items. **The Indenting Departments would have option to release payments in RTGS/Electronics mode also.**
   Delay in payments to the suppliers beyond the stipulated credit period indicated in the supply order, unless supported by cogent reasons and approved by a higher authority, will attract penal interest on the defaulting amount @ Rs. 25/- per rupees one lakh per day of delay beyond the stipulated credit period. Non provision of adequate budget will be no ground for delay in payments to the supplier.

7. **INSPECTION**:- The inspection will be conducted at the premises of the firm before affecting the supplies.

In case, the material offered for inspection by the firm fails to meet the specifications stipulated in NIT/Order/Contract and the samples are rejected by the Inspecting Committee, the Indenting Department will have the right to levy a penalty at 0.1% of the total order value. In case, the material offered for inspection fails during the 2nd inspection also, the Indenting Department will have the right to increase the penalty to 0.25% of the total order value. In case, the material offered fails during the 3rd and final inspection also, the firm will be liable for penal action including forfeiture of EMD, risk purchase, debarring/ blacklisting in future, and no further opportunity for inspection would be provided to the supplier firm.

(OTHER TERMS & CONDITIONS AS PER DNIT AND SCHEDULE-B ATTACHED).

Assistant Director,
Supplies & Disposals,Haryana,
For & On behalf of Governor of Haryana.

Encls.a/a