OFFICE OF THE DEAN::COLLEGE OF FISHERIES
ASSAM AGRICULTURAL UNIVERSITY::RAHA::NAGAON::ASSAM

No: AAU/FY/G-88(D)/2019-20/ <u>2340</u>   **Dtd. <u>11/09/2019/</u>**

<u>NOTIFICATION FOR SHORT QUOTATION</u>

Sealed tenders/quotations affixing non-refundable Court Fee Stamp of Rs. 8.25 (Rupees eight and paisa twenty five) are invited from OEMs/authorized dealers/ farm/suppliers/publishers/contractor (whoever is/are concerned) for Modern Classroom Interior construction. Details of each category of work and item wise tender can be availed at office during office hours**.** Quotations will be received within 7(seven) days from date of publication of the notice and will be opened on the next day**.** The selection will be made considering price, service conditions and reputation of brand.

(K. K. Tamuli)
Dean (i/c)
College of Fisheries,
Assam Agricultural
University,
Raha-782103, Nagaon
Assam.

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SHORT NOTICE INVITING TENDER

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Tender invited for:1)Supply, installation and commissioning on a turn key basis of Audio – Visual, Acoustic and associated works of Smart & Digital Classroom
The quotations will be received by the undersigned on or before *2:00 P.M on the last date* and will be opened on the next date at *3:00 P.M.* in the presence of the bidders or their authorized agents. (not mandatory)

NAME OF WORK	TIME OF COMPLETION
Supply, Installation and Commissioning of Audio-Visual, Acoustic and Associated works	**45 days from the date of Work Order**

TERMS FOR THE BIDDER

1. Tender to be collected from the College Office during Office hours or may be downloaded from the websites http://www.vetbifguwahati.ernet.in and http://www.aau.ac.in.

2. Respective bidder must have working experience of similar nature of the work in a minimum of three reputed organizations.

3. Bidders should have a minimum business turnover of Rupees 2.5 crores during last three financial years. Audited Balance Sheet must be attached.

4. Authorization Certificates - The dealer should provide valid MAF/Authorisation certificate of OEM clearly suggesting the authorization to the dealer without which the tender of bidder will be deemed cancelled

5. The bidders are requested to inspect the site of work and acquaint about the site conditions and rules and regulations before quoting the rates.

6. Bidder should submit a detail layout and interior design plan of the seminar hall along with the tender.

7. The tenders will be liable to be rejected if;
    a. If the tenderer does not quote for any item/sub-item in the tender.

b. If the tenderer proposes any alterations to any of the conditions laid down or proposes any other conditions of any description whatsoever.

8. The bidder firm must have proper PAN & GSTIN and copy of the same shall have to be enclosed with the quotations.

9. The rate quoted shall inclusive of all taxes, forest royalties or any dues payable to Govt. of Assam.

10. Preference will be given to the experiences firm/ contractor for acoustic and audio-visual works.

11. The quotation should be addressed to " The Dean, College Of Fisheries Science, Raha superscribing the Quotation Notice Number on the envelope.

12. The bidder should deposit 1% of the quoted value as **Earnest Money Deposit** along with the tender. It should be made in the form Demand Draft Favoring The Dean, College of Fisheries Science, payable at S.B.I Raha

13. The Management of the College reserves the right to accept or reject any or all the quotations without assigning any reason.

14. Bid should be submitted separately for Technical and Financial in respective Annexures.

Annexure I

Smart Classroom

Item	Specifications	Complied (yes/no) Describe quoting model	Remarks
Interactive Board	78 inch diagonal, 4:3 aspect ratio, Dry erase surface, surface area resolution 30 DPI, Multi touch s, Regulatory Certification CE, FCC, IC, UL/CUL, CB, CQC , teach infinity software embedded		
Short throw projector	LCD, White and Colour Brightness at 3,200lm ,XGA Resolution, HDMI Connectivity, 10,000 hours lamplife, Muti-PC Projection throw ratio as low as 0.48,EasyMP Network Projection, 2 years warranty, MRP of replacement lamp for this product should be under Rs. 10,000.00. wmk with cables		
Display	43-inch, 16:9 aspect ratio, 1920 x 1080 pixels resolution, view angle178°/178°,video RCA X 1, audio RCA Pin Type X 2, HDMI 1.4 X 2,USB 2.0 X 1, HDMI CEC, RS232, SAFETY REGULATIONS IS 13252:2010,		
Conference Camera with speaker	Complete camera ,speakerphone , remote control and microphone should be an integrated single OEM solution for ease of use and seamless experience, System should support Bluetooth and NFC (Near Field Communication) for audio call integration with mobile phone in the conference room.System must have all required certification FCC , CE , RoHS and comply to India E-waste management rules,System should be Indian Standard: 9000 certified by any of the NABL government laboratory,OEM for the system should be ISO 9001:2008 certified, All required components of the system should have Government of India - Ministry of Communication & IT approval (WPC - Wireless and planning coordination certified),OEM for the system should be listed in India for more than 5 years as on bid calling date. To support bidder and for better service to end customer, OEM should have minimum 40 or more authorized service centres across India with atleast one service centre in each of the metro cities : Delhi , Mumbai , Bangalore , chennai from the last 3 years as on bid calling date.OEM for the system should be innovative and must have international recoginition from Wainhouse , Frost & Sullivan , let's do video , reddot etc.OEM should be profitable organization with overall turnover of		

	minimum 2 billion USD gloabally for the last 2 years.OEM for integrated system should be innovative and must have atleast 100 patents awarded to it's name from day one.OEM for the system should have option to provide SDK free of cost for the integration of the system in any workflow / Application.		
	System should support onboard H.264 with Scalable Video Coding (SVC) , UVC 1.5 for processing of video within the camera and usb Audio class (UAC) to save computing resources on end device/ laptop/PC or codec.Output : H.264 ,YUY2,MJPEG.Optical Resolution : 3 MP (1080p30fps or above).Sensor size : 1/3'' CMOS.Port : USB 2.0 for end device connectivity. SNR >= 35dB,FOV : Diagonal 90°, Horizontal 81.9°and vertical 59°or above.Aperature : F2.0～3.0.Smooth Motorized pan, tilt and zoom from remote control and as well as manually from the speakerphone / control unit placed on the table.Lens of the camera should have ZEISS certification . Should support FECC : Far End camera control. Camera Control: Standard VISCA / Mini din 6 pin or equivalent.Should have Kensington Security Slot to ensure physical security of camera in conference room.＋/-90° Pan range , ＋35°/-45° tilt range . LED for speakerphone streaming , mute , hold and bluetooth pairing so that user is aware about the status of the device.Audio Technology : Must support Echo cancellation, Noise reduction, ultra-wideband audio.Four inbuilt omni-directional microphones supporting 20-foot or more diameter range . Integrated microphone and supported expansion microphone should have mute/unmute button so that user sitting at any corner of conference room have provision to mute/ unmute the complete system with LED indication on each of microphone.System should support central mountable cable manager for connection of all components in system so that single USB cable(for camera , speakerphone and microphone		

	) with 3mts of minimum length is connected to end device (laptop,Mac, Codec ,desktop and thin client)		
Table top touch panel	Display Size: 21.5", Resolution: 1920X 1080, Graphics Input: DVI-I, Size: 566 X 385 X 55 mm, Tablet Resolution: 2540 lpi, Adjustable stand, DVI-DVI and DVI-VGA video cables, Five customizable ExpressKeys, 210 cd/m² Brightness,Cordless and battery-free pen with 2 side-switches, 1024 levels of pressure sensitivity,Integrated USB hub with 2 USB ports to provide access to your favorite USB devices,HDCP compliant,Built-in DVI-I pass-thru connector handles either digital or analog input and allows mirroring directly from the pen display to a projector or another display, wacom patented		
Air Conditioner	Auto Clean/ Self clean 3 star Inverter Split ac,4 way swing, 50 ft Long - air throw, 1.5 Ton capacity, EER – 3.62, 900 Air circulation(m3/h), Cooling Capacity 5150 W, Power Requirements (voltage/frequency) - 230/SINGLE/50 (Ph,V,Hz). 4 KVA Voltage Stabilizer		
Ceiling Mount Kit	3 feet to 6 feet ceiling mount Kit wit 15 VGA cable/ HDMI to VGA converter		
Document camera	CMOS Technology, 2M pixels,1920 x 1080,30 FPS, 16:9, video output 750 TV lines , Optical X Digital 12x10, Split Screen, Negative Positive conversion , 380 mm x 285 mm shooting area		
ups	1 KVA UPS with 1 hour back up		

Item	Specifications		
portable projector	Portable projector: ultra-portable LED projector, Big screen projection: shorter throw lens project up to 100-inches from 8-feet 9-inches, Premium audio: built-in dual Harman kardon speakers deliver room-filling audio, Long battery life: a built-in battery provides up to 6 hours of power and can be quickly charged via USB type c		

Other Item

Item	Specifications	Complied (yes/no) Describe quoting model	Remarks
Wooden Almirah with chair	3 x 2 ftx 2.5 ft table, drawer with one cabinet. MDF made with finishing, Full Wooden Chair with cushion		
Lan	Optical fiber cable ,media converter, patch cord, splicing		
Basic electrification with wiring	UPS connectivity to main line, 4 point modular box		
Room color with finishing	per square feet (color will be selected by management)		

Surveillance Security for Smart Classroom and Digital classroom

Item	Specifications	Complied (yes/no) Describe quoting model	Remarks
DVR 8 channel	Embedded LINUX, 8 Channel BNC,5MP, 4MP, 1080P@25/30fps - 720P@50/60fps - 720P@25/30fps, record rate Main Stream:8CH: the 1st & 2nd channels 5M-N(1~10fps);other channels 4M-N/1080P(1~15fps); 1080N/720P/960H/D1/CIF (1~25/30fps)Sub stream:CIF/QCIF (1~15fps),1 HDMI ,1 VGA		
2 TB HDD	surveillance		
SMPS	Input : 110 - 240 V AC, with 1.5 meter long power cord,Output: 12 V DC, with 8 Chanel connectors and 8 LED indicators,Working temp: 0 ~ 40 C		
DC	DC Connectors Screw Type		
BNC	High quality		
Camera	Max. 30fps@1080P,HD and SD output switchable,3.6mm fixed lens (2.8mm, 6mm optional),Max. IR length 20m, Smart IR, DC12V		
1 KVA UPS	1 KVA UPS with 2 no.s 7ah battery		
4 U Rack	fully loaded		
Gang box	for camera mounting		
Cat 6	D link		

PVC pipe/ Flexible	1 inch pvc		
Installation	as per required		
PTZ	1/2.8" STARVIS™ CMOS,1920(H) x 1080(V), 2 Megapixels,Progressive scanning, Distance up to 150m (492ft), Distance up to 150m (492ft),4 IR LED,25x optical zoom 16x digital ,180° flip,		

Other Item for Digital Classroom cum Seminar Room			
Item	**Specifications**	**Complied (yes/no) Describe quoting model**	**Remarks**
Acoustics with paint	Saint Gobain perforated tiles, Perforation size - 12 x 12 mm, Perforated area - 18%,Width (mm) 580, Length (mm) 1160, Weight (kg)7 , Class C sound absorber. High quality framing , foaming		
Ceiling paint and painting	Branded		
Wall paper	Branded for 2 walls.		
lights	Led panel light 8 watt, 12 watt, 15 watt		
dias	19 mm ply with carpet 10 x 8 ft		
electrification	On actual per required . Must use materials of great white, anchor, finolex,wipro ,havells etc		
UPS	3 KVA , 26 AH x 8 no.s battery 1 hour back. Should include rack and connecting cables. Installation accessories		
A/C	Auto Clean/ Self clean 3 star Inverter Split ac,4 way swing, 50 ft Long - air throw, 1.5 Ton capacity, EER – 3.62, 900 Air circulation(m3/h), Cooling Capacity 5150 W, Power Requirements (voltage/frequency) - 230/SINGLE/50 (Ph,V,Hz). 4 KVA Voltage Stabilizer		
Sofa	Symmetrical, filled with foam, W x H x D: 168 cm x 86 cm x 76 cm (5 ft 6 in x 2 ft 9 in x 2 ft 5 in), Upholstery Included ,3 seater, Frame made from kiln dried and treated pine wood.Elastic belt webbing.Foam cushioning.Artificial leather finish with cherry brown and ABS leg is used, color black, Maximum load capacity.		
Seating arrangment with chair	19mm ISI Marked W/P Plywood finished with 1mm Laminate of a reputed brand, Each Table will have 2 nos 5 Amp Plug points with required wiring. High cushioned chair.		
Student writing pad chair	High quality branded		
table with 3 no.s 6 amp socket	4 ft x 2.5 ftx 2.5 ft .mdf made with drawer for storage. Fitted Black glass		
Lan	I/O box with		

Stool	Stool with LAN port and power socket , made of steel		

Digital Classroom cum Seminar Room IT equipment

Item	Specifications	Complied (yes/no) Describe quoting model	Remarks
Sound Speaker	Long throw 4" (102 mm), utilize a 15 W transformer,Max SPL (calculated): 98.5 dB (104.5 dB Peak), Coverage angle: Horizontal 110°, Vertical 110°, Power handling: 15 W (60 W Peak) Continuous Pink Noise (100 hours) ,Dimensions (H x W x D): 193 mm x 140 mm x 120 mm (7.6 in x 5.5 in x 4.7 in) , Transformer taps: 70 V: 3.7 W, 7.5 W, 15 W 100 V: 7.5 W, 15 W, loudspeaker shall be a surface mount, two-way,full-range system, with an internal passive crossover.The loudspeaker's low-frequency transducer shall be a 4" (102 mm) woofer, with a weather resistant polypropylene cone, and a 1" (25 mm) voice-coil. The loudspeaker's high-frequency transducer shall be a 0.75" (20 mm) Ferro fluid cooled driver. The loudspeaker system shall meet the following performance criteria: Power handling, 15 W of IEC60268-5 continuous pink noise (6 dB crest factor); Frequency response, 75 Hz - 20 kHz (-10 dB from rated sensitivity); Sensitivity, 86.5 dB at one watt, 100 Hz - 10 kHz at one meter.The loudspeaker shall have a transformer suitable for use on 70 V or 100 V distributed lines. The transformer shall have taps ranging from 3.7 W to 15 W, selectableusing a Euroblock connector on the rear of theenclosure.		
Microphone handheld	ClearScan automatically finds the clearest channel, EZsync one-step channel setup, PL22 cardioid dynamic microphone element, Number of Channels : 32, Diversity True Antenna, RF Sensitivity <1.0 µV for 12 dB SINAD, Squelch Tone Code plus Amplitude, Distortion < 1.0%, 0.4% typical (ref 1 kHz, 40 kHz deviation)		
Microphone lapel	Flexible TNC 1/2 Wave antennas, Connector Type 1/4 inch unbalanced, 3-Pin XLR balanced,element ULM18 Directional Microphone, Number of Channels 32 Per Band, 8 Simultaneous, Polar Pattern Cardioid, Signal-to-Noise Ratio (A-weighted) greater than 100 dBdB Squelch Tone code plus Amplitude		

Amplifier with rack	120 Watt Mixer Amplifier, 4 microphone / line inputs, plus music source input, Announcement only output, 3-wire volume override, Wide range of output power (60, 120 and 240 Watts), Connector Cinch, stereo converted to mono, Input 1 (push-to-talk contact with priority): 5-pin Euro style, balanced, phantom, Input 2: 3-pin Euro style, balanced, phantom, Input 3 and 4 : TRS Jack (1/4, 6.3mm) balanced, 4 u rack fully load .		
projector with 8 x 6 liberty motorized screen	4,000 Lumens, Contrast:100,000:1, 1920x1080 resolution, Lamp Life: 20,000 hours / 20,000 hours (eco), Lamp type : Laser Phosphor, required kit to mount. Screen		
Spotlit	All in one wireless presenter having additional functionality of Timer and Pointer (Dimmer, magnifier and highlighter), System must have all required certification FCC , CE , RoHS, GS, C-Tick , VCCI and comply to India E-waste management rules, OEM for the system should be ISO 9001:2008 certified,All required components of the system should have Government of India - Ministry of Communication & IT approval (WPC - Wireless and planning coordination certified), Software: Powerpoint , Keynote , PDF , Google slides and Prezi etc,Should have the option to control cursor on the screen to click videos and links in the presentation, 30meters range, ccelerometer and Gyroscope leveraging Invensense 3D technology, Rechargeable Lithium (80mAh) Or better		
CPU with wireless KBM	SFF core i 3, 4GB RAM, 1 TB HDD, win 10,		
Accessories	Cable ,connectors , sound cable, switchers and converters		
Video Conferencing Unit	The Video Conferencing device should be ground-breaking solution that offers businesses a revolutionary video conferencing system with unprecedented flexibility and the power of support for multiple popular video conferencing protocols and platforms right out of the box. The SIP-based GVC3200 supports Grandstrea m's robust IPVideoTalk platform for plug and play video conferencing while also being interoperable with any 3rd party SIP video conferencing platform - thus offering a great option to expand or implement a 3rd party platform. Addit ionally, since it is based on Android 4.4, the VC devices offers full access to all video conferencing apps in the Google Play Store. The VC should supports an innovative, patentpending		

	embedded MCU that supports up to 9-way conferencing wit h local mixing between SIP and other protocols.	
	Required Supported Protocol :SIP RFC3261, BFCP, RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, SSH, TFTP, NTP, STUN, LLDP-MED, LDAP, TR-069, 802.1x, TLS, SRTP, TCP/IP/UDP, IPv6, FEC, FECC, H.323, Q.931, H.224, H.281, H.225.0, H.239, H.241, H.245, H.460.18 and H.460.19	
	Camera Specification 1/3" 2 Megapixel CMOS 1920Hx1080V@30fps,12x optical zoom, +/-23° tilt, +/- 90° pan, 70°(W)*- 6.3° (T) field of view	
	Network Features 1× RJ45 10/ 100/ 1000 Mbps port, Wifi Supported integrated dual-band 802.11 a/b/g/n (2.4GHz & 5GHz), Yes, integrated. Bluetooth 4.0 + EDR	
	Video Outputs : 3x HDMI up to 1080p with CEC, video outputs 1x VGA/1x HDMI with resolution up to 1080p, Microphone/Speaker External MIC/Speaker, built-in MIC, cascadable external MIC/speaker (pending), Remote Control Bluetooth remote control with multi-touch touchpad, Auxiliary Ports 1x USB 2.0, SD, external speaker port, reset pin, Graphic Display OLED with 128x32 resolution	
	Voice Codecs G.711μ/a, G.722 (wide-band), G.726-32, iLBC (pending), Opus, G.722.1, G.722.1c (pending), in-band and out-of-band DTMF (In audio, RFC2833, SIP INFO), Video Codecs H.264 BP/MP/HP, video resolution up to 1080p, frame rate up to 30 fps, bitrate up to 4Mbps,People Video Resolution 1080p from 512 Kbps, 720p from 384 Kbps, 4SIF/4CIF from 128 Kbps, SIF/CIF/QSIF/QCIF/SQSIF/SQCIF from 64 Kbps, Content Video Resolution Input: VGA, SVGA, XGA, WXGA, WXGA, SXGA, 1440×900, 720p, 1600×1200, 1080p (HDMI), up to 60fps; Encoding: 1280×720, 1920×1080, Output Resolution 720p, 1080p, Embedded MCU Up to 4-way 1080p conference, 5-way 720p conference, 9-way VGA conference, Dual-Stream BFCP, people video (up to 1080p@30fps) + content video (up to 1080p@15fps, 720p@30fps), Audio Features AEC, ANS, AGC, PLC, CNG/VAD, Video Features FEC, dynamic display layout, picture-in-picture, picture-outside-picture, digital caption (pending), Platform Bridging Bridge SIP calls with	

		any Android VoIP apps such as Skype, Skype for Business, Google Hangouts and more, Telephony Features Hold, transfer, forward (unconditional/no-answer/busy), call park/pickup, 9-way audio/video conference, downloadable XML phone book, LDAP, call waiting, call history, flexible dial plan, personalized music ring tones, server redundancy & fail-over, Sample Applications Skype, Google Hangouts, Skype for Business, Web browser, Facebook, Twitter, YouTube, Google calendar, mobile phone data import/export via Bluetooth, etc. API/SDK available for advanced custom application development		
		Application Deployment : Allows Android 4.4.2 compliant applications to be deployed in the device with provisioning control, QoS: Layer 2 QoS (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ, MPLS) QoS, Security : User and administrator level passwords, MD5 and MD5-sess based authentication, 256-bit AES encrypted configuration file, TLS, 128/256-bit SRTP, HTTPS, 802.1x media access control		
		Upgrade/Provisioning : Firmware upgrade via TFTP / HTTP / HTTPS or local HTTP upload, mass provisioning using TR-069 or AES encrypted XML configuration file		
		Power & Green Energy Efficiency : Universal power adapter included: Input 100-240VAC 50-60Hz; Output 12VDC/5A (60W), Temperature and Humidity : Operation: 0°C to 40°C, Storage: -10°C to 60°C, Humidity: 10% to 90% Non-condensing, Compliance : FCC: Part 15 (CFR 47) Class B; UL 60950 (power adapter), Part 15C, Part 15E.407, Part 2.1091 CE: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1, EN62479, RoHS, EN301893, EN62311 RCM: AS/NZS CISPR22/24; AS/NZS 60950; AS/NZS 4268		

Display Panel for Digital Classroom cum seminar hall

Item	Specifications		Complied (yes/no) Describe quoting model	Remarks
Interactive Panel with standing trolley	Technology	TFT LCD with DLED Backlit		
	Display Size (diagonal)	65" or higher		
	Aspect Ratio	16:09		
	Resolution	3840 x 2160 4K Ultra HD		
	Flicker Free	Should have Blue Light Filter		
	Static Contrast Ratio	1200:1 (typ) or higher		
	Brightness	350 nits or higher		
	Display Colour	1.07B colors or higher		
	Input Ports	HDMI 2.0 x 3; VGA x 1; Audio x 1 ; CVBS (AV) ; RS 232 x 1; Slot In For PC Built-in x 1; Wi-Fi Module Slot Built-in x1; or more		
	Output Ports	HDMI x 1; Audio Out x 1		
	LAN	RJ 45 x 1 or more		
	USB	3.0 x 3;		
		2.0 x 2		
		2.0 (For Touch) x 2		
		Camera USB x 1		
	Speakers	10W x 2 Stereo speakers and 15W Subwoofer		
	Touch	Type: Should be IR Recognition;		
		Touch Resolution: 32767 x 32767 or higher		
		Touch Point : 20 Points or higher		
		Writing : 10 Points or higher		
		Response Time: < 4ms or better		
		Supports: Windows 10/ Windows 8 / Windows 7 / Windows XP / Vista / Linux/ MAC / Android/ Wince / Chrome		
	Embedded Player CPU Inbuilt	Android Version: 7.0 or higher		

		CPU: ARM Quad Core Cortex A72 1.2G Hz or higher		
		GPU: ARM Mali-450 MP 4 or higher		
		Memory : 2GB DDR 4 or higher		
		Storage : 16GB eMMC or higher		
		Networking : 10/ 100M auto-identification and DHCP		
	Smart USB Port	The USB should detect and follow the current video input facilitating the user to use front USB ports while attaching their own device.		
	Anti Scratch – Anti Glare	Minimum 7H scratch resistant and Anti Glare or higher		
	Camera Port	To facilitate the user not unplug and use the same camera port while switching between Slot-in-PC or Android.		
	Mirror Extending	Should have flexibility to allow content to be mirrored on two IFP simultaneously through HDMI Out.		
	Casting in Android	It should allow-broadcasting of IFP Screen from 1 to many and should also allow devices (Windows, Chrome, MAC) to broadcast their content on the screen. Minimum 4 screens should be broadcasted simultaneously on IFP.		
	Save Option	Should have Built-in save option, which should save the whole session directly to Google Drive and One Drive.		
	Quiz	Should have Built in Tool to allow participants to submit answers from their Smart Phones using as answering/voting device.		

		Zoom Video Conferencing	Should have Built in Zoom Video Conferencing as an integral part of IFP		
		QR Code Scan	On press of a icon the whole session / annotation should be converted into a PDF file and can be downloaded in any Smartphone just by scanning the QR code.		
		Email	On press of a icon a email should be generated automatically along with the whole session / annotation attached as PDF and should be ready to be sent just by inserting the email id.		
		Split Screen	Should have the feature, built-in facility to split the screen in 2,3,4,5 and.6 where in six application can be opened from a single PC / Laptop allowing to work on all opened application simultaneously..		
		Annotation/Writing	Should be able to write on a Blank screen and on any application – PPT, Word, Excel, PDT, Web Browser, Video etc.		
		Floating Tool	Should have floating tools which should appear just by press of 2 fingers for writing / annotation		
		Wireless Content Sharing	The Panel should allow user to share / mirror the content of Laptop/Desktop (Mac, Windows) and mobile devices (iOS, Android) wirelessly		
			Wireless Presentation should allow user to access their Laptop / Desktop through touch Panel.		
		Video Conference	Should support USB based PTZ cameras allowing Software based Video Conferencing		

	Software	The software features required should be the integral part of the IFP and both IFP and the software offered should be from the same OEM.		
	Built-in PC Slot	Should have slot for the built-in PC		
	Optional; PC for the Built-in PC Slot	i5, Intel Unite, Intel-i5-6400, 8DDR4 RAM, 128 GBSSD, Win Pro 10 Compatible, Intel 1217LM, RTL8111El , Win Dual band + BT, VGAx1, HDMI Out x 1, Mini DP x 1; USB x3; RJ45 x 1,		
		Software : Win 10 Professional; ViewBoard2.1V, Intel Unite,		
	Wi-Fi and Bluetooth Dongle	CPU : Realtek RTL 8821AU-VS; Interface: USB-2.0; Wireless / Bluetooth- WiFi Standard: 802.11 a/b/g/n/ac, 2.4G & 5G (5150Mhz-5250MHz & 5725MHz-5825MHz) Up to 433.5Mbps; Bluetooth: Support 2.1/3, 0/4.0 BLE; Vo;tage : 5V DC, Consumption: <2.5W		

Annexure - II

Price Bid

(Vendor should use this format only)

Smart Classroom	Unit price with tax	Quantity (No.)	Total price with tax
Interactive Board		**1**	
Short throw projector		**1**	
Display		**1**	
Conference Camera with speaker		1	
Table top touch panel		1	
Air Conditioner		2	
Ceiling Mount Kit		2	
Document camera		2	
ups		2	
portable projector		1	

Others	Unit price with tax	Quantity (No.)	Total price with tax
Wooden Almirah with chair		2	
Lan		2	
Basic electrification with wiring		2	
Room color with finishing		2	

Surveillance Security for Smartclassroom and Digital classroom	Unit price with tax	Quantity (No.)	Total price with tax
DVR 8 channel		2	
2 TB HDD		2	
SMPS		2	
DC		16	
BNC		32	
Camera		14	
1 KVA UPS		2	
4 U Rack		2	
Gang box		14	
Cat 6		2	
PVC pipe/ Flexible		100	
Installation		18	
PTZ		2	

Digital Classroom cum Seminar Room other items	Unit price with tax	Quantity (No.)	Total price with tax
Acoustics with paint		per sqft	
Ceiling paint and painting		per sqft	
Wall paper		per sqft	
lights		per required	
dias		1	
electrification		per required	
UPS		1	
A/C		3	
Sofa		2	
Seating arrangment with chair		10	
Student writing pad chair		30	
table with 3 no.s 6 amp socket		1	
Lan		1	
Stool		1	

Digital Classroom cum Seminar Room IT equipment	Unit price with tax	Quantity (No.)	Total price with tax
Sound Speaker		4	
Microphone handheld		3	
Microphone lapel		1	
Amplifier with rack		1	
projector with 8 x 6 liberty motorized screen		1	
spotlit		1	
CPU with wireless KBM		1	
Accessories		1	
Video Conferencing Unit		1	
Interactive Panel		1	