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NATIONAL ACADEMY OF AGRICULTURAL SCIENCES (NAAS) NASC, Dev Prakash Shastri Marg, New Delhi-110012 (Tel. 011-25846051, -52, Ext. 103 & 115; Email naas-mail@naas.org.in) OPEN TENDER (Two Bid System) For supply, commissioning and installation of Hybrid Conferencing Solution for Lecture Hall and Committee Room No.1 at NAAS, New Delhi	
The National Academy of Agricultural Sciences (NAAS) established in 1990 under Societies Registration Act 1860 hereby invites competitive bids from all prospective bidders for supply and installation of Conferencing Solution/Audio and Video System for its conference facilities . Interested bidders may refer to the bid documents and technical specifications available on our website www.naas.org.in .	
Name of Work	Last Date for Submission of Bid
Procurement, supply, commissioning and installation of Hybrid Conferencing Solution for Lecture Hall and Committee Room No.1 at NAAS (includes IFP, Digital Podium, PTZ Cameras, Microphones, speakers, PC etc.	15 days from the date of publication of Advertisement in the Newspaper
For any corrigenda and amendments etc. please visit our websites regularly.	
Executive Director	

Deerasha Gupta



F. No. NAAS/IV-32/2023-24

Dated: 11-2-2024

NOTICE FOR PROCUREMENT THROUGH OPEN TENDER

On behalf of National Academy of Agricultural Sciences, bids/quotations are invited from reputed Manufactures and it's Authorized Dealer in two bid system (**Technical bid & Financial bid**) for procurement, supply, commissioning and installation of **Hybrid Conferencing Solution at Lecture Hall and Committee Room of the Academy** as per detail specification enclosed.

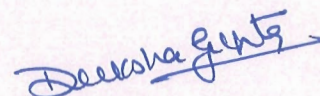
1) **Tender Schedule:**

Tender No.	NAAS/01/2024
Type of Bid	Two Bid System (Technical & Financial)
Published Date	11-2-2024
Bid Submission start date	12-2-2024
Last date & time for submission of bid	26-2-2024 (upto 4.00 PM)
Technical Bid Opening date	27-2-2024
Address/Communication	Executive Director, NAAS Phone No.011-25846051-52,Ext.103,115 Email:naas-mail@naas.org.in Website: www.naas.org.in

2) **Details of Tender Deposits :-**

- Earnest Money Deposit: **Rs.100000/- (One lakh only) in the form of Demand Draft in favour of 'The National Academy of Agricultural Science, New Delhi'** which may be placed in separate cover and submitted along with the offer.
- Performance Security Deposit: 10% of the Contract value. (The performance security should remain valid for a period of sixty days beyond the date of supply, commissioning and installation of the item.
- **The bid document can also be downloaded /viewed from NAAS website (www.naas.org.in).**

Note: In case, a holiday is declared by the Government on the day of opening bids, the bids will be opened on the next working day at the same time. The NAAS reserves the right to accept or reject any or all the tenders without assigning any reason.


Executive Director



F. No. NAAS/IV-32/2023-24

Dated: 11-2-2024

Bid Notice

From: Executive Director
National Academy of Agricultural Sciences
NASC, Pusa, New Delhi-110 012

To,

Dear Sir(s),

Tenders/Bid/Quotations are hereby invited by National Academy of Agricultural Sciences for procurement, supply, commissioning and installation of Hybrid Conferencing Solution for Lecture Hall and Committee Room to be installed at NAAS, New Delhi.

The terms and conditions of the contract are those contained in the General Conditions of contract applicable to the contract placed by the NAAS as detailed in the tender forms. **Please submit your offer/bid in the two packets (Technical and Financial bid)** if you are in a position to furnish the requisite supply, commissioning and installation in accordance with the requirements stated in the bid.

General Condition of Contract:

- 1) EMD of Rs.1.00 lakh in the form of DD/Banker's cheque from commercial bank drawn in favour of National Academy of Agricultural Sciences, payable at New Delhi must be attached along with Technical Bid. No interest on Earnest Money Deposit shall be paid by the NAAS to the tenderer. The EMD shall be refunded to the unsuccessful bidders after finalization of the tender/bid.
- 2) An amount @ 5% of the contract/supply order is to be deposited by the selected firm/successful Vendor as Performance Security Deposit. In the event of non-deposition of the same, the earnest money will be forfeited. No interest on Earnest Money (EMD) and Performance Security Deposit (Performance Bank Guarantee) shall be paid by the NAAS. Performance Security shall remain valid for three years beyond the date of completion of all contractual obligation.
- 3) The rates quoted by each firm in their bid should be valid for 90 days. No request for alteration in the rates once quoted will be permitted. The rates to be quoted should include cost of each and every item including transportation cost, manpower cost and taxes etc. The NAAS shall not bear any extra charge for the same. Conditional bids shall not be considered. No overwriting or cutting is permitted in the financial bid documents. Such bids will be rejected out-rightly.
- 4) **Only those firms will be considered for financial bid who will qualify in the Technical Bid.** Each page of the technical and financial bid must be signed by the Vendor (Authorised Official) while submitting bid document.
- 5) If Vendor does not accept the offer, after issue of award of contract/work order by NAAS within 05 working days, the offer shall be deemed to be withdrawn without any notice & Earnest Money Deposit will be forfeited.
- 6) **The following documents are required to be attached with the Technical Bid in the following manner with page number of each papers/documents.**

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- A. The requisite amount of Earnest Money Deposit (EMD) as prescribed in the bid document.
- B. Copy of Registration Certificate of the firm under Company/Shops & Establishment Act of the respective state for this purpose. The Manufacturer / Bidder should be in the business in India for more than 3 years as on 31-3-23. This should be supported by the Certificate of registration issued under the companies act by a competent authority.
- C. Copies of proofs of minimum Three Work Orders amounting to Rs.10.00 lakhs and above for satisfactory supply, installation, operationalized /commissioned of the items / products as mentioned /required in the present tender bid.
- D. The bidder for Technical Evaluation should submit catalogue, datasheet and other supporting document with complete technical details for – IFP, Podium, PTZ Camera, IFP, Microphone, and Speakers etc proposed solution. *(The respective features and specification should be publicly available on website having videos/documents for verification. The bid evaluation committee if required may invite the bidders for live demonstration to verify the proposed specifications/features. Bids failing to fulfil technical evaluation and not able to showcase the features will be technically rejected).*
- E. Last financial year ITR of the Company/firm duly approved/attested/countersigned by the Chartered Accountant. Copy of Income Tax (PAN number) and GST Registration Certificates.
- F. The firm/agency must enclose a certificate indicating that there is no criminal legal suit pending or contemplated against it. An Undertaking attested by Notary on a non-judicial stamp paper of value of Rs.100/- (Rupees One Hundred Only) regarding their non-blacklisting by any of the Central and State Govt. Departments, Union Tertiary, Public Sector Undertakings and/or by Central Vigilance Commission during the last three years. There should be no complaint against the bidder for poor performance of the equipment supplied/installed.
- G. Bidder needs to submit the Manufacturer Authorization Form (MAF) from respective OEM indicating name/address/email/phone number of issuing authority with Tender Number mentioned in it for all components of the solution (IFP, Podium, PTZ Camera, Microphone, Speakers etc) authorizing the bidder to participate. 3-years onsite comprehensive warranty for the supplied item should be provided by the bidder/OEM. Valid authorization Certificate from OEM of the participation of the firm.
- 7) **FINANCIAL BID: Financial Bid may be submitted in prescribed format as per bid document and may be placed in separate packet indicating 'FINANCIAL BID'.**
- 8) The Competent Authority of the Academy reserves the right to accept or reject any or all the bids received without assigning any reason thereof.


(Executive Director)



Checklist for Technical Bid
(To be enclosed along with Technical Bid)

S. No	Technical Requirements	Whether Meeting Requirements? (Tick Yes/No)	Please mention page No. of relevant document/ requirement submitted
A.	The requisite amount of Earnest Money Deposit (EMD) as prescribed in the bid document.	Yes/No	
B.	Copy of Registration Certificate of the firm under Company/Shops & Establishment Act of the respective state for this purpose. The Manufacturer / Bidder should be in the business in India for more than 3 years as on 31-3-23. This should be supported by the Certificate of registration issued under the companies act by a competent authority.	Yes/No	
C.	Copies of proofs of minimum Three Work Orders amounting to Rs.10.00 lakhs and above for satisfactory supply, installation, operationalized /commissioned of the items / products as mentioned /required in the present tender bid.	Yes/No	
D.	The bidder for Technical Evaluation should submit catalogue, datasheet and other supporting document with complete technical details for – IFP, Podium, PTZ Camera, IFP, Microphone, and Speakers etc proposed solution. <i>(The respective features and specification should be publicly available on website having videos/documents for verification. The bid evaluation committee if required may invite the bidders for live demonstration to verify the proposed specifications/features. Bids failing to fulfil technical evaluation and not able to showcase the features will be technically rejected).</i>	Yes/No	
E.	Last financial year ITR of the Company/firm duly approved/attested/countersigned by the Chartered Accountant. Copy of Income Tax (PAN number) and GST Registration Certificates.	Yes/No	
F.	The firm/agency must enclose a certificate indicating that there is no criminal legal suit pending or contemplated against it. An Undertaking attested by Notary on a non-judicial stamp paper of value of Rs.100/- (Rupees One Hundred Only) regarding their non-blacklisting by any of the Central and State Govt. Departments, Union Tertiary, Public Sector Undertakings and/or by Central Vigilance Commission during the last three years. There should be no complaint against the bidder for poor performance of the equipment supplied/installed.	Yes/No	
G.	Bidder needs to submit the Manufacturer Authorization Form (MAF) from respective OEM indicating name/address/email/phone number of issuing authority with Tender Number mentioned in it for all components of the solution (IFP, Podium, PTZ Camera, Microphone, Speakers etc) authorizing the bidder to participate. 3-years onsite comprehensive warranty for the supplied item should be provided by the bidder/OEM. Valid authorization Certificate from OEM of the participation of the firm.	Yes/No	

Dr. Anil Kumar

Signature of Authorized Person
(Full name and designation)
(Seal)



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Technical Specification

1. Lecture Hall

A. Interactive Flat Panel (Approved Brand/Make: LG/SONY/SAMSUNG/VIEWSONIC)			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
01	Quantity	01	
02	Screen size	105 inches	
03	Resolution	4K UHD	
04	Panel Type	TFT LCD Module with DLED Backlight	
05	Pixels	WUHD 5120x2160	
06	Aspect Ratio	21:9	
07	Backlight life	50,000 hrs	
08	Response Time	6.5ms	
09	Light Sensor	Available	
10	Brightness	350 Nits	
11	Contrast Ratio	4000:1	
12	Touch Point	20 Point Windows	
13	RAM	4GB	
14	Storage	64GB	
15	Camera Plate	On Top	
16	Android	9.0	
17	HDMI Input	2	
18	HDMI Output	1	
19	USB 2.0	2	
20	USB 3.0	3	
21	Touch Port	2	
22	Audio Port	1	
23	OPS SLOT	1	
24	Speakers	10WattX2	
25	Software	Same OEM	
26	Dual Writing	It should automatically sense the thickness of the tip of the pen and accordingly adjust the thickness of the width of the writing. It should also have a pen with Dual thickness with 3mm and 8 mm diameter pen tips. Live Caption (Live subtitling as the teacher speaks); Text to Speech: Via Immersive reader in male, and female voice, Grammar parts of speech; Cloud Storages: Google Drive, Dropbox, Box, One Drive Enterprise, One Drive Personal; Wireless Casting: Send and receive the board remotely; Canvas Area: Infinite Pages and each page can be infinitely scrolled; AI Pen: Auto detects shapes and give real-time google results	

Dr. Prakash Sastry



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B.	Digital Podium	Reputed Brand Specification : Similar or Higher	
1.	Quantity	01	
2.	Screen size and Resolution	22":1920 x 1080 (Full HD) (finger Touch)	
3.	View Area	476.64(H)mm x 268.11(V)mm (21.5 inch)	
4.	Luminance, White	200cd	
5.	Contrast Ratio	1000:1	
6.	Viewing Angle & Surface Treatment	178° / 178° (H/V) with Tempered Glass	
7.	Lamp Life Time	30,000 Hrs.	
8.	Connectivity	HDMI, DVI, VGA and USB	
9.	Technology	Electromagnetic + Capacitive Touch	
10.	Digitizer Resolution	3000 ppi	
11.	Position Report Rate	200 RPS	
12.	Sensitivity	2048 Level	
13.	Body	Steel Frame (MS) with Slidable Wooden Top	
14.	Sliding cover	Opening/Closing the cover easily	
15.	Soft wheels	Moving podium with convenience	
16.	Adjusting Monitor Angle system (Actuator Based)	Yes	
17.	Universal In-built Rack	19"	
18.	Dimension (mm)	687 X 1054 X 860 (W X H X D)	
19.	Microphone	Gooseneck Microphone	
C. PTZ Camera -Approved Brand/Make: SONY/LUMENS/CLEARONE			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
1.	Quantity	02	
2.	Zoom	Minimum 20X Optical	
3.	Iris	f=5.57~110mm; F1.6 ~ F3.5	
4.	Viewing Angle	3.3° (tele) –54.7° Wide	
5.	Sensors	1 /2.8inch	
6.	Pixels	2.07 Mega Pixel	
7.	Video Format	SDI Video Formats: 1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94. 720P / 50/ 30 / 25 /59.94/29.97	
8.	White Balance	Auto/Manual/One push 3000K / 3500K / 4000K / 4500K / 5000K / 5500K / 6000K / 6500K /7000K	
9.	Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve	
10.	Focus	Auto/Manual/One Push	
11.	Interface	USB 3.0 x1, DVI/HDMI x1, , LAN x1, RS232 x1	
12.	Video Compression Format	H.265/H.264	
13.	Control Protocol	VISCA/PELCO-D/Pelco-P	
14.	Baud Rate	11520 / 9600 / 4800 / 2400	

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15.	Network Protocol	RTSP/RTMP/ ONVIF, GB/T28181	
16.	Pre-set Number	255	
D. Microphone : Approved Brand/Make: SHURE/CLEARONE/BOSCH			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
1.	Quantity	03	
2.	Type	Condenser	
3.	Polar	Cardioid	
4.	Frequency	50Hz-18Khz	
5.	S/N Ratio	68db	
6.	Phantom Power	9-48Vdc	
7.	Sound Pressure	125db at 1KHz 1% T.H. D	
8.	XLR Pin	3	
9.	Sensitivity	-40dB +/- 3dB at 1 KHz (0dB = 1 V/Pa)	
10.	Impedance	200 Ohms	
11.	Switch	On Mic Mute/Unmute	
E. Microphone Shock Mount (Any Branded)			
Sr. No.	Features/Parameters	Specification Similar or Higher	Compliance (Yes/No)
1.	Quantity	03	
2.	XLR Pin	3 I/O	
3.	Application	Very low profile Through Table Microphone Shock Mount.	
4.	Termination	3 Pin Female XLR input and 3 Pin Male XLR output.	
5.	Finish	Satin Black.	
F. Handheld Microphone : Approved Brand/Make: SHURE/CLEARONE/BOSCH			
Sr. No.	Features/Parameters	Specification – Similar or Higher	Compliance (Yes/No)
1.	Quantity	01 Pair	
2.	Receiver	Dual Channel	
3.	Frequency Response	40Hz- 16Khz	
4.	Polar	Cardioid	
5.	Output	Individual Channel: XLR Mix out: ¼" Jack	
6.	Channel	80 Selectable Channels	
G. Lapel Microphone : Approved Brand/Make: SHURE/CLEARONE/BOSCH			
Sr. No.	Features/Parameters	Specification – Similar or Higher	Compliance (Yes/No)
1.	Quantity	01 Pair	
2.	Receiver	Dual Channel	
3.	Frequency Response	40Hz- 16Khz	
4.	Polar	Cardioid	
5.	Output	Individual Channel: XLR Mix out: ¼" Jack	
6.	Channel	80 Selectable Channels	

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H. Digital Signal Processor: Approved Brand/Make: CLEARONE/BOSE/SYMETRIX/ALLEN & HEATH			
Sr. No.	Features/Parameters	Specification – Similar or Higher	Compliance (Yes/No)
1.	Quantity	01	
2.	Sampling Rate	48KHz	
3.	Phantom Power	48V	
4.	Frequency Response	20 - 20KHz, $\pm 0.2\text{dB}$	
5.	Maximum Input/output Level	18dBu	
6.	Output Impedance (Balanced)	100 Ω	
7.	Equivalent Input Noise EIN	$\leq -125\text{dBu}$	
8.	Channel Isolation @1kHz	100dB	
9.	THD+N	$< 0.004\%$ @4dBu	
10.	Digital/Analog Dynamic Range	120dB	
11.	Background Noise	-90dBu	
12.	Analog/Digital Dynamic Range	114dB	
13.	Input Impedance (Balanced)	20k Ω	
14.	Input Gain Amplification range	24 to -27dB, (3dB Step, 17 in total)	
15.	Operating Power Supply	AC110/220V, 50Hz/60Hz	
16.	Enclosure / Chassis Material	Pressed Steel (powder coated)	
17.	Chassis Dimensions (H×W×D)	45×482×258 mm, Size 19" 1RU	
18.	Product Weight	2.9 kg	
19.	Included Accessories	IEC 1.2 MTR Power Cord	
20.	Environmental conditions	-10 to +40 °C	
21.	Compliance	CE & RoHS	
22.	Enclosure / Chassis Material	Pressed Steel (powder coated)	
23.	Analog Input Channel	8	
24.	Analog Output Channel	8	
25.	Ethernet control port	1	
26.	RS232	1	
27.	RS485	1	
28.	GPIO	8 (Freely Configurable i/o)	
29.	Features	Full-featured matrix mixing function. User definable GUI Windows-based control software to manage & configure the DSP unit. Built-in automatic camera tracking function.	

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I. Speakers : Approved Brand/Make : JBL/BOSCH/CLEARONE			
Sr. No.	Features/Parameters	Specification – Similar or Higher	Compliance (Yes/No)
1.	Quantity	13 Nos	
2.	Type	2 way. Passive Ceiling	
3.	Low Impedance Power	20 W @ 8 Ohm	
4.	L100V Power	2.5W (4 K Ohm) / 5W (2 K Ohm) / 10W (1 K Ohm) / 20W (500 Ohm)	
5.	L70V Power	1.25W (3k9 Ohm) / 2.5W (1k9Ohm) / 5W (980Ohm) / 10W (490Ohm) / 20W (245Ohm)	
6.	LF Transducer	Woofer 5"	
7.	HF Transducer	Tweeter 0.5"	
8.	Frequency Range	100 Hz - 20 KHz	
9.	Coverage	150° x 150° @ 1 KHz; 80° x 80° @ 4 KHz	
10.	Sensitivity	88 dB	
11.	Max SPL	101 dB	
12.	Mounting diameter	170 mm	
13.	Fixation	Rotating anchors	
14.	Material	Enclosure: Metal; Grille: ABS plastic	
J. Amplifier : Approved Brand/Make : JBL/BOSCH/CLEARONE			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
1.	Quantity	01	
2.	Type	Class D	
3.	No. Channels	4	
4.	W/Ch @ 8 Ohm	90 W	
5.	W/Ch @ 4 Ohm	150 W	
6.	W/Ch @ 2 Ohm	230 W	
7.	W Bridge @ 8 Ohm	310 W	
8.	W Bridge @ 4 Ohm	400 W	
9.	Frequency Range	20 Hz - 20 KHz, SUB mode: cut-off frequency between 50 Hz and 250 Hz	
10.	THD+N	<0.1 %	
11.	S/N Rate	>96 dB	
12.	Gain	28 dB	
13.	Input Sensitivity	2.21 dBu	
14.	Connections	Power supply: 1 x IEC, Audio in Euro block, Audio Amp Out: Euro block	
15.	Protections	Mute On / Off, DC, internal fuse	
K. Desktop PC : Approved Brand/Make: HP/DELL			
Sr. No.	Features/Parameters	Specification	Compliance (Yes/No)
1.	Quantity	01	
2.	Processor	i-7 10th Gen	
3.	RAM	16GB	
4.	HDD	1TB	

D. K. S. G. S.



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5.	OS	10, 64 Bits	
6.	USB	6X3.0 USB	
7.	Monitor	22" FHD	
L. Matrix Switcher : Approved Brand/Make: KRAMER/CYPRESS/EXTRON/LIGHTWARE			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
1.	Quantity	01	
2.	Input Port	4 HDMI (Female type)	
3.	Output Port	4 HDMI (Female type) Video	
4.	Features	<ul style="list-style-type: none">Seamless switchingSupports four different modes: Matrix mode/ Dual mode/ Quad / TV Wall modeMatrix mode: Seamless switching 4 x 4.Dual mode: 2 sources of PiP or PoP on both outputsQuad mode: all sources in quad view on one display	
M. Camera Switcher : Approved Brand/Make: KRAMER/CYPRESS/LUMENS/SONY/AREC			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
1.	Quantity	01	
2.	Video Input Ports	4xHDMI-A	
3.	Video Output ports	1xHDMI-A	
4.	Streaming Port	1xUSB Type A	
5.	Recording Port	1xUSB Type A	
6.	Audio In	2x3.5mm mini jack	
7.	Audio Out	1x3.5mm mini Jack	
8.	Power	1xUSB-C	
9.	Interface Ports	1xRJ45; HDMI 2.0; USB 3.0; H.265	
10.	Features	Visca, Mini switcher convenient to carry Built-in LCD for video previews Joystick Camera Control T-Bar switch and 14 transition effects 4K HDMI inputs Support live streaming via USB 3.0 Mix audio from multiple inputs Configurable PIP video overlay Chroma Key Configurable PIP video overlay	
N. Warranty			
	Warranty of all above items	Three years onsite comprehensive.	

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2. Committee Room -1

A. Interactive Flat Touch Panel: (Approved Brand/Make: LG/SONY/SAMSUNG/VIEWSONIC)			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
1.	Quantity	01	
2.	Screen size	105 inches	
3.	Resolution	4K UHD	
4.	Panel Type	TFT LCD Module with DLED Backlight	
5.	Pixels	WUHD 5120x2160	
6.	Aspect Ratio	21:9	
7.	Backlight life	50,000 hrs	
8.	Response Time	6.5ms	
9.	Light Sensor	Available	
10.	Brightness	350 Nits	
11.	Contrast Ratio	4000:1	
12.	Touch Point	20 Point Windows	
13.	RAM	4GB	
14.	Storage	64GB	
15.	Camera Plate	On Top	
16.	Android	9.0	
17.	HDMI Input	2	
18.	HDMI Output	1	
19.	USB 2.0	2	
20.	USB 3.0	3	
21.	Touch Port	2	
22.	Audio Port	1	
23.	OPS SLOT	1	
24.	Speakers	10WattX2	
25.	Software	Same OEM	
26.	Dual Writing	It should automatically sense the thickness of the tip of the pen and accordingly adjust the thickness of the width of the writing. It should also have a pen with Dual thickness with 3mm and 8 mm diameter pen tips. Live Caption (Live subtitling as the teacher speaks); Text to Speech: Via Immersive reader in male, and female voice, Grammar parts of speech; Cloud Storages: Google Drive, Dropbox, Box, One Drive Enterprise, One Drive Personal; Wireless Casting: Send and receive the board remotely; Canvas Area: Infinite Pages and each page can be infinitely scrolled; AI Pen: Auto detects shapes and give real-time google results	
B. OPS			
1	Processor	i-5 10 th Gen	
2	RAM	6GB	
3	SSD	256GB	
4	OS	10, 64 Bits or higher	
5	USB	4X3.0 USB	

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C. HDMI Splitter: Approved Brand/Make: KRAMER / JBL / CYPRESS			
Sr. No.	Features/Parameters	Specification : Similar or Higher	Compliance (Yes/No)
1	Quantity	01	
2	Input	01	
3	Output	04	
4	Support format	Up to 4k	
D. Dressing and Wooden Work			
Sr. No.	Features/Parameters	Minimum Specification Description	Compliance (Yes/No)
1	Quantity	Lump sum	
2	Wooden Work	7X1 Feet with front transparent	
3	Dressing	To maintain the site appearing pleasing the successful bidder must dress all of the cable's connectors and other accessories.	
E. Warranty			
	Warranty of all above items	Three years onsite comprehensive.	

SCOPE OF WORK:

- i. Supply, Installation and commissioning of all the items.
- ii. The necessities cables (HDMI, USB, audio, video etc.), connectors, licenses, wooden, electrical & civil works any other items should be provided by the bidders to make the satisfactory commissioning of the offered solution.
- iii. Training and demonstration of the offer solution have to be provided by the bidder at the site.

ADDITIONAL TERMS AND CONDITIONS (ATC)

- i. Partial/incomplete bids shall be liable for rejection.
- ii. Bidder to submit Bid specific Authorization with name, address and mail id of signatory of the respective all OEM.
- iii. The supplied items should have a minimum of 5 years in Support life. Declaration required on end-of-life by the OEM.
- iv. The specific data sheet of the product offered in the bid to be provided along with bid documents or the respective features and specifications of the quoted items should be publicly available on the website having videos/documents for verification (reference must be mentioned).
- v. The purchaser or the bid evaluation committee, if required, may invite the bidders for a live demonstration to verify the features, specifications etc.
- vi. The Bidder needs to submit the Manufacturer Authorization Form (MAF) from the respective OEM with the Tender Number mentioned in it authorizing the bidder to participate. the proposed specifications /features. Bids failing to fulfil technical evaluation and not being able to showcase the features will be technically rejected.


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FINANCIAL BID FOR LECTURE HALL

S. No.	Name of Equipment	QTY	Make	Model Offered	Unit Price of Complete Unit as mentioned at column (A) in Rs.)	Amount	GST		Total Price including GST (in Rs.)
							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
1	Interactive Flat Panel (Approved Brand/Make: LG/SONY/SAMSUNG/VIEWS ONIC) Screen size: 105 inches Resolution: 4K UHD Panel Type: TFT LCD Module with DLED Backlight Pixels: WUHD 5120x2160 Aspect Ratio: 21:9 Backlight life: 50,000 hrs Response Time: 6.5ms Light Sensor: Available Brightness: 350 Nits Contrast Ratio: 4000:1 Touch Point: 20 Point Windows RAM: 4GB Storage: 64GB Camera Plate: On Top	01							

Deeksha Gupta



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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Android: 9 HDMI Input: 2 HDMI Output: 1 USB 2.0: 2 USB 3.0: 3 Touch Port: 2 Audio Port: 1 OPS SLOT: 1 Speakers: 10WattX2 Software: Same OEM Dual Writing: It should automatically sense the thickness of the tip of the pen and accordingly adjust the thickness of the width of the writing. It should also have a pen with Dual thickness with 3mm and 8 mm diameter pen tips. Live Caption (Live subtitling as the teacher speaks); Text to Speech: Via Immersive reader in male, and female voice, Grammar parts of speech; Cloud Storages: Google								

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Drive, Dropbox, Box, One Drive Enterprise, One Drive Personal; Wireless Casting: Send and receive the board remotely; Canvas Area: Infinite Pages and each page can be infinitely scrolled; AI Pen: Auto detects shapes and give real-time google results								
2	Digital Podium (Reputed Brand) Screen size and Resolution: 22":1920 x 1080 (Full HD) (finger Touch) View Area: 476.64(H)mm x 268.11(V)mm (21.5 inch) Luminance, White: 200cd Contrast Ratio: 1000:1 Viewing Angle & Surface Treatment: 178° / 178° (H/V) with Tempered Glass Lamp Life Time: 30,000 Hrs. Connectivity: HDMI, DVI, VGA	01							

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	and USB Technology: Electromagnetic + Capacitive Touch Digitizer Resolution: 3000 ppi Position Report Rate: 200 RPS Sensitivity: 2048 Level Body: Steel Frame (MS) with Slidable Wooden Top Sliding cover: Opening/Closing the cover easily Soft wheels: Moving podium with convenience Adjusting Monitor Angle system (Actuator Based): Yes Universal In-built Rack: 19" Dimension (mm): 687 X 1054 X 860 (W X H X D) Microphone: Gooseneck Microphone								
3	PTZ Camera (Approved Brand/Make: SONY/LUMENS/CLEARONE) Zoom: Minimum 20X Optical	02							

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Iris: f=5.57~110mm; F1.6 ~ F3.5 Viewing Angle: 3.3° (tele) -54.7° Wide Sensors: 1 /2.8 inch Pixels: 2.07 Mega Pixel Video Format: SDI Video Formats: 1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94. 720P / 50/ 30 / 25 /59.94/29.97 White Balance: Auto/Manual/One push 3000K / 3500K / 4000K / 4500K / 5000K / 5500K / 6000K / 6500K /7000K Video Adjustment: Brightness, Color, Saturation, Contrast, Sharpness. B/W mode, Gamma curve Focus: Auto/Manual/One Push Interface: USB 3.0 x1, DVi/HDMI x1, LAN x1, RS232 x1 Video Compression Format:								

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	H.265/H.264 Control Protocol: VISCA/PELCO-D/Pelco-P Baud Rate: 11520 / 9600 / 4800 / 2400 Network Protocol: RTSP/RTMP/ ONVIF, GB/T28181 Pre-set Number: 255"								
4	Microphone (Approved Brand/Make: SHURE/CLEARONE/BOSCH) Type :Condenser Polar: Cardioid Frequency: 50Hz-18Khz S/N Ratio: 68db Phantom Power: 9-48Vdc Sound Pressure: 125db at 1KHz 1% T.H. D XLR Pin: 3 Sensitivity: -40dB +/- 3dB at 1 KHz (0dB = 1 V/Pa) Impedance: 200 Ohms Switch: On Mic Mute/Unmute	03							

Devi Singh



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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
5	Microphone Shock Mount (Any Branded) XLR Pin: 3 I/O Application: Very low profile Through Table Microphone Shock Mount. Termination: 3 Pin Female XLR input and 3 Pin Male XLR output. Finish: Satin Black	03							
6	Handheld Microphone (Approved Brand/Make: SHURE/CLEARONE/BOSCH) Receiver: Dual Channel Frequency Response: 40Hz-16Khz Polar: Cardioid Output: Individual Channel: XLR Mix out: 1/4" Jack Channel: 80 Selectable Channels	01 Pair							
7	Lapel Microphone (Approved Brand/Make: SHURE/CLEARONE/BOSCH)	01 Pair							

[Handwritten Signature]



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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Receiver: Dual Channel Frequency Response: 40Hz-16Khz Polar: Cardioid Output: Individual Channel: XLR Mix out: ¼" Jack Channel: 80 Selectable Channels								
8	Digital Signal Processor (Approved Brand/Make: CLEARONE/BOSE/SYMETRIX/ALLEN & HEATH) Sampling Rate: 48KHz Phantom Power: 48V Frequency Response: 20 - 20KHz , ±0.2dB Maximum Input/output Level: 18dBu Output Impedance (Balanced): 100Ω Equivalent Input Noise EIN: ≤-125dBU Channel Isolation @1kHz: 100dB THD+N: <0.004% @4dBu	01							

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Digital/Analog Dynamic Range: 120dB Background Noise: -90dBU Analog/Digital Dynamic Range: 114dB Input Impedance (Balanced): 20kΩ Input Gain Amplification range: 24 to -27dB, (3dB Step, 17 in total) Operating Power Supply: AC110/220V, 50Hz/60Hz Enclosure / Chassis Material: Pressed Steel (powder coated) Chassis Dimensions (H×W×D): 45×482×258 mm, Size 19" 1RU Product Weight: 2.9 kg Included Accessories: IEC 1.2 MTR Power Cord Environmental conditions: -10 to +40 °C Compliance: CE & RoHS Enclosure / Chassis Material:								

D. K. Gupta



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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Pressed Steel (powder coated) Analog Input Channel: 8 Analog Output Channel: 8 Ethernet control port: 1 RS232: 1 RS485: 1 GPIO: 8 (Freely Configurable i/o) Features: Full-featured matrix mixing function. User definable GUI Windows-based control software to manage & configure the DSP unit. Built-in automatic camera tracking function.								
9	Speakers (Approved Brand/Make : JBL/BOSCH/CLEARONE) Type: 2 way. Passive Ceiling Low Impedance Power: 20 W @ 8 Ohm L100V Power: 2.5W (4 K Ohm) /	13							

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	5W (2 K Ohm) / 10W (1 K Ohm) / 20W (500 Ohm) L70V Power: 1.25W (3k9 Ohm) / 2.5W (1k9Ohm) / 5W (980Ohm) / 10W (490Ohm) / 20W (245Ohm) LF Transducer: Woofer 5" HF Transducer: Tweeter 0.5" Frequency Range: 100 Hz - 20 KHz Coverage: 150° x 150° @ 1 KHz; 80° x 80° @ 4 KHz Sensitivity: 88 dB Max SPL: 101 dB Mounting diameter: 170 mm Fixation: Rotating anchors Material: Enclosure: Metal; Grille: ABS plastic								
10	Amplifier (Approved Brand/Make : JBL/BOSCH/CLEARONE) Type: Class D No. Channels: 4	01							

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	W/Ch @ 8 Ohm: 90 W W/Ch @ 4 Ohm: 150 W W/Ch @ 2 Ohm: 230 W W Bridge @ 8 Ohm: 310 W W Bridge @ 4 Ohm: 400 W Frequency Range: 20 Hz - 20 KHz, SUB mode: cut-off frequency between 50 Hz and 250 Hz THD+N: <0.1 % S/N Rate: >96 dB Gain: 28 dB Input Sensitivity: 2.21 dBu Connections: Power supply: 1 x IEC, Audio in Euro block, Audio Amp Out: Euro block Protections: Mute On / Off, DC, internal fuse								
11	Desktop PC (Approved Brand/Make: HP/DELL) Processor: i-7 10th Gen RAM: 16GB HDD: 1TB	01							

Daksh Gupta



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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	OS: 10, 64 Bits USB: 6X3.0 USB Monitor: 22" FHD								
12	Matrix Switcher (Approved Brand/Make: KRAMER/CYPRESS/EXTRO N/LIGHTWARE) Input Port: 4 HDMI (Female type) Output Port: 4 HDMI (Female type) Video Features: Seamless switching Supports four different modes: Matrix mode/ Dual mode/ Quad / TV Wall mode Matrix mode: Seamless switching 4 x 4. Dual mode: 2 sources of PiP or PoP on both outputs Quad mode: all sources in quad view on one display	01							
13	Camera Switcher (Approved Brand/Make:	01							

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	KRAMER/CYPRESS/LUMEN S/SONY/AREC) Video Input Ports: 4×HDMI-A Video Output ports: 1×HDMI-A Streaming Port: 1×USB Type A Recording Port: 1×USB Type A Audio In: 2x3.5mm mini jack Audio Out: 1×3.5mm mini Jack Power: 1×USB-C Interface Ports: 1×RJ45; HDMI 2.0; USB 3.0; H.265 Features: Visca, Mini switcher convenient to carry Built-in LCD for video previews Joystick Camera Control T-Bar switch and 14 transition effects 4K HDMI inputs Support live streaming via USB 3.0 Mix audio from multiple inputs Configurable PIP video overlay Chroma Key								

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Configurable PIP video overlay								
14	Warranty Warranty of all above items: Three years onsite comprehensive.								
	TOTAL PRICE IN FIGURES AND WORDS:								

Deepna Gupta



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FINANCIAL BID FOR COMMITTEE ROOM-1

S. No.	Name of Equipment	QTY	Make	Model Offered	Unit Price of Complete Unit as mentioned at column (A) in Rs.)	Amount	GST		Total Price including GST (in Rs.)
							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
1	Touch Panel (Approved Brand/Make: LG/SONY/SAMSUNG/VIEWS ONIC) Screen size: 105 inches Resolution: 4K UHD Panel Type: TFT LCD Module with DLED Backlight Pixels: WUHD 5120x2160 Aspect Ratio: 21:9 Backlight life: 50,000 hrs Response Time: 6.5ms Light Sensor: Available Brightness: 350 Nits Contrast Ratio: 4000:1 Touch Point: 20 Point Windows RAM: 4GB Storage: 64GB Camera Plate: On Top	01							

Deeksha Gupta



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NASC, Dev Prakash Sastry Marg, Pusa
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S. No.	Name of Equipment	QTY	Make	Model Offered	Unit Price of Complete Unit as mentioned at column (A) in Rs.)	Amount	GST		Total Price including GST (in Rs.)
							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Android: 9.0 HDMI Input: 2 HDMI Output: 1 USB 2.0: 2 USB 3.0: 3 Touch Port: 2 Audio Port: 1 OPS SLOT: 1 Speakers: 10WattX2 Software: Same OEM Dual Writing: It should automatically sense the thickness of the tip of the pen and accordingly adjust the thickness of the width of the writing. It should also have a pen with Dual thickness with 3mm and 8 mm diameter pen tips. Live Caption (Live subtitling as the teacher speaks); Text to Speech: Via Immersive reader in male, and female voice, Grammar parts of speech; Cloud Storages: Google								

Dev Prakash Sastry



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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	Drive, Dropbox, Box, One Drive Enterprise, One Drive Personal; Wireless Casting: Send and receive the board remotely; Canvas Area: Infinite Pages and each page can be infinitely scrolled; AI Pen: Auto detects shapes and give real-time google results								
2	OPS Processor: i-5 10th Gen RAM: 6GB SSD: 256GB OS: 10, 64 Bits or higher USB: 4X3.0 USB								
3	HDMI Splitter (Approved Brand/Make: KRAMER / JBL / CYPRESS) Input: 1 Output: 4 Support format: Up to 4k	01							
4	Dressing and Wooden Work Wooden Work: 7X1 Feet with	Lump sum							

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							Rate (in %)	Amount (in Rs.)	
	A	B	C	D	E	F=E*B	G	H = (F*G)/100	I=F+H
	front transparent Dressing: To maintain the site appearing pleasing the successful bidder must dress all of the cable's connectors and other accessories.								
5	Warranty Warranty of all above items: Three years onsite comprehensive.								
TOTAL PRICE IN FIGURES AND WORDS:									

Deekha Gupta