

Date: 21.06.2016
ANNEXURE I
PART-I
Technical Bid

To

Date:

 Assistant General Manager
 Indian Bank
 Zonal office,UGF, World trade centre New delhi

Dear Sir,

Sub: Supply, installation and maintenance of Video Conferencing Equipments.
Reference: Tender No. IB/ND/VC/2016-17 Dated 21.06.2016

Referring to your above tender document calling for quotations, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to undertake the videoconferencing project, and submit our quotation.

SPECIFICATIONS OF THE EQUIPMENTS
Video System

Sl. No	Description	Qty	Specification Offered: (Specify Make & Model for each item)	Complied with Bank's Spec. (Yes / No)																				
1	<table><tr><td colspan="2">Supply, Installation, Testing & Commissioning (SITC) of Video Conferencing Main Systems</td></tr><tr><td>No. of sites</td><td>Min. 3 sites using in-built multi-site endpoint feature with each site at 720p resolution</td></tr><tr><td>Camera</td><td>Camera with 1/3" CMOS/CCD with Capability for capturing video in poorly lit rooms. Camera mount / stand to be provided.</td></tr><tr><td>Output Pixels (H x V)</td><td>1920 x 1080</td></tr><tr><td>Frame Rate</td><td>Minimum 60 fps</td></tr><tr><td>Zoom</td><td>12X optical zoom with 12X digital zoom</td></tr><tr><td>Horizontal Viewing Angle</td><td>Minimum 65°</td></tr><tr><td>Pan/Tilt Angle</td><td>Pan ±90°/Tilt+/-15°</td></tr><tr><td>Preset Position</td><td>Minimum 25 positions</td></tr><tr><td>Other features</td><td><ul style="list-style-type: none">It should be able to register on the existing Gate Keeper available at Indian Bank's Head Quarter Chennai & Seamlessly work with the existing infrastructure setup at Bank (Polycom CMA 4000).</td></tr></table>	Supply, Installation, Testing & Commissioning (SITC) of Video Conferencing Main Systems		No. of sites	Min. 3 sites using in-built multi-site endpoint feature with each site at 720p resolution	Camera	Camera with 1/3" CMOS/CCD with Capability for capturing video in poorly lit rooms. Camera mount / stand to be provided.	Output Pixels (H x V)	1920 x 1080	Frame Rate	Minimum 60 fps	Zoom	12X optical zoom with 12X digital zoom	Horizontal Viewing Angle	Minimum 65°	Pan/Tilt Angle	Pan ±90°/Tilt+/-15°	Preset Position	Minimum 25 positions	Other features	<ul style="list-style-type: none">It should be able to register on the existing Gate Keeper available at Indian Bank's Head Quarter Chennai & Seamlessly work with the existing infrastructure setup at Bank (Polycom CMA 4000).	1		
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		<ul style="list-style-type: none"> The PTZ camera and codec should be of same manufacturer. In-built DSP to eliminate feedback and echo. The unit should be capable of supporting other video features like content sharing through direct physical link with the system or via LAN. Brief details on the VC recording facility and its setup shall be provided. 			
	Video Quality	Full HD (1080p)			
	Video Standards	H.263, H.263+, H.263++, H.264 Baseline Profile, H.264 High Profile, MPEG-4 SP@L3 (SIP only) H.460.18, H.460.19 Firewall Traversal			
	Audio Standards	G.711, G.722, G.722.1 Mono (11kHz@64/96kbps), MPEG-4 AAC-LC Mono (22kHz@96kbps).			
	Screen layout	Screen Layout Full Screen / PinP / PandP / PandPandP / Side by Side			
	Network Protocol	TCP/IP, UDP/IP, DHCP, DNS, HTTP, TELNET, SSH, SNMP, NTP, ARP, RTP/RTCP, PPPoE, UPnP, Protocol Stack IPv4, IPv6, Bit Rate 64 kbps to 4,096 kbps,			
	H.239 Presentation	YES 1080 / SXGA / WXGA / 720 / XGA @30fps,			
	Video Input/output	The unit should have minimum 2 video inputs first to HD camera, and Content (DVI-I or equivalent) and At least 2 No. of HDMI/DVI outputs to connecting to high definition display devices and recording devices.			
	Other connectors	<ul style="list-style-type: none"> VGA S Component (videos) 15 pin d-connectors (Camera to VC Processor) USB 3.0 			
	Audio Input/output	Input: <ul style="list-style-type: none"> Microphone Input (quoted system should support up to 4 mics) 3 X Mics (VC omni-directional HD MICS) should be provided 1 PC Audio /Aux port Output: <ul style="list-style-type: none"> 1 x stereo output (RCA) and 1 HDMi output 			
	Other audio features to be supported	<ul style="list-style-type: none"> Echo Cancellation Automatic gain control Automatic noise suppression Adaptive post filtering 			

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	<table><tr><td>Bandwidth / IP Features</td><td><ul style="list-style-type: none">• H.323/SIP up to 6 Mbps point to point• Support H.320 up 2 Mbps through gate keeper.• Packet Loss Recovery feature on H.323 call• SIP up to 4 Mbps in addition to H323 protocol.• Calls can be made on SIP or H323 without having to restart or reconfigure the endpoint.</td></tr><tr><td>Network Interface</td><td>Gigabit Ethernet (10BASE-T/100BASE-TX/1000BASE-T, IPv6 compatible) – 1 No.</td></tr><tr><td>User Interface:</td><td><ul style="list-style-type: none">• The system should support Password protected system menu.• Directory Services.• Web-based System Management- SNMP V3 support.</td></tr><tr><td>Make</td><td>Make: SONY/POLYCOM/AVER /CISCO</td></tr></table>	Bandwidth / IP Features	<ul style="list-style-type: none">• H.323/SIP up to 6 Mbps point to point• Support H.320 up 2 Mbps through gate keeper.• Packet Loss Recovery feature on H.323 call• SIP up to 4 Mbps in addition to H323 protocol.• Calls can be made on SIP or H323 without having to restart or reconfigure the endpoint.	Network Interface	Gigabit Ethernet (10BASE-T/100BASE-TX/1000BASE-T, IPv6 compatible) – 1 No.	User Interface:	<ul style="list-style-type: none">• The system should support Password protected system menu.• Directory Services.• Web-based System Management- SNMP V3 support.	Make	Make: SONY/POLYCOM/AVER /CISCO			
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2	<p>Revised specifications for SITC of Hydraulic Pop Up Box on Conference Table:</p> <p>VIDEO INPUT/OUTPUT 1 pass-through VGA 1 pass-through HDMI Connectors 15-pin HD female to 15-pin HD female on a 6" (15 cm) pigtail HDMI female to HDMI female on a 10" (25 cm) pigtail</p> <p>AUDIO INPUT/OUTPUT 1 pass-through stereo, unbalanced Connectors 3.5 mm TRS jack to 3.5 mm 3 pole captive screw connector on a 10" (25 cm) pigtail</p> <p>DATA INPUT/OUTPUT Standards CAT 6, TIA/EIA T568B Connectors 1 female RJ-45 to 1 female RJ-45</p> <p>POWER HSA 300 (US) 125 VAC, 50-60 Hz, 12 A max. HSA 300 (EU/Multi-Region/UK) 240 VAC, 50-60 Hz, 10 A max. USB power Power supply External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A Power output USB: 5 VDC, 2.1 A, 10.5 watts total</p> <p>(Make: Extron / Crestron / AMX)</p>	5										
3	<p>SITC of Switcher: Should be controllable through front panel source selection switches with provision for RS232C & contact Closure and also using IR / RF remote Control.</p> <p>Resolution range Up to 1080p (HDTV) or 1920x1200 (the highest resolution of the single-link DVI standard) @ 60 Hz</p> <p>Data rate: 6.75 Gbps (2.25 Gbps per color) or above Pixel clock: 165 MHz or above</p>	1										

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	Standards DVI 1.0, HDMI 1.3, VGA Switching speed: 200 ns. HDTV Compatible & HDCP Compliant. Video Inputs-10 HDMI & 5 computer graphics video on 15-pin HD (VGA) connectors. Scaled Outputs-2 HDMI, 22 Output Resolutions-Up to WUXGA/1080p, Auto Input Scanning and Switching, Color Sampling-Supports 4:4:4 (RGB and YUV) as well as 4:4:2 (YUV) color sampling, Audio Outputs-1 S/PDIF on an RCA connector, 1 balanced stereo audio on a terminal block, embedded audio on the HDMI outputs (Make: Kramer / Extron / Crestron)			
4	SITC of Motorized Screen • Size: 6 ft X 4 ft , Width 6ft & Height 4ft, diagonal 84" , • High Contrast Matt White, • Low Noise Motor • Video Spectra 1.5, • Remote control with range up to 40mtrs. (Make-Draper / De-lite)	1		
5	SITC of LCD Projector Resolution: WXGA Lumens: 4000 Connectivity: HDMI 19-pin x 1 (compatible with HDCP, Deep Color), audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) COMPUTER 1 IN - D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR) COMPUTER 2 IN /MONITOR OUT - D-sub HD 15-pin (female) x 1 (RGB), D-sub HD 15-pin (female) x 1 (RGB), (input/output selectable using on-screen menu) VIDEO IN Pin jack x 1 (Composite VIDEO) S-VIDEO IN Mini DIN 4-pin x 1 (S-VIDEO) AUDIO IN 1 M3 x 1 (L-R x 1) AUDIO IN 2 (MIC IN) M3 x 1 (L-R x 1) for audio input or for microphone connection (variable) AUDIO IN 3 Pin jack x 2 (L, R x 1) AUDIO OUT M3 x 1 (L-R x 1) for output (variable) LAN RJ-45 x 1 (for network connection, 10BASE-T/100BASE-TX, compliant with PLink™) SERIAL IN D-sub 9-pin (female) x 1 for external control (RS-232C compliant) (Make: Panasonic / Casio / NEC / SONY / EPSON)	1		
6	SITC of Ceiling Mount Kit for Projector Standard Duty Ceiling Mount Bracket (Up to 5 Kg Projector) (Make: Customized)	1		
7	SITC of LED TV with Wall mount bracket • 164cm or 65" Diagonal with 4k resolution (3840x2160). • View angle H/V 178/178°, • Aspect ratio 16:9, • Picture In Picture should be available • Audio Output (PMPO) (Watts) - Minimum 20W • Connectivity : HDMI Input • USB Port - 2 (Side) • Composite Input - 2 (Rear) • Digital Audio Out - 1 (Rear)	1		

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	<ul style="list-style-type: none"> Controlling switch to switch ON / OFF the TV should be provided at chairman's seat. (Make: LG /Panasonic/ Samsung / Sony)			
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Audio System

1	SITC of Boundary Layer Microphone with on/off for local conference <ul style="list-style-type: none"> Should be placed at 2'-3' intervals Frequency Response: 50 to 17000 Hz Output Impedance: up to 180Ω Programmable on/off switch and LED on/off indicator. Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 117.0 Db Dynamic Range at 94.0 dB Power Requirements 11 to 52 Vdc phantom Surface-mount microphone. Open circuit sensitivity at 1 kHz, Cardioid Cartridge: -27.5dBV/pa (42.2mV) Electret Condenser type Programmable on/off switch and LED on/off indicator. Three operating modes: touch-on/touch-off, press to talk, and press to mute (Make: SHURE/AKG/Beyerdynamic/Audiotechnica)	21		
2	SITC of Chairman (19 inch.) Gooseneck Microphone and stand with on/off Base <ul style="list-style-type: none"> Frequency Response : 50 to 17000 Hz Output Impedance : up to 180Ω Signal to noise ratio at 94 dB SPL Cardioid Open circuit sensitivity at 1 kHz, ref. 1V/Pascal-35.0 dB (17.8 mV) Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 124.2dB Maximum Equivalent output noise : 28.0 dB Dynamic Range at 1 kΩ Load 96.2 dB Power Requirements 11 to 52 Vdc phantom, 2.0 mA Make: HURE/AKG/Beyerdynamic/Audiotechnica	2		
3	SITC of Digital Signal Processor for 23 microphones: <ul style="list-style-type: none"> Multi Channel Microphone input Two Aux-level input LED indication Front-panel headphones output with level control Frequency Response 50 Hz to 20000Hz (±1 dB) Equalization inbuilt Phantom Power up to 48 Vdc Bi-color LED indication of channel activation and clipping Control System Compatible Linking capability up to 400 microphone Mountable in a single 19" rack space via integral rack-mount Peak-responding output limiter with selectable thresholds and LED indicator Logic Operation should be available (Make: BSS / Shure / Biamp)	1 to 3 depending upon the no. of channels available in the DSP		

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4	SITC of Ceiling speaker System <ul style="list-style-type: none"> • Freq. Range (-10 dB)1: 80 Hz - 20 kHz • Power Capacity2: 80 Watts Continuous Program Power • 40 Watts Continuous Pink Noise • Nominal Sensitivity3: 86 dB SPL @ 1 m (3.3 ft) • Nominal Coverage Angle4: 130° conical coverage • Directivity Factor (Q): 2.4 averaged 500 Hz to 4 kHz • Directivity Index (DI): 3.8 averaged 500 Hz to 4 kHz • Rated Maximum SPL: 102 dB @ 1 m (3.3 ft) • Nominal Impedance (24C): 16 ohms (Min Z 16.1 ? @ 320 Hz) • Transformer Taps (24CT): 070V: 30W, 15W, 7.5W & 3.7W taps • 100V: 30W, 15W, & 7.5W taps Transducers: <ul style="list-style-type: none"> • Low-Frequency: 100 mm (4.0 in) Polypropylene-coated, • 1" coil on aluminum former • High-Frequency: 19 mm (0.75 in) Titanium coated polyester (Make: JBL / Bose / Extron)	6		
5	SITC of Amplifier <ul style="list-style-type: none"> • Amplifier: 75 watts x 8 channel amplifier@ 8 ohm , • Sensitivity-1.4 V, • Signal to Noise Ratio-110 dB, • THD (full rated power, 20 Hz - 20 kHz)-< 0.05%, • Frequency Response (at 1W, 4/8 ohms)-+/- 0.5 dB, • Voltage Gain-25 dB • Speaker output 8Ω ,70V/100V • Built-in band-pass filter (80Hz to 16kHz) • Mountable Desktop & 19" rack. Make- QSC / BOSE / Extron	1		
6	SITC of AV Recorder: <ul style="list-style-type: none"> • Should Capture HD footage, • Pause & resume recording facility should be available • Recording through USB & HDD, • Storage: 2TB HDD (Internal/External) • Input: HDMI, Component video & audio L/R, 3.5 Audio, Microphone, • Output: HDMI, Headphone, 3,5mm audio, • 19" Rack mountable, • Data Transfer through USB to Computer, • Power on auto play, (Make- DENON / AVERMEDIA / PANASONIC)	1		
7	SITC of Speaker cable <ul style="list-style-type: none"> • 2 core of high quality with minimum data loss, • 1.13mm, AWG-16,foil-shielded, twisted-pair, • Capacitance: 8.5 pF (per foot at a frequency of 10 kHz) • Conductor Stranded bare copper, • Insulation PVC. Make: AMX / Kramer / Extron	100 Mtrs.		

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8	SITC of Microphone Cable <ul style="list-style-type: none"> High quality with minimum data loss, 0.4mm, AWG-20, ruggedness, flexibility, flex life and interference immunity. Low impedance, Operating Temperature Range:-30°C To +60°C, Overall Nominal Diameter:5mm Make: AMX / Kramer / Extron	275 Mtrs		
9	SITC of Equipment Rack <ul style="list-style-type: none"> With lockable rear and front glass door, power strip, castor wheel for easy movement. Large cable entry in bottom Grounding and bonding stud installed in base. Finish in a durable textured powder coat for all the above audio main systems. (Make- EXTRON / Valrack / President)	1		
10	<ul style="list-style-type: none"> Bulk Connectors for complete systems (Audio, Video projection etc.), HDMI Cable 15 Mtr, HDMI Cable 3 Mtrs, VGA patch cord Length: as per site requirements (Make: Kramer/Extron/AMX/Falcon)	1 Lot		

Note: Offered specification should be specifically mentioned wherever required.

List of deviations from the required specifications:

1)

2)

(If left blank, it is treated that there are no deviations in the compliance of specifications)

We offer a warranty period of **ONE YEAR** from the date of installation of the equipment.

We agree for quote validity of 90 days.

We agree for insuring the equipments covering storage cum erection risk for a period of three months from the date of delivery at the destination.

We enclose the technical brochures for the model quoted.

We submit that we shall abide by your terms and conditions governing the quotations and Warranty mentioned in your letter. We submit that we abide by the details given above.

We undertake, if our quotation is accepted, to complete the services in accordance with the delivery schedule specified in the quote.

If our quotation is accepted, we will obtain the guarantee of a bank for a sum equivalent to 10% of the total project cost for the due performance of the Contract, in the form prescribed by the Bank.

We undertake that, in competing for (and, if the award is made to us, in executing) the above project, we will strictly observe the laws against fraud and corruption in force in India.

We understand that you are not bound to accept the lowest or any quotation you may receive.

We clarify/confirm that we comply with the qualification criteria of the project.

Date: 21.06.2016

Dated this day of 2016.....

Signature of Authorised Person (In the Capacity of) Duly
authorised to sign the quote for and on behalf of (give below the Name & Address of Bidder)

Mobile No:

Email Address:

Company Seal:

Annexure II
Part II (Commercial Quote)

To

Date:

Assistant General Manager
 Indian Bank
 Zonal office,UGF, World trade centre New delhi

Sub: Supply, installation and Maintenance of Video Conferencing Equipments.
Reference: Tender No. IB/ND/VC/2016-17 Dated 21.06.2016

Referring to your above letter calling for quotations, we submit hereunder the price bid for supply, installation and maintenance of Video Conference equipments for the specifications given in Part-I.

I. VIDEO SYSTEM

Sl. No	Description		Qty	Rate / Unit (Taxes Extra)	Total Amount (Taxes Extra)
1	Supply, Installation, Testing & Commissioning (SITC) of Video Conferencing Main Systems		1		
	No. of sites	Min. 3 sites using in-built multi-site endpoint feature with each site at 720p resolution			
	Camera	Camera with 1/3" CMOS/CCD with Capability for capturing video in poorly lit rooms. Camera mount / stand to be provided.			
	Output Pixels (H x V)	1920 x 1080			
	Frame Rate	Minimum 60 fps			
	Zoom	12X optical zoom with 12X digital zoom			
	Horizontal Viewing Angle	Minimum 65°			
	Pan/Tilt Angle	Pan ±90°/Tilt+/-15°			
	Preset Position	Minimum 25 positions			
	Other features	<ul style="list-style-type: none">It should be able to register on the existing Gate Keeper available at Indian Bank's Head Quarter Chennai & Seamlessly work with the existing infrastructure setup at Bank (Polycom CMA 4000).The PTZ camera and codec should be of same manufacturer.In-built DSP to eliminate feedback and echo.The unit should be capable of supporting other video features like content sharing through direct physical link with the system or via LAN.			

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		<ul style="list-style-type: none"> Brief details on the VC recording facility and its setup shall be provided. 			
	Video Quality	Full HD (1080p)			
	Video Standards	H.263, H.263+, H.263++, H.264 Baseline Profile, H.264 High Profile, MPEG-4 SP@L3 (SIP only) H.460.18, H.460.19 Firewall Traversal			
	Audio Standards	G.711, G.722, G.722.1 Mono (11kHz@64/96kbps), MPEG-4 AAC-LC Mono (22kHz@96kbps).			
	Screen layout	Screen Layout Full Screen / PinP / PandP / PandPandP / Side by Side			
	Network Protocol	TCP/IP, UDP/IP, DHCP, DNS, HTTP, TELNET, SSH, SNMP, NTP, ARP, RTP/RTCP, PPPoE, UPnP, Protocol Stack IPv4, IPv6, Bit Rate 64 kbps to 4,096 kbps,			
	H.239 Presentation	YES 1080 / SXGA / WXGA / 720 / XGA @30fps,			
	Video Input/output	The unit should have minimum 2 video inputs first to HD camera, and Content (DVI-I or equivalent) and At least 2 No. of HDMI/DVI outputs to connecting to high definition display devices and recording devices.			
	Other connectors	<ul style="list-style-type: none"> VGA S Component (videos) 15 pin d-connectors (Camera to VC Processor) USB 3.0 			
	Audio Input/output	Input: <ul style="list-style-type: none"> Microphone Input (quoted system should support up to 4 mics) 3 X Mics (VC omni-directional HD MICS) should be provided 1 PC Audio /Aux port Output: <ul style="list-style-type: none"> 1 x stereo output (RCA) and 1 HDMi output 			
	Other audio features to be supported	<ul style="list-style-type: none"> Echo Cancellation Automatic gain control Automatic noise suppression Adaptive post filtering 			
	Bandwidth / IP Features	<ul style="list-style-type: none"> H.323/SIP up to 6 Mbps point to point Support H.320 up 2 Mbps through gate keeper. Packet Loss Recovery feature on H.323 call SIP up to 4 Mbps in addition to H323 protocol. Calls can be made on SIP or H323 without having to restart or reconfigure the endpoint. 			
	Network	Gigabit Ethernet (10BASE-			

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	<table><tr><td>Interface</td><td>T/100BASE-TX/1000BASE-T, IPv6 compatible) – 1 No.</td></tr><tr><td>User Interface:</td><td><ul style="list-style-type: none">• The system should support Password protected system menu.• Directory Services.• Web-based System Management- SNMP V3 support.</td></tr><tr><td>Make</td><td>Make: SONY/POLYCOM/AVER /CISCO</td></tr></table>	Interface	T/100BASE-TX/1000BASE-T, IPv6 compatible) – 1 No.	User Interface:	<ul style="list-style-type: none">• The system should support Password protected system menu.• Directory Services.• Web-based System Management- SNMP V3 support.	Make	Make: SONY/POLYCOM/AVER /CISCO			
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Make	Make: SONY/POLYCOM/AVER /CISCO									
2	<p>Revised specifications for SITC of Hydraulic Pop Up Box on Conference Table:</p> <p>VIDEO INPUT/OUTPUT 1 pass-through VGA 1 pass-through HDMI Connectors 15-pin HD female to 15-pin HD female on a 6" (15 cm) pigtail HDMI female to HDMI female on a 10" (25 cm) pigtail</p> <p>AUDIO INPUT/OUTPUT 1 pass-through stereo, unbalanced Connectors 3.5 mm TRS jack to 3.5 mm 3 pole captive screw connector on a 10" (25 cm) pigtail</p> <p>DATA INPUT/OUTPUT Standards CAT 6, TIA/EIA T568B Connectors 1 female RJ-45 to 1 female RJ-45</p> <p>POWER HSA 300 (US) 125 VAC, 50-60 Hz, 12 A max. HSA 300 (EU/Multi-Region/UK) 240 VAC, 50-60 Hz, 10 A max. USB power Power supply External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A Power output USB: 5 VDC, 2.1 A, 10.5 watts total</p> <p>(Make: Extron / Crestron / AMX)</p>	5								
3	<p>SITC of Switcher: Should be controllable through front panel source selection switches with provision for RS232C & contact Closure and also using IR / RF remote Control.</p> <p>Resolution range Up to 1080p (HDTV) or 1920x1200 (the highest resolution of the single-link DVI standard) @ 60 Hz</p> <p>Data rate: 6.75 Gbps (2.25 Gbps per color) or above Pixel clock: 165 MHz or above</p> <p>Standards DVI 1.0, HDMI 1.3, VGA Switching speed: 200 ns. HDTV Compatible & HDCP Compliant. Video Inputs-10 HDMI & 5 computer graphics video on 15-pin HD (VGA) connectors. Scaled Outputs-2 HDMI, 22 Output Resolutions-Up to WUXGA/1080p, Auto Input Scanning and Switching, Color Sampling-Supports 4:4:4 (RGB and YUV) as well as 4:4:2 (YUV) color sampling, Audio Outputs-1 S/PDIF on an RCA connector, 1 balanced stereo audio on a terminal block, embedded</p>	1								

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	audio on the HDMI outputs (Make: Kramer / Extron / Crestron)			
4	SITC of Motorized Screen <ul style="list-style-type: none"> • Size: 6 ft X 4ft , Width 6ft & Height 4ft, diagonal 84" , • High Contrast Matt White, • Low Noise Motor • Video Spectra 1.5, • Remote control with range up to 40mtrs. (Make-Draper / De-lite)	1		
5	SITC of LCD Projector Resolution: WXGA Lumens: 4000 Connectivity: HDMI 19-pin x 1 (compatible with HDCP, Deep Color), audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) COMPUTER 1 IN - D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR) COMPUTER 2 IN / MONITOR OUT - D-sub HD 15-pin (female) x 1 (RGB), D-sub HD 15-pin (female) x 1 (RGB), (input/output selectable using on-screen menu) VIDEO IN Pin jack x 1 (Composite VIDEO) S-VIDEO IN Mini DIN 4-pin x 1 (S-VIDEO) AUDIO IN 1 M3 x 1 (L-R x 1) AUDIO IN 2 (MIC IN) M3 x 1 (L-R x 1) for audio input or for microphone connection (variable) AUDIO IN 3 Pin jack x 2 (L, R x 1) AUDIO OUT M3 x 1 (L-R x 1) for output (variable) LAN RJ-45 x 1 (for network connection, 10BASE-T/100BASE-TX, compliant with PLink™) SERIAL IN D-sub 9-pin (female) x 1 for external control (RS-232C compliant) (Make: Panasonic / Casio / NEC / SONY / EPSON)	1		
6	SITC of Ceiling Mount Kit for Projector Standard Duty Ceiling Mount Bracket (Up to 5 Kg Projector) (Make: Customized)	1		
7	SITC of LED TV with Wall mount bracket <ul style="list-style-type: none"> • 164cm or 65" Diagonal with 4k resolution (3840x2160). • View angle H/V 178/178°, • Aspect ratio 16:9, • Picture In Picture should be available • Audio Output (PMPO) (Watts) - Minimum 20W • Connectivity : HDMI Input • USB Port - 2 (Side) • Composite Input - 2 (Rear) • Digital Audio Out - 1 (Rear) • Controlling switch to switch ON / OFF the TV should be provided at chairman's seat. (Make: LG /Panasonic/ Samsung / Sony)	1		

I. Audio System

Sl. No	Description	Qty	Rate / Unit (Taxes Extra)	Total Amount (Taxes Extra)
1	SITC of Boundary Layer Microphone with on/off for local conference <ul style="list-style-type: none"> • Should be placed at 2'-3' intervals • Frequency Response: 50 to 17000 Hz 	21		

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	<ul style="list-style-type: none"> Output Impedance: up to 180Ω Programmable on/off switch and LED on/off indicator. Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 117.0 Db Dynamic Range at 94.0 dB Power Requirements 11 to 52 Vdc phantom Surface-mount microphone. Open circuit sensitivity at 1 kHz, Cardioid Cartridge: -27.5dBV/pa (42.2mV) Electret Condenser type Programmable on/off switch and LED on/off indicator. Three operating modes: touch-on/touch-off, press to talk, and press to mute (Make: SHURE/AKG/Beyerdynamic/Audiotechnica)			
2	SITC of Chairman (19 inch.) Gooseneck Microphone and stand with on/off Base <ul style="list-style-type: none"> Frequency Response : 50 to 17000 Hz Output Impedance : up to 180Ω Signal to noise ratio at 94 dB SPL Cardioid Open circuit sensitivity at 1 kHz, ref. 1V/Pascal-35.0 dB (17.8 mV) Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 124.2dB Maximum Equivalent output noise : 28.0 dB Dynamic Range at 1 kΩ Load 96.2 dB Power Requirements 11 to 52 Vdc phantom, 2.0 mA Make: HURE/AKG/Beyerdynamic/Audiotechnica	2		
3	SITC of Digital Signal Processor for 23 microphones: <ul style="list-style-type: none"> Multi Channel Microphone input Two Aux-level input LED indication Front-panel headphones output with level control Frequency Response 50 Hz to 20000Hz (±1 dB) Equalization inbuilt Phantom Power up to 48 Vdc Bi-color LED indication of channel activation and clipping Control System Compatible Linking capability up to 400 microphone Mountable in a single 19" rack space via integral rack-mount Peak-responding output limiter with selectable thresholds and LED indicator Logic Operation should be available (Make: BSS / Shure / Biamp)	1 to 3 depending upon the no. of channels available in the DSP		
4	SITC of Ceiling speaker System <ul style="list-style-type: none"> Freq. Range (-10 dB)1: 80 Hz - 20 kHz Power Capacity2: 80 Watts Continuous Program Power 40 Watts Continuous Pink Noise Nominal Sensitivity3: 86 dB SPL @ 1 m (3.3 ft) Nominal Coverage Angle4: 130° conical coverage Directivity Factor (Q): 2.4 averaged 500 Hz to 4 kHz Directivity Index (DI): 3.8 averaged 500 Hz to 4 kHz Rated Maximum SPL: 102 dB @ 1 m (3.3 ft) Nominal Impedance (24C): 16 ohms (Min Z 16.1 ? @ 320 Hz) Transformer Taps (24CT): 070V: 30W, 15W, 7.5W & 3.7W taps 100V: 30W, 15W, & 7.5W taps Transducers:	6		

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	<ul style="list-style-type: none"> Low-Frequency: 100 mm (4.0 in) Polypropylene-coated, 1" coil on aluminum former High-Frequency: 19 mm (0.75 in) Titanium coated polyester (Make: JBL / Bose / Extron)			
5	SITC of Amplifier <ul style="list-style-type: none"> Amplifier: 75 watts x 8 channel amplifier@ 8 ohm , Sensitivity-1.4 V, Signal to Noise Ratio-110 dB, THD (full rated power, 20 Hz - 20 kHz)-< 0.05%, Frequency Response (at 1W, 4/8 ohms)-+/- 0.5 dB, Voltage Gain-25 dB Speaker output 8Ω ,70V/100V Built-in band-pass filter (80Hz to 16kHz) Mountable Desktop & 19" rack. Make- QSC / BOSE / Extron	1		
6	SITC of AV Recorder: <ul style="list-style-type: none"> Should Capture HD footage, Pause & resume recording facility should be available Recording through USB & HDD, Storage: 2TB HDD (Internal/External) Input: HDMI, Component video & audio L/R, 3.5 Audio, Microphone, Output: HDMI, Headphone, 3,5mm audio, 19" Rack mountable, Data Transfer through USB to Computer, Power on auto play, (Make- DENON / AVERMEDIA / PANASONIC)	1		
7	SITC of Speaker cable <ul style="list-style-type: none"> 2 core of high quality with minimum data loss, 1.13mm, AWG-16,foil-shielded, twisted-pair, Capacitance: 8.5 pF (per foot at a frequency of 10 kHz) Conductor Stranded bare copper, Insulation PVC. Make: AMX / Kramer / Extron	100 Mtrs.		
8	SITC of Microphone Cable <ul style="list-style-type: none"> High quality with minimum data loss, 0.4mm, AWG-20, ruggedness, flexibility, flex life and interference immunity. Low impedance, Operating Temperature Range:-30°C To +60°C, Overall Nominal Diameter:5mm Make: AMX / Kramer / Extron	275 Mtrs		
9	SITC of Equipment Rack <ul style="list-style-type: none"> With lockable rear and front glass door, power strip, castor wheel for easy movement. Large cable entry in bottom Grounding and bonding stud installed in base. Finish in a durable textured powder coat for all the above audio main systems. (Make- EXTRON / Valrack / President)	1		
10	<ul style="list-style-type: none"> Bulk Connectors for complete systems (Audio, Video projection etc.), HDMI Cable 15 Mtr, HDMI Cable 3 Mtrs, VGA patch cord Length: as per site requirements (Make: Kramer/Extron/AMX/Falcon)	1 Lot		

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III. Annual Maintenance Charges

S. No.	Item Description	Annual Maintenance Charges for 2 nd , 3 rd , 4 th and 5 th years in Rupees # (Taxes Extra)			
		2 nd year	3 rd year	4 th year	5 th year
	Entire Video Conference System as detailed in the technical bid				
	Total AMC for 4 years				

SUMMARY

S. No.	Description	Amount in Rupees
1	Total Cost of Video Equipments with 1 year warranty (As per Total of item I)	
2	Total Cost of Audio Equipments with 1 year warranty (As per Total of item II)	
3	Total AMC Charges (As per Total of item II)	
	Grand Total (Total of S.No.1, 2 & 3)	

Note: 1. Price to include all duties, levies, freight, insurance, warranty, AMC etc and buyback cost of old equipments but exclusive of VAT/CST, octroi/entry tax. Octroi or entry tax, if applicable, shall be reimbursed at actuals, against proof of payment in original.

1. Bidder should ensure to have visited the site and understood the scope of work before quoting rates. No claims will be entertained by Bank beyond the quoted amount for any additional work necessitated for commissioning of the system.

2. In case of discrepancy between unit price and total price, the unit price shall prevail.

3.

We submit that we will abide by the details given above and the conditions given in your above Bid document.

Place:

Date:

Signature of Authorised Person

Name

Business address