

# Annexure-A

<b>Request of proposal for Procurement of Installation for up-gradation of Audio-Visual arrangement in NAMS Conference Hall</b>			
S. No.	Item	Compliance (Yes/No)	Deviation (Attach OEM Datasheet)
<b>A. SITC of Upgradation of Audio-Visual Arrangement for Conference Hall</b>			
1.	<b>Supply Installation Testing and Commissioning of 4,500 Lumens Laser Projector (Qty - 1) (Indicate Make/Model _____):</b> Display technology: DLP, Resolution :1080p Full HD (1920x1080), Brightness :4,500 lumens, Contrast ratio :3,00,000:1, Native aspect ratio :16:9, Aspect ratio - compatible :4:3, 16:9, Keystone correction - horizontal : +/-30°, Keystone correction - vertical : +/-30° Has vertical auto keystone correction: Yes, Displayable colours (millions) :1073.4 Horizontal scan rate :15 ~ 140Khz, Vertical scan rate :24 ~ 120Hz, Uniformity :80% Screen size :0.76m ~ 7.62m (30" ~ 300") diagonal, Light source type :Laser LASER life:30,000 hours, throw ratio :1.12:1 ~ 1.47:1, Projection distance :1m - 8m Zoom :1.3, Zoom type: Manual, Focal length: 16.90 ~ 21.61, Native offset :116% Connections: Inputs 2 x HDMI 2.0, 1 x RJ45; Outputs 1 x Audio 3.5mm, 1 x USB-A power 1.5A; Control 1 x RS232		
2.	<b>Supply Installation Testing and Commissioning of 8.69 ft. x 5.44 ft. Projection Screen (Qty - 1) (Indicate Make/Model _____):</b> 123" Diagonally (16:10)		
3.	<b>Supply Installation Testing and Commissioning of Dual Channel Wireless Handheld Microphone with Stand (Qty - 4) (Indicate Make/Model _____):</b> Up to 12 compatible systems per frequency band (region dependent), Microprocessor-controlled internal antenna diversity, One-touch Quick Scan frequency selection quickly locates the best frequency, 1/4" and XLR audio outputs, two color audio status indicator LED, Operating Range: 300 ft (91 m) line of sight (actual range depends on RF signal absorption, reflection and interference), Audio Frequency Response: 50–15,000 Hz (dependent on microphone type), Transmitter RF Output Power: 10 mW, typical (varies by region), Audio Output Connector: XLR and 1/4" (6.35 mm) unbalanced, Maximum Output Level: -27 dBV (XLR, mic level), -13 dBV (1/4"), Dynamic Range: 100 dB A-weighted, System Distortion: 0.5% THD typical (ref. +/- 33 kHz deviation, 1 kHz tone)		
4.	<b>Supply Installation Testing and Commissioning of 12x Zoom Full HD PTZ Camera (Qty - 1) (Indicate Make/Model _____):</b> Video system: Common resolutions & frame rates from 720p/25 to 1080p/60, Pan tilt angle: Pan: ±170°, Tilt: -30° to +90° or better, Sensor:1/2.7 Inch, CMOS, effective pixel: 2.07M, Lens :12X, F3.5MM – 42.3MM, F1.8 – F2.8 or better, Shutter:1/30S – 1/10000S, Number of Presets: 250 or better, Angle of view: Horizontal 72.5° – 6.9° Vertical 44.8° – 3.9°, Rotation range: Horizontal: ±170°, Vertical: -30° – +90°, Speed range: Pan: 1.7° – 100°/S, Tilt: 1.7° – 69.9°/S, HD output :1 X HDMI: Version 1.3, Network interface:1 X RJ45: 10M/100M Adaptive Ethernet Port, Audio inputs :1-CH 3.5MM Audio Interface Line IN USB :1 X USB3.0: Type B female JACK 1 X USB2.0, Communication :1 X RS-232 IN: 8-PIN Min Din, Max Distance: 30M		

5.	<b>Supply Installation Testing and Commissioning of 200W 8-inch Two Way Wall Speaker (Qty - 2) (Indicate Make/Model _____):</b> Frequency Range: 80- 27.7k Hz (-6 dB, free field response), 60- 29.5k Hz (-10 dB, free field response), Maximum Output: 119dB SPL continuous rms output (calculated), 125dB SPL peak output (calculated), Impedance: 8 ohms nominal, 5.5 minimum at 17.6k Hz, 64.2 maximum at 2.56k Hz, Power Rating: 400 watts rms (IEC 268-5, 8 hours, 50-20k Hz, 6dB crest factor), Recommended Amp Power: 800 watts rms, Sensitivity: 93dB, 1 watt, 1-meter, free field (4 pi), Nominal Coverage: 90° horizontal x 60° vertical with waveguide as installed at factory, Directivity Index and Q-, Frequency: 500 Hz-6.2(DI), 4.2 (Q), Frequency: 1k Hz- 9.5(DI), 8.9 (Q), Frequency: 2k Hz- 11.0(DI), 12.6 (Q) ,Frequency: 4k Hz- 9.5(DI), 8.9 (Q), Frequency: 8k Hz- 8.5(DI), 7.1 (Q), Frequency: 16k Hz- 8.0(DI), 6.3 (Q), Transformer-Taps (switch selectable) (70V): 25, 50, 100, and 200W, Taps (switch selectable) (100V): 50, 100, and 200W, 8-ohm bypass (70V/100V): Yes, Transducers- Low Frequency Driver: two 8-inch (203mm) neodymium magnet low-frequency drivers, High Frequency Driver: 1-inch throat compression high-frequency driver		
6.	<b>Supply Installation Testing and Commissioning of Audio Digital Signal Processor with Control Processor (Qty - 1) (Indicate Make/Model _____):</b> Type - Open Architecture DSP, Mic/Line Inputs - 4, Line Outputs - 4, Dante Channels - 8x8, Total Network Channels - 64x64, AEC Processors - 8, Network Protocols - Dante, AES67 GPIO Ports - 8x8, USB Ports - Type A/B/C, USB for Soft VC - Type B and C, USB Audio Channels - 8x8 Audio Players - 16, Audio Recorders - 4, LAN - Dual ports, RS232 - 2 Nos, Phantom Power - +48 VDC A/D-D/A converters - 24-bit, Sample Rate - 48 kHz, Software based Control - Yes, Mounting Accessories - Included		
7.	<b>Supply Installation Testing and Commissioning of Pc (Qty - 1) (Indicate Make/Model _____):</b> i5/16GB/512GB SSD/Win 10 with 18.5" Display Monitor		
8.	<b>Supply Installation Testing and Commissioning of Control Software (Qty - 1)</b>		
9.	<b>Supply Installation Testing and Commissioning of 15U Equipment Rack (Qty - 1)</b>		
10.	Supply Installation Testing and Commissioning of other supporting equipment configuration with existing equipment/network		
11.	Supply Installation Testing and Commissioning of Cable, Connectors & Accessories		
<b>Total Amount (Rs.)</b>			

## **Certifications to be supplied for following systems/sub-systems:**

1. With Ser. A- 1) – 4,000 Lumens Ultra Short Throw Projector/4,500 Lumens Laser Projector:
  - a. OEM Authorization
  - b. Data Sheet
2. With Ser. A- 3) – Dual Channel Wireless Handheld Microphone:
  - a. OEM Authorization
  - b. Data Sheet
3. With Ser. A-4) – 12x Zoom Full HD PTZ Camera:
  - a. OEM Authorization
  - b. Data Sheet
4. With Ser. A-5) – 200W 8-inch Two Way Wall Speaker:
  - a. OEM Authorization
  - b. Data Sheet
5. With Ser. A-6) – Audio Digital Signal Processor with Control Processor:
  - a. OEM Authorization
  - b. EMC and RoHS Certification
  - c. Data Sheet
6. With Ser. B- 1) – Dual Channel Wireless Handheld Microphone:
  - a. OEM Authorization
  - b. Data Sheet
7. With Ser. B-2) – 12x Zoom Full HD PTZ Camera:
  - a. OEM Authorization
  - b. Data Sheet
8. With Ser. B- 3) – Dual HDMI to USB-C UVC Video Capture:
  - a. OEM Authorization
  - b. Technical Drawing
  - c. Data Sheet
9. With Ser. B-4) – HDMI Tx/RX for PTZ Camera:
  - a. OEM Authorization
  - b. Technical Drawing
  - c. Data Sheet