



**NATIONAL INSTITUTE OF MENTAL HEALTH AND NEUROSCIENCES
(INSTITUTE OF NATIONAL IMPORTANCE) BANGALORE-560 029
ENGINEERING DEPARTMENT Phone (080) 26995215**

Ref.No.NIMH/ENG/EE/ 637/2021- 22

Dt: 07/07/2021

QUOTATION NOTIFICATION

Sealed Quotations are invited from the reputed agencies/Contractor for the Unit rates for preparation of estimate purpose only for the following items in NIMHANS Campus addressed to the Executive Engineer, National Institute of Mental Health and Neurosciences, Post Box.No.2900, Hosur Road, Bangalore-29, so as to reach the quotation to undersigned by 03.00 p.m on or before 14/07/2021 Quotations will be opened on the same day at 03.30 p.m. Please furnish your quotation in a sealed cover and rate to be quoted in figures and words. (Excluding GST).

SLNo	Description of the works	Unit	Quantity
1	Supply installing, testing and commissioning of Bosch Incorporates all functions of the CCS-Dx CCS Delegate Units (With the exception of the Possible-To-Speak functionality/LED) Priority button for chairman microphone Temporary or permanent muting of delegate microphones optional chime tone facility for proceeding chairman announcements modern, unobtrusive styling to match the CCS-DxCCS Delegate units etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
2	Supply installing, testing and commissioning of Bosch Table top model delegate unit with talk switch lavalier (neckie) good neck microphone with red LED press to talk switch on the unit and socket for interconnection of in and out sockets for linking next unit head phone socket for interconnection of in and out sockets for linking next unit head head phones to the delegates etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
3	Supply installing, testing and commissioning of Bosch Digital Acoustic Feedback suppression discussion control without operator controls contribution devices built-in monitor loudspeaker. 1 year warranty and maintenance included. Model:Bosch-CCS-CU etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
4	Supply installing, testing and commissioning of sound craft mixer frame sizes 6+2, 8+2 and 12+22 configurable auxiliary buses XLR-type and ¼" metal jack connector sockets RCA phono stereo playback inputs and record outputs 3 -band EQ with a swept mid-on mono inputs 2-band EQ on stereo inputs TRS insert sockets and inserts on all mono inputs and mix output Ten-segment LED output metering Intuitive and comprehensive solo system headphone output easily rack mountable etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00

5	Supply installing, testing and commissioning of Bosch EV HA-A is robust handled UHF wireless system, suitable for any application where the convenience of a handled transmitter wireless handled microphones etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
6	Supply installing, testing and commissioning of AKG wireless had woven microphone. AKG is your best choice for any application calling for a solution that is more flexible than a simple plug and play system yet easy to set up and operate. Half 19" all metal case diversity receiver, automatic frequency setup function for quick and easy operations operation. 8 hours battery life and battery status information in hours. Compatible with antenna splitters, power supplies, and high quality directional and Omni-directional antennas. Programmable warning functions using a two-color display backlighting to indicate critical operation conditions (low battery, audio peak, RF low) etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
7	Supply installing, testing and commissioning of Bosch booster amplifies, 480 W power amplifies in a 3U high 19" housing. EN 54-16 certified and EN 60849 compliant. Dual inputs with priority switching. 100 V input for slave operation on 100 V speaker line. 70V/100 V and 8 ohm outputs etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
8	Supply, installing ,testing and commission of Microphone unit to control of junction box for conference unit etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
9	Supply installing, testing and commissioning of 2 crore 0.5 SQ MMX2 core shielded cable have Flexible Bare copper conductor, PVC insulated, cross laid up, overall aluminum Mylar Tape shielded along with ATC Drain wire FRLS outer sheath shielded cable etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
10	Supply installing, testing and commissioning of 8 core shield cable 1Sq mmX8 core shielded flexible FRLS cable. Flexible Bare copper conductor, PVC insulated, cross laid up, overall aluminum Mylar Tape shielded along with ATC drain wire FRLS outer sheath shielded cable etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
11	Supply installing, testing and commissioning of 25mm PVC coping & casing etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
12	Supply installing, testing and commissioning of DI box for Audio laptop connectivity etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
13	Supply installing, testing and commissioning Face plate for laptop connectivity etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00

14	Supplying installing ,testing and commissioning including all necessary RF remote, ceiling mount kit, HDMI cable, VGA cables, Audio, devender, 3x2.5 copp cable, laying in PVC conduit of Maxell MC-EX4051 4200ANSI / 3LCDXG A1024X7 68 ACCENTUALISER and HDCR Images Optimiser Perfect it Moderation control 16 watt speaker, 20000:1 contract, HDMI X2,VGAX2,UP TO 12,500 HRS IAMP, dICOM SIMULATION mODE, usb & lan display, Optional wifi AMX Device Discovery and Crestron C onnectged, W355mm xH106 mmx D267mm, Make:Hitachi / Masell / Equivalent etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Set	1.00
15	AIR CONDITIONING: Supply, Installation, Testing and Commissioning of air conditioning, double skin air handling units floor mount of GSS Pre coated sheet metal, cabinet type, modular construction. Unit frame work shall have internally coved aluminium extrusion finish, with thermal break profile. The panels shall be of double skinned construction with both skins being of GI Sheet. They shall incorporate 42 mm thick injected HFC-Filler PUF insulation material of 50 Kg/M3 density, sandwiched between the external and internal sheets. The Foam spread shall be equal across the panel to avoid any air pocket. The unit panel's skin thickness should be not less than 0.8 mm for outer skin and 0.8 mm for inner skin. The outer skin shall be paint finish. All panels shall be sealed (anti fungicide sealant material) against the framework. The Panel shall be mounted flush with the frame members to create smooth surface inside and outside. AHU shall be complete with Inlet section with low leakage aluminium dampers. Filter section for G4 type washable filters. Rh% 60. DX cooling coil section comprising 6/8 row deep copper coil with aluminium fins and Copper header with anti corrosive paint & matching flanges, Mist eliminator, Bypass Damper (as per design requirement), SS 304 Insulated drain tray with drain trap, Cable entry gland (1No for DOL and 2Nos for Star Delta). The Fan Section to be provided with light fixtures and Limit switch which shall be internally wired (running in conduit and neatly dressed) terminating in a switch on the AHU casing. (Electrical Contractor shall terminate the power supply to this point), Fire proof double canvas connections (Fungal Resistant and Lint free) to be used to connect the fan to the AHU Casing. Empty Section with Low leakage Aluminium volume control outlet damper for Supply. Complete Units shall be mounted on a common base frame & with suitably rated neoprene pads (provided along with the unit). All dampers shall be with lock & graduation arrangement. The details to be read as Blower Air volume, TR Cooling Capacity, required Static Pressure etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc., - AHU 4400 CFM 11 TR 80 mmwg	Set	1.00
16	AIR COOLED DX CONDENSING UNIT FOR THE ABOVE AHUs Air cooled DX type condensing unit for AHU comprising scroll / rotary type compressor with suitable Thermostat Control air cooled condenser coil with condenser fan, safety controls like HP /LP cutout switch, Relief Valve, over load protection for compressor and condenser fan motor, Catchall strainer, electronic / Thermostatic expansion valve, internal and external refrigerant pipes, isolation valves, sight glass, first charge of compressor oil, R-22 / R-410A / R-407 C refrigerant. Compressor, air cooled condenser coil, condenser fan and motor to be housed in an all-weather resistant cabinet / casing. Copper refrigerant pipes both internal and external to be sized suitably and shall be considered as an integral part of the unit. Actual capacity of the air cooled condensing unit shall be 11 TR @ 36° C ambient temperature etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Set	1.00
17	Copper refrigerant piping between outdoor and indoor units for the above mentioned DX units etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc., - 11/8" Pipe.	RMtr	1.00

18	Copper refrigerant piping between outdoor and indoor units for the above mentioned DX units etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc., - 5/8" Pipe.	RMtr	1.00
19	Expansion Valve, filter Drier, side view Glass, Liquid line Valve, with flange fittings for all DX unit's etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Set	1.00
20	Fabrication of outdoor stand using 40mm x 40 x 6mm MS angle with one coat of red oxide and with one coat of black enamel paint with 8mm anchor fasteners for mounting Ductable condensing unit etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
21	Supply and installation of Duct Acoustic Insulation applied inside of duct work with 10 mm thick open cell elastomeric insulation of 60 +/- 10 kg/m ³ density and with K value of 0.037 W/mK at 20 deg C. Insulation shall be with Class 1 fire classification etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Sqm	1.00
22	Supply & installation of Fresh / Exhaust Air Louvres with insect weld mesh made of MS powder coated strips / Louvres with proper stiffeners. Complete with G2 filter with filter frame. The entire set shall be fixed on to a removable frame. Bottom of Louvre casing to have slope with drain point. etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
23	Supply & installation of Fire Dampers with Fusible Links rated for 72°C. (Damper should have a micro switch to be interlocked to the AHU Motor) etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
24	Supply, Installation, Testing and Commissioning of Low Leakage GI Duct Volume Control Dampers (for duct system & Return air raiser) with coloured graduation & locking arrangement etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
25	Supply and fixing of collar damper 600 x 150 x 75 mm etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
26	Electrical works for HVAC contractor shall include Cabling between Indoor and Outdoor units, Cabling from Electrical Panel to the equipment Motor, Push button stations, MCCB/MCB near units, copper earthing for equipment, Interlocking for working outdoor units, supply and fixing Cable Tray. any other Electrical works related to HVAC shall be included in the quote etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
27	Electric control panel board included, VFD, COS, DIGITAL Ammeter, volts meter, indicators, suitable starters, Rh% 6Kw Controller, outgoing MCCB/MCB, Incommitt mccb, all these items housing in OUT DOOR 16 SWG fabricated panel boards supported by suitable size angle irons etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc., -(11.0TR 4No's, 8.5 TR 1No's, VFD Controls)	Each	1.00
28	Civil works such as opening and closing of walls to take the pipes and ducts, fresh Air, and indoor base platform etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	LS	1.00

29	Supply and fixing condensate drain lines for condensate water from air conditioners using pvc pipe of 25 mm dia with necessary fixtures etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Mtr.	1.00
30	Power Conditioner etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
31	Supply and fixing of Subwoofer with Drivers 1x 18" LF; Frequency range 38 - 200 Hz, Power capacity-programm / peak: 2400 / 4800 W; Imopedance - 8Ohm, Sensitivity 1 W / 1 m - 96dB Passive ;SPLmax / 1 m / peak 132dB, Make : TWAudio etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
32	Supply and fixing of Loudspeakers with Drivers 1 x 12" LF / 1 x 1.4" HF ; Frequency range 60 - 19000 Hz; Power capacity programm/peak: 700 / 1400 W ; Impedance - 8 Ohm; Coverage range (h x v) 75° x 50° HF-horn, rotatable;Sensitivity 1 W / 1 m- 101 dB; SPLmax / 1 m / peak 132 dB, Make : etc. , complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
33	Supply and fixing of Speakon, TRS, 3.5mm, XLR Connectors etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	LS	1.00
34	Supply and fixing of Four Channel amplifier with inbuilt DSP, 800W @2ohm , 600W @4 ohm; 600W @8ohm and 1600W @40ohm and 1200W@8ohm, in bridge mode; Maximum output voltage 100Vpeak and 45Apeak current; Frequency Response 20Hz-20KHz;S/N Ratio- 108dB; Crosstalk >70dB@1Khz;THD+N < 0.1%; Slew Rate- 50V/microSec; Damping Factor >500@ 20-100Hz; A/D and D/A Converters of 24bit/48KHz; DSP Inbuilt Preset Memory; Crossover Filters - linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR);Input Equalizers - Raised- cosine, custom FiR, parametric iIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass; Output Equalizer ; Limiters - P TruePower™, RMS voltage, RMS current, Peak limiter; Audio signal input 1 x 12 pin Phoenix MC 1.5/12-ST- 3.8 1 - Signal input – MAIN; Loudspeakers 1 x 8 pin Phoenix DFK-PC 4/8-G-7.62 - Signal output; Network/data 1 x USB plug - USB connection, Make : Powersoft etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
35	Supply and fixing of 12 inch Powered Stage Monitor with 12" LF Driver & 1.5" HF Titanium compression Driver, 1000W Power with Peak SPL of 126 dB. Make : EV-Electro Voice etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
36	Supply and fixing of 4 inch LF Driver & 1 inch balanced dome tweeter with 25W Power & 90 dB SPL Loudness, Make : Yamaha etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Pair	1.00
37	Supply and fixing of 2-way bi-amp powered studio monitor, 8" cone LF Driver & 1" Dome HF Driver, Output Power 120W with Level & EQ Controls, Make : Yamaha etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges and GST etc.,	Pair	1.00
38	Supply and fixing of Digital Mixer with iPad Controls with 32 Line or Mic Inputs, 32+1 Faders, 10 Aux Outputs (4 Mono and 3 stereo), 4 stereo groups and 2 stereo matrix mix, 16 Channels of AMM, 3 Stereo Inputs, 4 Nos FX, Make : Allen Heath etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00

39	Supply and fixing of 8 Inputs & 4 Output Digital Stage Box, Make : Allen Heath etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
40	Supply and fixing of Floor Mount Stage Box with 4 Inputs & 2 Outputs, Make : SRC etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
41	Supply and fixing of 18" Cardioid Pattern desktop gooseneck condenser microphone with LED Indicator & Mic Mute, ON/OFF Controls, Make : Shure etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
42	Supply and fixing of Wireless Handheld UHF Mic with Transmitter & Receiver, Polar Pattern :- Omnidirectional, Carrier frequency range 500Mhz to 865Mhz , Frequency response 20Hz to 20Khz , Mute Button on Transmitter, Make : Beyerdynamic etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
43	Supply and fixing of Headworne Wireless UHF Mic with Transmitter & Receiver, Polar Pattern :- Omnidirectional, Carrier frequency range 500Mhz to 865Mhz , Frequency response 20Hz to 20Khz , Mute Button on Transmitter, Make : Beyerdynamic etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
44	Supply and fixing of Wired Vocal Microphone, Make : Beyerdynamic etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
45	Supply and fixing of Brackets for Mounting FOH Speaker with Pitch & Yaw. Make : Custom etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
46	Supply and fixing of Brackets for Mounting Front Fills Speaker with Pitch & Yaw, Make : Custom etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
47	Supply and fixing of Brackets for Mounting Delay Speaker with Pitch & Yaw, Make : Custom etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
48	Supply and fixing of Subwoofer Trolley with lockable wheels to mount Subwoofers, Make : Custom etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
49	Supply and fixing of 31 band GEQ, Make : Behringer etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
50	Supply and fixing of Volume controller for Green Room Speakers, Make : Atlas etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
51	Supply and fixing of 4 Port Switch with Accesspoint, Make : D-Link etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
52	Supply and fixing of 16 U rack with Rack Plates, Rack Fans for cooling, Power Distribution Box, Glass door, Make ; Custom etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00

53	Supply and fixing of 8 U rack with Rack Plates, Rack Fans for cooling, Power Distribution Box, Glass door, Make ; Custom etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Each	1.00
54	Supply and laying of 2.5 Sqmm Speaker Cable in PVC conduit pipe. Make : SBEE/Sunrich/Belden etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Mtr	1.00
55	Supply and laying of of 3 Core Audio Signal Cables in PVC conduit pipe Make : SBEE/Sunrich/Belden etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Mtr	1.00
56	Supply of Cat 6 Cable, Make : SBEE / Sunrich / Belden etc., complete as per direction of the Engineer in-charge of work including cost of all materials, labour charges, loading, unloading, lead lift, transportation charges etc.,	Mtr	1.00

Terms and Conditions:

1. Prosperous quotationers are requested to visit the NIMHANS website regularly till this Quotation process is complete, for any amendment/clarification notified if any. It will not be published in any other form.
2. All the items rates quoted in the tender include all lead, lifts, loading, unloading, transportation, labour, hire charges of machinery, cost and conveyance of all materials and all such incidental charges for successful completion of the works as per the detailed technical specification and direction of Engineer-in charge of the work.
3. If the dates mentioned happens to be institute holiday the next working day should be considered.
4. **The rate to be quoted Excluding GST.**
5. **This quotation is called exclusively for the purpose of considering the competitive rates for the preparation of estimate.**
6. **For any clarification please contact Sri. Chalubaraju. J.E (Electrical) Mobile No: 9480829708.**
7. Conditional quotation will not be accepted.
8. **The Director, reserves the right for accepting or rejecting any or all quotations for this work without assigning any reasons at any stage.**

Sd/-
Executive Engineer
NIMHANS, Bangalore