



GUJARAT MINERAL DEVELOPMENT CORPORATION LTD

(A Govt. of Gujarat Enterprise)
CIN: L14100GJ1963SGC001206
GST: 24AAACG7987P1ZT

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T.No-11/COB/SITC-ELV SYSTEM WORK/2022

**Work of
Supply, Installation, Testing & Commissioning of ELV System work
at 8th Floor , Corporate office building of GMDC, Vastrapur,
Ahmedabad, Gujarat**

TECHNICAL BID-II

TECHNICAL SPECIFICATION

GUJARAT MINERAL DEVELOPMENT CORPORATION LTD (GMDC)

**Khanij Bhavan,
Near University Ground, 132 feet Ring Road,
Vastrapur, Ahmedabad-380 052
Phone : (079) 27913200, 27913501
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Email: civil@gmdcltd.com
Website: www.gmdcltd.com**

TECHNICAL SPECIFICATION

Item No 1 : Supply, Installation Testing & Commissioning of ARM Cortex-A73*2 + Cortex-A53*2 1.5GHz, 3GB DDR4 or better, storage-32GB or better, TFT LCD Module with DLED Backlight, 1895.04 (H) x 1065.96 (V) (85.6"diagonal), 16:09:00, UHD 3840x2160 (Pixels), 1.07B colors (10bit), 20 points touch, 10 points writing, 1.07B colors (10bit), 350 nits or better, OPS:-01, 5000:1 (DCR)8ms, H = 178, V = 178 typ, 30,000 Hours (Min), Hardness: 9H, Anti-glare coating, USB2.0: Front x2, Rear x1 (SmartPort™ for all), Slim - Landscape, IR Recognition, 32767 x 32767, HDMI:-2.0-2, RGB / VGA:-01, Audio:-01 (PC audio in), RS232:-01, OUTPUT Audio:x1 (Earphone out), SPDIF:1 (optical), RJ45:-01, USB3.0: Front x1, Rear x3 (SmartPort™ for Rear x3), x2, for touch, spk-10W x 2 + 15W x 1 subwoofers, TOP CAMERA PLATE - yes, HDMI (3840 x 2160), Android 8, All-in-one USB port: - Front "SmartPort™ USB" to all channels., required for window /android /mac, 10M/100M/ for Android, 10M/100M/1000M for slot-in PC, Wall Mount (VESA®) : - yes, 0°C to 40°C, 10% ~ 90% RH non-condensing, cTUVus, FCC, ES8, EPEAT, EMC/CE, CB, RoHS & DOC, REACH, WEEE, ErP, EAC, UKrSEPRO, RCM, BSMI, 1. Power cable (3 meters). VSAx1, VSEx2, VSIx4 2. Remote control 3. USB cable (3 meters) 4. Touching pen x 2 5. Quick Start Guide 6. RS232 adapter 7. Clamp x 5 8. Plate 9. Screw x 8 10. HDMI cable 3M - APPROVED MAKE :- Foxcon, Christie Benq, Viewsonic, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No 2 : Supply, Installation Testing & Commissioning of 15.6" Touch display, Easily extend your content from laptops and mobile devices, Built-in 6H hardness screen, it's resistant to surface damage, even if accidentally scratched by your keys, Avoid damage during carry, the detachable magnetic cover is easy to put on. Used as a mat, its anti-slip surface prevents the monitor from sliding away, Up to 60 Degree Tilt, Temperature: 32°F to 104°F (0°C to 40°C) Humidity (non-condensing): 20% to 90% . APPROVED MAKE :- Sony, Samsung, Viewsonic, Lg (BOARD ROOM - 8th floor)

1. Material:

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2. Workmanship:

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- Work complete including all types of tools, tackles, labour etc complete at any level and height.
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Item no : 3 Supply, Installation Testing & Commissioning of 4K @ 30fps and Full HD @ 60fps PTZ camera, minimum 30X Optical Zoom, min 200 Presets, Ethernet Out, HDMI Out, 3G-SDI Out, Audio In, IP/RS232/422 Controls, -170° ~ +170° Panning angle, -30° ~ +90° Tilting angle , Should support PoE+. Should be CE, ROHS, BIS and FCC Certified. WITH 3 YEAR WARRENTY. APPROVED MAKE :- Vaddio, sony, Lumens, Poycom (BOARD ROOM - 8th floor)

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2. Workmanship:

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- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

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- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item : 4 Supply, Installation Testing & Commissioning of Wireless and Wired Presentation and Collaboration Device with Airplay, Miracast Technology. 6 user can present simultaneously on single display mode and upto 12 user in dual display mode. 1xHDMI Input for Hardwiring Input , 1xHDMI Output, 1xDisplay Port OUT, 1xMic IN and 1xLine Out Ports, 3xUSB 3.0 and 2xUSB 2.0 Ports , additionally have 128GB SSD for Storage, 8 GB RAM with Windows Platform. Login using conventional Wi-Fi or LAN connections Powerful security features: user authentication, 1024-bit encryption, dynamic room code Supports Windows laptops and MAC, as well as iOS and Android mobile operating systems High quality video streaming, supports 4K@60 (using the VIA app Multimedia feature connect & collaborate Third Party VC Intastall Support, Should have Via versa feature to access professional grade camera wirelessly. APPROVED MAKE:- Kramer, Bi-amp, Extron (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

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- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
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- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 5 Supplying, installation, testing and commissioning of 4K60 HDbaseT Receiver (1X HDBaseT IN,1X HDMI OUT) , Should have built-in IR and RS-232 port for controlling the connected display or an external control port,support cable length minimum 70 Mtr. at 1080P and 40 Mtr. at 4K@60Hz. APPROVED MAKE :- Kramer, Bi-amp, Extron (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 6 Supplying, installation, testing and commissioning of 4X4 matrix switcher that transmits video, audio, Ethernet, RS-232 and IR signals over extended distances. Should have 4 HDMI Inputs ,4 HDbaseT Outputs with 2 HDMI Simultaneous Output ,should have max resolution support of 4K@60Hz,Should Support HDBaseT Range — Up to 130m (430ft) at normal mode (2K), up to 100m at normal mode (4K); up to 180m (590ft) ultra mode (1080p @60Hz @24bpp) when using BC-UNIKAT cables.APPROVED MAKE :- Lightware, Extron, Kramer, Bi-amp (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 7 Supplying, installation, testing and commissioning of Pop-Up Box / Cable cubby Includes a Universal power outlet X 2 Nos, HDMI Port X 1nos, RJ-45 X 2 Nos. APPROVED MAKE :- Brix, Kramer, Extron, AVC (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 8 Supplying, installation, testing and commissioning of 1 Double Power Socket Slot, 6 Insert Slots (Includes 4 Blank & 2 Cable Pass-Through Inserts). APPROVED MAKE :- Brix, Kramer, Extron, AVC (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

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- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 9 Supplying, installation, testing and commissioning of TBUS Dual Power Socket – Universal . APPROVED MAKE :- Brix, Kramer, Extron, AVC (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

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- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 10 Supplying, installation, testing and commissioning of Wall Plate Insert – Dual RJ-45 – Black. APPROVED MAKE :- Brix, Kramer, Extron, AVC (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.

- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 11 Supplying, installation, testing and commissioning of W-HDMI Wall Plate Insert – Black. APPROVED MAKE :- Brix, Kramer, Extron, AVC (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
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Item no : 12 Supplying, installation, testing and commissioning of TBUS AC Power Cord - Right-Angle India 6ft 250V AC. APPROVED MAKE :- Brix, Kramer, Extron, AVC (BOARD ROOM - 8th floor)

1. Material:

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2. Workmanship:

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- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 13 Supply, Installation, Testing and Commissioning of Frequency response 200Hz-12.5kHz, White ('Possible-To-Speak') shall indicate that the microphone will be active immediately after pressing the microphone button. green shall indicate that the participant has pressed the microphone button and the request to speak has been added to the waiting list. green flashing shall indicate that the participant is first in the waiting list, i.e. next in line to speak. Loudspeaker nominal output 72dB SPL, red shall indicate that the microphone is active. Color-coded light-ring indicator in head of microphone: green shall indicate that a request-to-speak has been added to the waiting list; green flashing shall indicate that the participant is first in the waiting list; red shall indicate that the microphone is active. Rotary thumbwheel on side of device for adjusting volume of connected headphones. The chairman has a separate microphone button and priority button enable the user to function as the chairperson at a conference or meeting. The chairperson's microphone shall be activated when the priority button is pressed and held in. All currently active participant microphones shall be muted, allowing the chairperson to take control of the meeting. A chime shall be sounded to announce that the chairperson is about to speak,,

APPROVED MAKE :- Bi-amp, Apart, Sennheiser, Brahler, Bosch (BOARD ROOM - 8th floor)

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Item no ; 14 Supply, Installation, Testing and Commissioning of Headphones load impedance >32ohms <1kohm, The Discussion Device shall enable participants to take part in a discussion by speaking into a microphone and listening to proceedings on a loudspeaker. The device shall have the following features and benefits: Plug-and-play functionality. Compact, attractive, ergonomic design, with LED indicator in the Discussion Device and in head of microphone. Choice of short or long fixed microphone with flexible stem. Loudspeaker integrated into front of device. Built-in headphone socket with output level control. Automatic level reduction when microphone is activated (configurable via web browser application of Control Unit): prevents acoustic feedback from headphone to microphone. Configurable as a participant or chairperson's device: changeable microphone buttons and concealed slide switch at the bottom of the device for configuration purposes. GSM immunity. The device shall have the following user controls and indicators: Microphone button. Loudspeaker nominal output 72dB SPL. APPROVED MAKE :- Bi-amp, Apart, Sennheiser, Brahler, Bosch (BOARD ROOM - 8th floor)

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Item No : 15 Supply, Installation, Testing and Commissioning of Frequency response 200Hz-12.5kHz, The Control Unit shall have the following features and benefits: Plug-and-play functionality for quick and easy connection of Discussion Devices. Intuitive touch-buttons on the front panel for easy configuration and operation purposes. Intuitive LED indicators for clear and immediate feedback on the system settings. Web browser control – it shall be possible to use a web browser application to view and manage system settings. System control for up to 80 Discussion Devices. Hot swap of Discussion Devices, without having to power down the system. Plus/minus buttons and green LED indicators for setting the volume range of all connected Discussion Devices. Microphone-mode selection button and green LED indicators for selecting one of the following microphone operating modes: 'open mode', 'override mode', 'voice activation mode', and 'push to talk (PTT) mode'. Number of Open Microphones (NOM) button and green LED indicators for selecting the number of microphones that can be activated at the same time. It shall be possible to select up to four open microphones at the Control Unit. Built-in digital recorder with internal memory and USB recording. Built-in loudspeaker and headphone socket for listening to recorded discussions before replaying them to the Floor, or listening to recordings. Built-in Digital Acoustic Feedback Suppression (DAFS). USB connector on front of unit for connecting a USB memory stick. Gain reduction due to number of open microphones (NOM) 1/SQRT (NOM) Sample rate 44.1kHz Nominal input (85 db SPL) <0.5% Max. input (110 db SPL) <0.5% Recording/ Playback 64,96,128,256Kbit/sec Recording/ Playback (sample frequency) 44.1kHz, Nominal output 72dB SPL APPROVED MAKE :- Bi-amp, Apart, Sennheiser, Brahler, Bosch (BOARD ROOM - 8th floor)

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2. Workmanship:

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Item No : 16 Supply, Installation, Testing and Commissioning of VHF wireless microphone system, sound clarity, impeccable performance, make their 58 series one of the most popular wireless microphone system currently available. With head mic and inbuilt battery. APPROVED MAKE :- Bi-amp, Sennheiser, Studio Master, Bosch (BOARD ROOM - 8th floor)

1. Material:

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2. Workmanship:

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- Work complete including all types of tools, tackles, labour etc complete at any level and height.
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- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 17 Supply, Installation, Testing and Commissioning of Wall or ceiling Mounted 2 way Passive Speaker ,having power 40W RMS, LF Transducer 6.5" Woofer, HF Transducer 1" Tweeter and frequency range of 80 Hz - 20 KHz. APPROVED MAKE :- Bi-amp, Apart, Kramer (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
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- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 18 Supply Installation Testing & Commissioning of Digital Signal Processor with 1 Unbalanced 3.5mm input, 4 mic/Line input with two AEC support and 2 outputs.should have additional 2 HDMI Inputs and 1 HDMI output with 4K@60HZ (4:4:4).Supports HDMI Audio De-Embedding.Internal processing should be on 24-bit, USB interface port for PC configuration software and processing audio through laptop, RS-232 interface, RJ-45 interface etc.APPROVED MAKE :- Bi-amp, Apart, Kramer (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

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- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
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Item no : 19 Supply, Installation, Testing & Commissioning of Audio Server with designed output as per selected speaker, minimum 1X balanced input,1X Unbalanced Input, Frequency response 50 Hz - 22 kHz, DSP features: Per channel presets for high-pass filter, parametric EQ, multi-band compressor, and look-ahead limiter. APPROVED MAKE:- Bi-amp, Apart, Kramer (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
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- No extra payment will be given for any of the reasons.
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- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 20 Supply, Installation, Testing and Commissioning of Room Controller with BIDIRECTIONAL PORTS, 4 RS-232 serial on 3-pin terminal blocks, 4 GPI/O on 2-pin terminal blocks, 1 Ethernet on a RJ-45 connector with POE , 1 micro-USB connector for sending P3K commands and performing a firmware upgrade, INPUTS- 1 built-in IR sensor (for learning) OUTPUT-4 IR out and 4 relays on 2-pin terminal block connectors INDICATORS- LED indicator for each port and function PROCESSOR SPEED -1GHz MEMORY -512MB RAM, 4GB Flash POWER CONSUMPTION -100-240V AC, 200mA with all accessories .APPROVED MAKE :- Bi-amp, Apart, Sennheiser, Brahler Kramer (BOARD ROOM - 8th floor)

1. Material:

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2. Workmanship:

- Work complete as per above specification.
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- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no : 21 Supply, Installation, Testing & Commissioning of 7" Table or Wall mount Touch Panel with 10 points, 2-finger gesture support.Supports Advanced Android Operating System with rich Kramer and market-available applications from cloud/store offerings, such as K-Touch Control and EventBoard Scheduling applications. Support Kramer Aware app on the touch panel to control devices connected to compatible products.Should Support WIFI 802.11 b/g/n/ac as well as POE Connectivity,Should have 2GB of RAM and 16GB ROM with Quad Core CPU. Should have Superior IPS 1280x800 hi-resolution screen with $\pm 80^\circ$ horizontal and vertical wide viewing angles, built-in lighting sensor for auto-adaptable brightness, Should Support Bluetooth 4.0 Connectivity,Should have Versatile Powering Option PoE, PSU and battery.Should have 2x1W Speakers.Firmware Update via USB Port.Approved Make :- Kramer, Bi-amp, Apple IPAD (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.

- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no: 22 Supply, Installation, Testing and Commissioning of Smart controller to Seamless connectivity & smart control of all devices through touch circuit display, touch glass panel and required all retrofit module. system has along with software & own app to customize control of all IR/Zwave tech devices in entire conference room like dimmable light, AC, Display, Curtain in individual or group. Complete as per approved by consultant. Approved Make :- Bi-amp, Hogar, Kramer (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no: 23 Supply, Installation, Testing and Commissioning of Smart customized programmable touch panel as per electrical circuit complete as per approved by consultant. Approved Make :- Bi-amp, Hogar, Kramer (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.

- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no: 24 Supply, Installation, Testing and Commissioning of Ethernet & WiFi Access Point Connectivity, 2/3 node, RGBW, Light/Fan/Plug type retrofit module as per electrical circuit 8 Port High Voltage Relay with RS-232 Control. Approved Make :- Bi-amp, Hogar, Kramer (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no: 25 Supply, Installation, Testing and Commissioning of high end hang/mount structure or trolley set for touch glass unit as per site condition as per approved by consultant . Approved Make :- Foxcon, View Sonic, Benq, AVC (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no: 26 Supply, Installation Testing & Commissioning of System Rack 600/600/800 along with require accessories as per site requirement complete as per approve by consultant. Approved Make :- Valrack, Siemens, Elixir (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item no: 27 Supply, Installation Testing & Commissioning of high-performance, HDMI cable.It supports signals up to 4K@60Hz (4:4:4), Deep Color, x.v.Color™, Lip Sync, 7.1 PCM, Dolby TrueHD, DTS-HD, CEC., 24K gold-plated connectors resist corrosion, Provides 15lbs of restraining force for a non-slip connection.Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.

- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No: 28 Supply, Installation Testing & Commissioning , high-performance Display port to HDMI cable.It supports signals up to 4K@60Hz (4:4:4), Deep Color, x.v.Color™, Lip Sync, 7.1 PCM, Dolby TrueHD, DTS-HD, CEC., 24K gold-plated connectors resist corrosion, Provides 15lbs of restraining force for a non-slip connection. Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No: 29 Supply, Laying, Testing and Commissioning of Active High Speed HDMI Cable 15 Mtr. ,HDMI 2.0 Cable Male to Male, support Deep Color, 4K 4096 x 2160 @60Hz; 3840 x 2160 @ 60Hz 4:4:0, Minimum conductor gauge - 30AWG, gold Plating. Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.

- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No: 30 Supply, Laying, Testing and Commissioning of Two 20 AWG conductors Audio/Mono Cable with Drain Wire High performance cable for audio signals/Control Signals with 300mtr. Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No: 31 Supply, Installation Testing & Commissioning , high-performance Active USB 3.0 A to A Male-Female Extender Cable .High Quality Construction 2 pair 24AWG + 1 pair 26AWG + 2 wires 22AWG + 2 drain wires 24AWG.USB 3.0 Super Speed (5Gbps) Standard Compliant with USB 3.0 .No External Power Required Pulls power from the USB source device. Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.

- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No: 32 Supply, Laying of Shielded Twisted Pair (STP) 4Pairs 24 AWG Cable with connector. CAT6A U/FTP Video & LAN Bulk Cable — Low Smoke & Halogen Free 100 Mtr. Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 33 Supply, Laying, Testing and Commissioning of Two 16 AWG conductors non- plenum Speaker Cable, for High performance cable for audio signals. Speaker Cable 100 Mtr. Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 34 Supplying, installation, testing and commissioning of RJ 45 Connector for 24AWG to 23AWG twisted pair cables with insulation diameter of 1.40mm to 1.50mm. Use with: Kramer BC-DGKAT, UNIKAT cables. Approved Make :- Extron, Ton, Kramer, (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 35 Supply, Installation Testing & Commissioning of ARM Cortex-A73*2 + Cortex-A53*2 1.5GHz, 3GB DDR4 or better, stroge-32GB or better, TFT LCD Module with DLED Backlight, 1895.04 (H) x 1065.96 (V) (85.6"diagonal), 16:09:00, UHD 3840x2160 (Pixels), 1.07B colors (10bit), 20 points touch, 10 points writing, 1.07B colors (10bit), 350 nits or better,OPS:-01, 5000:1 (DCR)8ms, H = 178, V = 178 typ, 30,000 Hours (Min), Hardness: 9H, Anti-glare coating, USB2.0: Front x2, Rear x1 (SmartPort™ for all), Slim - Landscape, IR Recognition, 32767 x 32767, HDMI:-2.0-2, RGB / VGA:-01, Audio:-01 (PC audio in), RS232:-01, OUTPUT Audio:x1 (Earphone out), SPDIF:1 (optical), RJ45:-01, USB3.0: Front x1, Rear x3 (SmartPort™ for Rear x3), x2, for touch, spk-10W x 2 + 15W x 1 subwoofers, TOP CAMERA PLATE - yes, HDMI (3840 x 2160), Android 8, All-in-one USB port: - Front "SmartPort™ USB" to all channels., required for window /android /mac, 10M/100M/ for Android, 10M/100M/1000M for slot-in PC, Wall Mount (VESA®): - yes, 0°C to 40°C, 10% ~ 90% RH non-condensing, cTUVus, FCC, ES8, EPEAT, EMC/CE, CB, RoHS & DOC, REACH, WEEE, ErP, EAC, UKrSEPRO, RCM, BSMI, 1. Power cable (3 meters). VSAx1, VSEx2, VSIx4 2. Remote control 3. USB cable (3 meters) 4. Touching pen x 2 5. Quick Start Guide 6. RS232 adapter 7. Clamp x 5 8. Plate 9. Screw x 8 10. HDMI cable 3M - APPROVED MAKE :- Foxcon, Christie Benq, Viewsonic, (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.

- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 36 Supply, Installation Testing & Commissioning of Full HD @ 60fps PTZ camera, minimum 20X Optical Zoom, min 100 Presets, Ethernet Out, HDMI Out, 3G-SDI Out, Audio In, IP/RS232/422 Controls, -170° ~ +170° Panning angle, -30° ~ +90° Tilting angle , Should support PoE+. Should be CE, ROHS, BIS and FCC Certified. Approved make :- Cosco, Lumens, Polycom, Panasonic (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 37 Supply, Installation, Testing and Commissioning of The Tracking Intelligent Microphone (TIM) breaks the mould for ceiling microphones. Designed for use in AV conference and huddle room applications. Tracks meeting participants within a room, APT technology for best possible sound output, Eliminates unwanted steady state noise e.g. air conditioning , projectors Built in equalizer Supports DANTE and AES 67 Intutive GUI through standard Web browser Powered over Ethernet (PoE+), Separate control and data paths for added security, API commands via UDP, Easy setup and install, Dante Domain Manager Ready. Approved Make : - Polycom, Cleare one, Clock audio, Shure (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.

- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Pair for area of work done. The rate shall be for a unit of one Pair.

Item No : 38 Supply, Installation, Testing & Commissioning of Each input supports 12-band parametric equalizer (PEQ), signal generator, compressor, expander, ducker, and 48 V phantom power • Each output supports 31-band graphic equalizer (GEO), audio crossover, delayer, limiter • Up to 16 settings can be preset • Built-in USB sound card for recording and playing digital audio • DSP Configurator software tool for managing all audio operations, minimum 1X balanced input, 1X Unbalanced Input, Frequency response 50 Hz - 22 kHz, DSP features: Per channel presets for high-pass filter, parametric EQ, multi-band compressor, and look-ahead limiter. 16 sets of presets, each preset working independently. Independent adaptive feedback inhibition per channel. Automatically detects feedback points and automatically suppresses them. ADI SHARC 21489 processor • 8 balanced microphone or line level inputs on Terminal Block connectors • 8 balanced line level outputs on Terminal Block connectors • 2 Dante audio interfaces on RJ-45 connectors, Pair of wall mount speaker • 8 GPI/O multi-function ports on Terminal Block connectors • Dante audio channels up to 8x8 • Defnable GUI for managing and configuring multiple units • Supports Apple iOS and MS Windows operating systems • Supports adaptive echo cancellation (AEC), adaptive feedback control (AFC), automatic gain control (AGC), automatic mixture control (AMC), automatic noise suppression (ANS) Approved Make : - Polycom, Cleare one, Clock audio, Shure (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 39 Supply, Installation, Testing and Commissioning of high end hang/mount structure or trolley set for touch glass unit as per site condition as per approved by consultant . Approved Make :- Foxcon, View Sonic, Benq, AVC (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 40 Supply, Installation Testing & Commissioning of System Rack 600/600/800 along with require accessories as per site requirement complete as per approve by consultant. Approved Make :- Valrack, Siemens, Elixir (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 41 Supply, Installation Testing & Commissioning of high-performance, HDMI cable.It supports signals up to 4K@60Hz (4:4:4), Deep Color, x.v.Color™, Lip Sync, 7.1 PCM, Dolby TrueHD, DTS-HD, CEC., 24K gold-plated connectors resist corrosion, Provides 15lbs of restraining force for a

non-slip connection. high-performance Active USB 3.0 A to A Male-Female Extender Cable .High Quality Construction 2 pair 24AWG + 1 pair 26AWG + 2 wires 22AWG + 2 drain wires 24AWG.USB 3.0 Super Speed (5Gbps) Standard Compliant with USB 3.0 .No External Power Required Pulls power from the USB source device. Approved Make :- Extron, Ton, Kramer, (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 42 Supply, Laying of Shielded Twisted Pair (STP) 4Pairs 24 AWG Cable with connector. CAT6A U/FTP Video & LAN Bulk Cable — Low Smoke & Halogen Free 100 Mtr. Approved Make :- Extron, Ton, Kramer, (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 43 Supply, Laying, Testing and Commissioning of Two 16 AWG conductors non- plenum Speaker Cable, for High performance cable for audio signals. Speaker Cable 100 Mtr. Approved Make :- Extron, Ton, Kramer, (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 44 Supplying, installation, testing and commissioning of RJ 45 Connector for 24AWG to 23AWG twisted pair cables with insulation diameter of 1.40mm to 1.50mm. Use with: Kramer BC-DGKAT, UNIKAT cables. Approved Make :- Extron, Ton, Kramer, (DELEGATE ROOM : 8th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 45 Supply, Installation Testing & Commissioning of ARM Cortex-A73*2 + Cortex-A53*2 1.5GHz, 3GB DDR4 or better, storage-32GB or better, TFT LCD Module with DLED Backlight, 1895.04 (H) x 1065.96 (V) (85.6"diagonal), 16:09:00, UHD 3840x2160 (Pixels), 1.07B colors (10bit), 20 points touch, 10 points writing, 1.07B colors (10bit), 350 nits or better, OPS:-01, 5000:1 (DCR)8ms, H = 178, V = 178 typ, 30,000 Hours (Min), Hardness: 9H, Anti-glare coating, USB2.0: Front x2, Rear x1 (SmartPort™ for all), Slim - Landscape, IR Recognition, 32767 x 32767, HDMI:-2.0-2, RGB / VGA:-01, Audio:-01 (PC audio in), RS232:-01, OUTPUT Audio:x1 (Earphone out), SPDIF:1 (optical), RJ45:-01,

USB3.0: Front x1, Rear x3 (SmartPort™ for Rear x3), x2, for touch, spk-10W x 2 + 15W x 1 subwoofers, TOP CAMERA PLATE - yes, HDMI (3840 x 2160), Android 8, All-in-one USB port: - Front "SmartPort™ USB" to all channels., required for window /android /mac, 10M/100M/ for Android, 10M/100M/1000M for slot-in PC, Wall Mount (VESA®): - yes, 0°C to 40°C, 10% ~ 90% RH non-condensing, cTUVus, FCC, ES8, EPEAT, EMC/CE, CB, RoHS & DOC, REACH, WEEE, ErP, EAC, UKrSEPRO, RCM, BSMI, 1. Power cable (3 meters). VSAx1, VSEx2, VSIx4 2. Remote control 3. USB cable (3 meters) 4. Touching pen x 2 5. Quick Start Guide 6. RS232 adapter 7. Clamp x 5 8. Plate 9. Screw x 8 10. HDMI cable 3M - APPROVED MAKE :- Foxcon, Christie Benq, Viewsonic, CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 46 Supply, Installation Testing & Commissioning of Wireless and Wired Presentation and Collaboration Device with Airplay, Miracast Technology. 6 user can present simultaneously on single display mode and upto 12 user in dual display mode. 1xHDMI Input for Hardwiring Input, 1xHDMI Output, 1xDisplay Port OUT, 1xMic IN and 1xLine Out Ports, 3xUSB 3.0 and 2xUSB 2.0 Ports, additionally have 128GB SSD for Storage, 8 GB RAM with Windows Platform. Login using conventional Wi-Fi or LAN connections Powerful security features: user authentication, 1024-bit encryption, dynamic room code Supports Windows laptops and MAC, as well as iOS and Android mobile operating systems High quality video streaming, supports 4K@60 (using the VIA app Multimedia feature connect & collaborate Third Party VC Intastall Support, Should have Via versa feature to access professional grade camera wirelessly. APPROVED MAKE :- Kramer, Bi-amp, Extron (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 47 Supplying, installation, testing and commissioning of 4X4 matrix switcher that transmits video, audio, Ethernet, RS-232 and IR signals over extended distances. Should have 4 HDMI Inputs ,4 HDBaseT Outputs with 2 HDMI Simultaneous Output ,should have max resolution support of 4K@60Hz,Should Support HDBaseT Range — Up to 130m (430ft) at normal mode (2K), up to 100m at normal mode (4K); up to 180m (590ft) ultra mode (1080p @60Hz @24bpp) when using BC-UNIKAT cables. APPROVED MAKE :- Lightware, Extron, Kramer, Bi-amp (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 48 Supplying, installation, testing and commissioning of Pop-Up Box / Cable cubby Includes a Universal power outlet X 2 Nos, HDMI Port X 1nos, RJ-45 X 2 Nos. Supplying, installation, testing and commissioning of 1 Double Power Socket Slot, 6 Insert Slots (Includes 4 Blank & 2 Cable Pass-Through Inserts), APPROVED MAKE :- Brix, Kramer, Extron, AVC (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 49 Supplying, installation, testing and commissioning of 1 Double Power Socket Slot, 6 Insert Slots (Includes 4 Blank & 2 Cable Pass-Through Inserts) .APPROVED MAKE :- Brix, Kramer, Extron, AVC (CONFERENCE ROOM: 7th Floor)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 50 Supplying, installation, testing and commissioning of TBUS Dual Power Socket – Universal. APPROVED MAKE :- Brix, Kramer, Extron, AVC (CONFERENCE ROOM: 7th Floor)

- 1. Material:**

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 51 Supplying, installation, testing and commissioning of Wall Plate Insert – Dual RJ-45 – Black . APPROVED MAKE :- Brix, Kramer, Extron, AVC (CONFERENCE ROOM: 7th Floor)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 52 Supplying, installation, testing and commissioning of W-HDMI Wall Plate Insert – Black. APPROVED MAKE :- Brix, Kramer, Extron, AVC (CONFERENCE ROOM: 7th Floor)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 53 Supplying, installation, testing and commissioning of TBUS AC Power Cord - Right-Angle India 6ft 250V AC. APPROVED MAKE :- Brix, Kramer, Extron, AVC (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 54 Supply, Installation, Testing and Commissioning of Priority button for chairman microphone In addition to the 'microphone on' button the chairman units feature a 'chairman priority' button. When pressed the priority button causes all currently active delegate microphones to be permanently muted, Built-in loudspeaker Loudspeaker volume is set centrally at the Control Unit for all delegate units, Two headphone sockets Two 3.5 mm (0.14 in) stereo headphone sockets, Built-in volume control for headphones, 85dB SPL, Delegate unit gooseneck microphones, Microphone with flexible stem and light ring The microphone has a flexible stem, which is easily adjustable to suit personal preferences, Controls and Indicators • Microphone on/off button. • Rotary volume control for adjusting headphone volume. • Loudspeaker, automatically muted when microphone is on Length of the microphone from the base of the stem 488mm. APPROVED MAKE :- Bi-amp, Apart, Sennheiser, Brahler, Bosch (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.

- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 55 Supply, Installation, Testing and Commissioning of Frequency response 200Hz-12.5kHz, The Control Unit shall have the following features and benefits: Plug-and-play functionality for quick and easy connection of Discussion Devices. Intuitive touch-buttons on the front panel for easy configuration and operation purposes. Intuitive LED indicators for clear and immediate feedback on the system settings. Web browser control – it shall be possible to use a web browser application to view and manage system settings. System control for up to 80 Discussion Devices. Hot swap of Discussion Devices, without having to power down the system. Plus/minus buttons and green LED indicators for setting the volume range of all connected Discussion Devices. Microphone-mode selection button and green LED indicators for selecting one of the following microphone operating modes: 'open mode', 'override mode', 'voice activation mode', and 'push to talk (PTT) mode'. Number of Open Microphones (NOM) button and green LED indicators for selecting the number of microphones that can be activated at the same time. It shall be possible to select up to four open microphones at the Control Unit. Built-in digital recorder with internal memory and USB recording. Built-in loudspeaker and headphone socket for listening to recorded discussions before replaying them to the Floor, or listening to recordings. Built-in Digital Acoustic Feedback Suppression (DAFS). USB connector on front of unit for connecting a USB memory stick. Gain reduction due to number of open microphones (NOM) $1/\sqrt{\text{NOM}}$. Sample rate 44.1kHz Nominal input (85 db SPL) <0.5% Max. input (110 db SPL) <0.5% Recording/ Playback 64,96,128,256Kbit/sec Recording/ Playback (sample frequency) 44.1kHz, Nominal output 72dB SPL. APPROVED MAKE :- Bi-amp, Apart, Sennheiser, Brahler, Bosch (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.

- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 56 Supply, Installation, Testing and Commissioning of Wall or ceiling Mounted 2 way Passive Speaker ,having power 40W RMS, LF Transducer 6.5" Woofer, HF Transducer 1" Tweeter and frequency range of 80 Hz - 20 KHz. APPROVED MAKE :- Bi-amp, Apart, Kramer (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Pair for area of work done. The rate shall be for a unit of one Pair.

Item No : 57 Supply Installation Testing & Commissioning of Digital Signal Processor with 1 Unbalanced 3.5mm input, 4 mic/Line input with two AEC support and 2 outputs. should have additional 2 HDMI Inputs and 1 HDMI output with 4K@60HZ (4:4:4).Supports HDMI Audio De-Embedding. Internal processing should be on 24-bit, USB interface port for PC configuration software and processing audio through laptop, RS-232 interface, RJ-45 interface etc. APPROVED MAKE :- Bi-amp, Apart, Kramer (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons. Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.

- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 58 Supply, Installation, Testing and Commissioning of Room Controller with BIDIRECTIONAL PORTS, 4 RS-232 serial on 3-pin terminal blocks, 4 GPI/O on 2-pin terminal blocks, 1 Ethernet on a RJ-45 connector with POE , 1 micro-USB connector for sending P3K commands and performing a firmware upgrade, INPUTS- 1 built-in IR sensor (for learning) OUTPUT-4 IR out and 4 relays on 2-pin terminal block connectors INDICATORS- LED indicator for each port and function PROCESSOR SPEED -1GHz MEMORY -512MB RAM, 4GB Flash POWER CONSUMPTION -100-240V AC, 200mA with all accessories . APPROVED MAKE :- Bi-amp, Apart, Sennheiser, Brahler Kramer (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons. Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 59 Supply, Installation, Testing and Commissioning of high end hang/mount structure or trolley set for touch glass unit as per site condition as per approved by consultant . Approved Make:- Foxcon, View Sonic, Benq, AVC (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons. Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 60 Supply, Installation Testing & Commissioning of System Rack 600/600/800 along with require accessories as per site requirement complete as per approve by consultant. Approved Make :- Valrack, Siemens, Elixir (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons. Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 61 Supply, Installation Testing & Commissioning of high-performance, HDMI cable.It supports signals up to 4K@60Hz (4:4:4), Deep Color, x.v.Color™, Lip Sync, 7.1 PCM, Dolby TrueHD, DTS-HD, CEC., 24K gold-plated connectors resist corrosion, Provides 15lbs of restraining force for a non-slip connection. Approved Make :- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 62 Supply, Installation Testing & Commissioning , high-performance Display port to

HDMI cable. It supports signals up to 4K@60Hz (4:4:4), Deep Color, x.v.Color™, Lip Sync, 7.1 PCM, Dolby TrueHD, DTS-HD, CEC., 24K gold-plated connectors resist corrosion, Provides 15lbs of restraining force for a non-slip connection. Approved Make :- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 63 Supply, Laying, Testing and Commissioning of Active High Speed HDMI Cable 15 Mtr. ,HDMI 2.0 Cable Male to Male, support Deep Color, 4K 4096 x 2160 @60Hz; 3840 x 2160 @ 60Hz 4:4:0, Minimum conductor gauge - 30AWG, gold Plating. Approved Make :- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Numbers for area of work done. The rate shall be for a unit of one Numbers.

Item No : 64 Supply, Laying, Testing and Commissioning of Two 20 AWG conductors Audio/Mono

Cable with Drain Wire High performance cable for audio signals/Control Signals with 300mtr. Approved Make :- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 65 Supply, Installation Testing & Commissioning , high-performance Active USB 3.0 A to A Male-Female Extender Cable .High Quality Construction 2 pair 24AWG + 1 pair 26AWG + 2 wires 22AWG + 2 drain wires 24AWG.USB 3.0 Super Speed (5Gbps) Standard Compliant with USB 3.0 .No External Power Required Pulls power from the USB source device. Approved Make :- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Number for area of work done. The rate shall be for a unit of one Number.

Item No : 66 Supply, Laying of Shielded Twisted Pair (STP) 4Pairs 24 AWG Cable with connector. CAT6A U/FTP Video & LAN Bulk Cable — Low Smoke & Halogen Free 100 Mtr. Approved Make:- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 67 Supply, Laying, Testing and Commissioning of Two 16 AWG conductors non- plenum Speaker Cable, for High performance cable for audio signals. Speaker Cable 100 Mtr. Approved Make :- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 68 Supplying, installation, testing and commissioning of RJ 45 Connector for 24AWG to 23AWG twisted pair cables with insulation diameter of 1.40mm to 1.50mm. Use with: Kramer BC-DGKAT, UNIKAT cables. Approved Make :- Extron, Ton, Kramer, (CONFERENCE ROOM: 7th Floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Lot for area of work done. The rate shall be for a unit of one Lot.

Item No : 69 MODEL YEAR - 2021, SCREEN SIZE (INCH, MEASURED DIAGONALLY)

75 (74.5), DIMENSION OF TV WITHOUT STAND (W X H X D), Approx. 1,686 x 969 x 72 mm, DIMENSION OF TV WITH STAND (STANDARD POSITION) (W X H X D), Approx. 1,686 x 1,045 x 410 mm, SCREEN SIZE (CM, MEASURED DIAGONALLY) 189 cm, HDCP HDCP2.3 (for DMI™1/2/3/4), USB DRIVE FORMAT SUPPORT T16/FAT32/exFAT/NTFS, HDMI INPUTS TOTAL 4 (4 Side), USB PORTS 2 (Side), WI-FI STANDARD. Wi-Fi Certified 802.11a/b/g/n/ac, BLUETOOTH PROFILE SUPPORT. version 4.2; HID, ETHERNET INPUTS 1(Side), OPERATING SYSTEM. Android TV™, VOICE SEARCH Yes 2 with loading and unloading. Approved Make:- LG, PANASONIC, SONY (7th Floor Waiting Area, 8th Floor Waiting Area, & Chairman Cabin)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No : 70 MODEL YEAR 2021, 85 (84.6), Approx. 1,899 x 1,176 x 456 mm, BLUETOOTH - version 4.2; HID, CHROMECAST BUILT-IN - YES, HDMI INPUTS TOTA - 04, HDCP2.3 (for HDMI™1/2/3/4), USB PORTS - 02, DISPLAY TYPE - LCD, PICTURE PROCESSOR - 4K HDR Processor X1™, SPEAKER TYPE - Bass Reflex Speaker, X-Balanced Speaker, OPERATING SYSTEM - Android TV™, ON-BOARD STORAGE - 16 GB. with loading and unloading . Approved Make:- LG, PANASONIC, SONY (7th Floor Waiting Area, 8th Floor Waiting Area, & Chairman Cabin)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No : 71 Supply, Installation, Testing and Commissioning of high end hang/mount structure or trolley set for touch glass unit as per site condition as per approved by consultant . Approved Make :- Foxcon, View Sonic, Benq, AVC (7th Floor Waiting Area, 8th Floor Waiting Area, & Chairman Cabin)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Number for area of work done. The rate shall be for a unit of one Number.

Item No: 72 : Supplying & erecting approved make Telephone Cable electrolytic copper conductor PE insulation twisted in two pairs, & wrapped with FRLS PVC tape & sheathed with FRLS PVC or HFFR outer Jacket suitable for telephone wiring & confirming to C-DOT erected in existing pipe. of following size of conductors & nos. of pairs. With necessary connections.[B] Armoured(Jelly Filled).

1) Ten Pairs (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 73 Supplying & erecting approved make Telephone Cable electrolytic copper conductor PE insulation twisted in two pairs, & wrapped with FRLS PVC tape & sheathed with FRLS PVC or HFFR outer Jacket suitable for telephone wiring & confirming to C-DOT erected in existing pipe. of following size of conductors & nos. of pairs. With necessary connections.[B] Armoured(Jelly Filled).

2) Twenty Pairs (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 74 Providing & erecting main Distribution (MDF) indoor type, back mounted frame as per DoT standard approved with krone strips. (a) Suitable for 10 pair (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 75 Providing & erecting main Distribution (MDF) indoor type, back mounted frame as per DoT standard approved with krone strips. (b) Suitable for 20 pair (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 76 Providing & erecting main Distribution (MDF) indoor type, back mounted frame as per DoT standard approved with krone strips. (c) Suitable for 50 pair (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 77 Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge. (3) Two Pin/RJ-11 Telephone Socket [A] For One Gang Cat.III (Telephone & CCTV)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 78 Supplying & erecting push button type telephone instrument having speaker phone Caller ID & hands free dialing system & 30 memories with display system.(a) Single line BEETEL/Panasonic or equivalent make (Telephone & CCTV)

- 1. Material:**

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 79 Supplying & erecting Delton or approved make Telephone Cable electrolytic copper conductor PE insulation twisted in two pairs, & wrapped with FRLS PVC tape & sheathed with FRLS PVC or HFFR outer Jacket suitable for telephone wiring & confirming to C-DOT erected in existing pipe. of following size of conductors & nos.of pairs. With necessary connections. [A] Conductor Size 0.5 mm (a) Unarmoured 2) Two Pairs (Telephone & CCTV)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 80 DOME CAMERA / Bullet-- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition · Outputs max. 2MP (1920 × 1080) @25/30 fps · H.265 codec, high compression rate, ultra-low bit rate · Built-in warm lights, max. illumination distance: 30 m · ROI, SMART 64+/H.265+, flexible coding, applicable to various bandwidth and storage environments · Rotation

mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes · Intelligent detection: Intrusion, tripwire · Abnormality detection: Motion detection, video tampering, scene changing, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection · Built-in Mic · Supports max. 256 GB Micro SD card · 12V DC/PoE power supply . Approved Make :- sony, Palco, Dahuva, Hikvision (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 81 Supplying & erecting approved make LAN cable of following size in existing pipe as per direction [D] CAT - 6 E (For LAN & Camera). (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 82 Supply, installation, testing and commissioning of Providing following type of Modular Type Accessories mounted with PVC / metallic box, single mounting base frame covered with textured / metallic front plate, modules erected with necessary connection. As desired by Engineer In charge. Modem Jack for Computer Open RJ-45 CAT III. (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 83 SITC of Layer Layer 2 Managed No Switching Capacity 52 Gbps Packet Forwarding Rate 38.688 Mpps Packet Buffer Memory 4 Mbit MAC Table Size 8K Standards Compliance IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.3z Intelligent PoE · Red Port Supports BT 90W · All-giga Ports · Smooth Transmission (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 84 SITC of Patch Panel Cat 6 UTP Keystone Type- 24 Port-Fully Loaded (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 85 SITC of CAT6 UTP 24AWG PATCH CORD:1M,Plug 30U' Snag less (Telephone & CCTV)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 86 Network Video Recorder: Supply, Installation, Testing and Commissioning of · Smart H.265+/H.265/Smart H.264+/H.264 · Max 200Mbps Incoming Bandwidth · Up to 8MP Resolution for Preview and Playback · Up to 2ch@4K/8ch@1080P decoding · HDMI/VGA simultaneous video output, Approved Make :- sony, Palco, Dahuva, Hikvision (Telephone & CCTV)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.

- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 87 Supply, Installation, Testing and commissioning of 6 TB Surveillance series Hard disk (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 88 Supply Installation, Testing & Commissioning of Wall mounted Communication Rack with Glass doors. Handles. Lock, Top & Bottom Cable entries supports for mounting rack on the wall, Cable managers, One Fan, Equipment mounting hardware, Power Supply box for supplying power to switches, Fans etc. Along with earth continuity kit, MCB, Indicator, Molded power supply cable. 19 inch 6U 530mm Depth Wall mounted (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.

- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 89 : Supply, Installation, testing & commissioning of Wireless WiFi Router with below specification Networking Interface : (1) 10/100 Ethernet Port Buttons : Reset Antennas ,Power Method : Passive Power over Ethernet (12-24V) Power Supply : Included 24V, 0.5A PoE Adapter Maximum Power Consumption : 6 W Maximum TX Power : 27 dBm BSSID : Up to Four Per Radio Power Save : Supported Wireless Security : WEP, WPA-PSK, WPA-TKIP,WPA2 AES.(WIFI router should support 5G Speed.) (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Each for area of work done. The rate shall be for a unit of Each.

Item No: 90 : Providing & Erecting approved make following size of TV Co-axial flexible cable comprising inner conductor of solid bare copper insulated with Foam PE & Secondary conductor made of poly - Aluminium film bonded Al. Braids @ suitable coverage overall sheathed with black PVC insulation. (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.

- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 91 SITC Of 40 Inch Full HD LED TV as per tender specification. (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Nos for area of work done. The rate shall be for a unit of Nos.

Item No: 92 Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge. (4) TV Co-axial Socket outlet Cat.II (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 93 Cat 6 UTP IO Jack with IO Face plate - Single or double (Telephone & CCTV)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 94 Supply, installation, testing and commissioning of Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate (Telephone & CCTV)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.
 - Work complete including all types of tools, tackles, labour etc complete at any level and height.
 - The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.
- 3. Measurements:**
- The rate shall be consolidated for all above items.
 - The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
 - No extra payment will be given for any of the reasons.
 - Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
 - The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 95 Supplying & erecting approved make Telephone Cable electrolytic copper conductor PE insulation twisted in two pairs, & wrapped with FRLS PVC tape & sheathed with FRLS PVC or HFFR outer Jacket suitable for telephone wiring & confirming to C-DOT erected in existing pipe. of following size of conductors & nos.of pairs. With necessary connections.[B] Armoured(Jelly Filled)
3) Fifty Pairs (Telephone & CCTV)

- 1. Material:**
- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.
- 2. Workmanship:**
- Work complete as per above specification.

- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Item No: 96 Supply, Installation Testing & Commissioning of 65"UHD resolution, ultra high-definition 4K resolution. Crystal Processor 4K, The flat back and slim depth , Built-in WiFi and Bluetooth, Resolution 3840*2160 (4K UHD), Built in Speaker(10W + 10W), HDMI 2.0 (2), HDCP 2.2USB 2.0 x 2, S232C(in/out) thru stereo jack, RJ45, 9.2mm(U/L/R), 11.2mm(B) APPROVED MAKE :- Sony, Samsung, Viewsonic, Lg (BOARD ROOM - 8th floor)

1. Material:

- All type of material shall be used as per approved make list and confirming to relevant IS codes and approved sample by Architect/Client.

2. Workmanship:

- Work complete as per above specification.
- Work complete including all types of tools, tackles, labour etc complete at any level and height.
- The whole work is to be completed as per design; sample material & any other requirement shall be as per instruction of Architect/Client.

3. Measurements:

- The rate shall be consolidated for all above items.
- The rate shall include the cost of all materials, labour, scaffolding etc. to complete the whole work satisfactorily as per instruction of Architect/Client.
- No extra payment will be given for any of the reasons.
- Rate to be inclusive of all material, wastage, necessary tools tackles etc for fixing at all heights and for all floors.
- The work done shall be measured in Meter for area of work done. The rate shall be for a unit of one Meter.

Note:

- For all type of Sub Estimate work , The rate shall include the cost of all materials, labour, scaffolding, transport , tools , tackles , hardware's , accessories , core cutting , finishing , including As built drawing , shop drawing, etc. to complete the whole work satisfactorily as per instruction of Architect/Client. No extra payment will be given for any of the reasons.
- The Contractor shall submit As-built drawing with necessary soft copy.