

| BOQ FOR CIVIL & INTERIOR WORKS | | | | | |
|--------------------------------|---|-------|--------|------------------|-------------------|
| Sr.No. | Description of items | Unit | Qty | Unit Price (INR) | Total Price (INR) |
| 1 | Civil Work | | | | |
| 1.10 | Providing and constructing brick masonry in partition walls in any shape & for all works with approved quality bricks having minimum crushing strength 35 Kg./Sq.cm, at all levels in CM 1:4 (1 part cement and 4 part coarse sand) including scaffolding, racking out joints, FOR 100 MM THICK PARTITION WALLS | SFT | 110.00 | | |
| 1.20 | Providing and applying 12 mm thick plain cement plaster finish at all heights and below highest plinth level in Cement Mortar (CM) 1:4 (1 part cement: 4 parts sand) in line, level and plumb to the walls, concrete elements, beams, ceiling, stair, columns, pardis, including making plaster bands, stripes, moulds, pattas, grooves etc, over any brick or concrete surface as specified including scaffolding, curing and finishing smooth, complete as directed. | SFT | 254.00 | | |
| 1.30 | Providing and fixing of RCC lintel coping, 100 mm wide and 100 mm high, reinforced with 8 mm and 12 mm steel bars | Rn.Ft | 9.00 | | |
| 1.40 | Providing and Fixing of 600 x 600 Floor Tiles With Req. Chemical or Cement Mortar and Other material Removing Old Tile and Bedris Outside Plant Area, Tile Basic Rate 50 Rs | SFT | 216.00 | | |
| 1.50 | Skirting | Rn.FT | 78.00 | | |
| 1.60 | Providing and fixing of 100-250 mm Door granite framework with required chemical anchoring and Dhar police | Rn.Ft | 16.00 | | |
| 1.70 | Removing Existign Window | Nos | 2.00 | | |
| 1.80 | Dismantling a 3' x 3' wall, removing debris outside the premises, finishing plaster in the window cutout area, and providing and fixing a granite frame in the 3' x 3' window opening | Job | 1.00 | | |
| 1.90 | Dismantling RCC slab (madiya) in the new server room, approximately 8' x 3' in size, finishing the affected wall area with plaster, and removing debris outside the premises | Job | 1.00 | | |
| 2.00 | Antistatic Access floor/ Vinyl & LWF works | | | | |
| | Raised Antistatic Access Flooring : Supply, laying and fixation of false Flooring for Netwok S/w Room . For cut tiles measurement shall be considered as one full 2'x2' tile with more than 12" as full tile and 2 Nos. of tiles with less than 12" to be considered as 2'x2' full tile.Understructure for false flooring giving 450mm to 6000 mm height for false floor on IPS. Price to include material labour, alignment, tile cutting for Racks. including at corners and partial tiles. Costs include final alignment after equipments are placed. | SFT | 216.00 | | |
| 3.00 | False Ceiling | | | | |
| 3.10 | Gypsum Board Suspended Ceiling : Providing and fixing in position multi level FR MR grade GYPSUM board false-ceiling suspended on G.I. frame work in design as shown in the drawing. The G.I. frame work consist of Perimeter channel of size 27mm x 0.5mm. Intermediate channel of size 45mm x 0.5mm thick. Ceiling section of 0.5mm thickness. 12.5mm thick tapered edge gypsum plaster board fixed to ceiling channel with 25mm dry wall screws at 230mm centers Jointed and finished with requisite filler, paper tape, finisher and primer suitable for Gypsum plaster boards. Rate to include making necessary cut-outs/openings for light fittings. This item includes all vertical drops, niches in ceiling etc. Gypsum board to be of saint gobin / India Gypsum. | SFT | 70.00 | | |

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| 3.20 | Grid Ceiling:- Providing & Fixing of micro-perforated-metal-Suspended Ceiling System with TILES using GI .50 MM Thick. Panels - Square - Beveled edge, Size -600 * 600mm. Material: Galvanized Steel 0.5mm. Perforation Details: 2.5mm, Center to Center in Regular Pattern & Square Perforation. Paint finish: 55 microns thick powder coating on exposed surface or 25 microns polyester coil coated over primer on visible surface with primer coat on rear side. Suspension: Spring Steel Butterfly clip, 4mm dia GS Rod, GS / Aluminum Edge Profile & recommended 'T' grid system. | SFT | 189.00 | | |
| 3.30 | Gypsum Board Cove : P/f Cove light pelmet/trough: 150mm high, 200mm wide in ceiling made of Lagyp board with GI framing complete as per design. (Note :- Cove to be complete from inner side as well) Gypsum board to be of saint gobin / India Gypsum | RFT | 70.00 | | |
| 4.00 | Alluminium Section Work | | | | |
| 4.10 | Alluminium Profile Shutter : Providing and fixing aluminium section framing with a profile shutter and 5mm fix glass | SFT | 40.00 | | |
| 5.00 | Doors / Shutters (Modi Guard, Saint Gobain toughened Glass) | | | | |
| 5.10 | Glass Door Only H/W :- The door will be fixed on Insta / Ozone / Dorset MAKE fitting as top Pivot , top patch , bottom patch ,Floor Spring , corner lock with lock keeper plate , door handle (300 mm long) as approved etc. | | | | |
| | Glass door Hardware - 900 x 2100 MM | NOS | 1.00 | | |
| 6.00 | Glazing and Glazed Openings | | | | |
| 6.10 | Frameless Glass Partition or Fix Glass : Providing & fixing frameless glazed door shutters using 12 mm thick toughened glass with all necessary hardware required & necessary floor / glass cutting, making holes etc complete as per design & detailed drawings (drawings shall be prepared by the bidder). | SFT | 100.00 | | |
| 7.00 | Painting & Polishing Work Providing and applying 2 or more coats of paint on walls or ceiling wherever advised . The surface shall be thoroughly cleaned and prepared by raking old paints (existing) by sand papering and applying 2 coat putty to achieve smooth and truly levelled surface. Required number of coats and type of primer as prescribed by manufacture shall be applied before the application of finishing coat as recommended by manufactures' specifications | | | | |
| 7.10 | Fire Retardant Plastic Emulsion Paint | SFT | 995.00 | | |
| 7.20 | Providing & applying surface cleaning proper then crack filling and two or more coats of "Exterior Paint" Apex Ultima, Dulux, Berger approved colour shade to give good and even shade over Compound wall surfaces at all levels including scaffolding, cleaning, washing the surface etc. complete as per instructions of ERDA EIC. | SFT | 2,735.00 | | |
| 7.30 | Inside Painting /Interior Surfaces: Providing and applying three or more coats of Acrylic Premium Emulsion paint of "Asian or Berger" make of approved colour and shade one coat of primer, brooming down and cleaning the surfaces, finishing of holes and depressions including scaffolding and staging of all levels with all labour and material at etc. all levels including all complete As per instructions of ERDA engineers-in-charge | SFT | 3,635.00 | | |

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| 7.40 | OIL Paint Colourwork: Providing and applying two or more coats of synthetic enamel paint or oil paint of "Asian or Berger" make, and of approved colour and shade one coat of primer & 2 coat of Oilpaint colour cleaning the surfaces, with all labour and material etc. complete at all levels. As per instructions of ERDA engineers-in-charge | SFT | 1,080.00 | | |
| 8.00 | Internal Signages | | | | |
| 8.10 | General room Signage in foam sheet 2mm thick 300 x 100 MM | NOS | 4.00 | | |
| 8.20 | General Luminous Fire Exit - 2 hours battery back up Signages 300 x 150 MM | NOS | 2.00 | | |
| 8.30 | Fire evacuation plans foam sheet 2 mm thick 1000 x 600 MM | NOS | 1.00 | | |
| 8.40 | Push/ Pull signages for all doors SS Finish 100 x 50 | NOS | 2.00 | | |
| 9.00 | Special Feature Items | | | | |
| 9.10 | Entrance Floor Mat - Providing and installing trapper floor matting (Heavy duty) as per manufacturer specification. | SFT | 6.00 | | |
| | Deep Cleaning of Floor | JOB | 1.00 | | |
| 10.00 | FIRE DOOR | | | | |
| 10.10 | Door Size: 900-1000mm (W) x 2100mm (H) – S.L. | NOS | 1.00 | | |
| | Accessories: | | | | |
| | S.S. Ball Bearing Hinges (Dorma, Yale Make) | | | | |
| | Vision Panel with Fire Rated Glass of Size: 200 x 300mm (6mm Thick Clear Toughened Fire Glass) | | | | |
| | Heavy Duty Door Closer (Dorma, Yale Make) | | | | |
| | Dead Lock with Cylinder (Dorma, Yale Make) | | | | |
| | S.S. "D" Type Handle (1 Set) | | | | |

BOQ FOR ELECTRICAL WORK

| ITEM | DESCRIPTION | UNIT | QTY | Unit Price (INR) | Total Price (INR) |
|------------|--|------|-----|------------------|-------------------|
| 1.0 | LV DISTRIBUTION PANELs | | | | |
| 1.1 | LOW VOLTAGE PANEL BOARDS | | | | |
| | Supply, Installation, assembling, connection, testing and commissioning of Panels as per Specification, Technical Data sheet, IS & relevant drawings. | | | | |
| | All panels and DBs shall be manufactured by ERDA approved (for 50kA/3S) panel busbar testing certificate in last two years) panel manufacturer. Panel Support Structure shall be pre-cast, pre-fabricated angle/channel structure with sheet steel fabricated doors & partitions. | | | | |
| | The unit rate for each item shall include : | | | | |
| 1) | SITC of panels | | | | |
| 2) | Testing of panels as per specifications at manufacturer's works in presence of client's representative and/or consultant. | | | | |
| 3) | Delivery of the panels / DB's to site. | | | | |
| 4) | Shifting of the panels from site store to the suitable location. | | | | |
| 5) | Assembly and wiring of component supplied separately. | | | | |
| 6) | Touching of body with powder coating for damaged parts. All the nuts bolts & joints exposed to the air shall be covered with suitable anti - oxidant material or as directed by the Engineer incharge. | | | | |
| 7) | Supply all accessories and supporting structure. | | | | |
| 8) | Checking of Internal connection & wiring, operation of switches, MCCB, MCB etc. | | | | |
| 9) | Testing of panels as per specifications at manufacturer's works in presence of client's representative and/or consultant. | | | | |
| 10) | Delivery of the panels / DB's to site. | | | | |
| 11) | Shifting of the panels from site store to the suitable location. | | | | |
| 11) | Assembly and wiring of component supplied separately. | | | | |
| 12) | Installation of panels as per Location arranged by site Engineer in charge including removing packing. | | | | |

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| 13) | Earthing all components, frame etc. to a common internal earth bar. | | | | |
| 14) | Touching of body with powder coating for damaged parts. All the nuts bolts & joints exposed to the air shall be covered with suitable anti - oxidant material or as directed by the Engineer incharge. | | | | |
| 15) | Supply and fixing all accessories and supporting structure. | | | | |
| 16) | Checking of Internal connection & wiring, operation of switches, MCCB, MCB etc. | | | | |
| 17) | Supply of necessary tools, hardware, testing hardware, testing equipment during testing at site. | | | | |
| 18) | Supply & fixing of 100 mm main steel [No rolling mill material shall be allowed] MS channels for fixing the panel, alongwith all the required civil materials required to complete the job as per the instruction of Engineer Incharge | | | | |
| 19) | To carry out the insulation test at site and all the readings shall be submitted in duplicate to the consultant or engineer in-charge. | | | | |
| 20) | To co-ordinate with other agencies working at site | | | | |
| 21) | To prepare shop drawing and to take approval of consultant & client at each stage. | | | | |
| 22) | To prepare & submit as-built drawing and handing over document to end user. | | | | |
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| 1.1.1 | Supply, Installation, assembly, connection, testing and commissioning of MAIN LT as per Specification with energy meter. Technical Data sheet & ISI PER SLD. | No. | 1 | | |
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| 2.0 | LIGHTING / POWER DISTRIBUTION BOARDS | | | | |
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| 2.1 | Supply, installation, Testing & Commissioning of Distribution Board as per following Description. | | | | |
| | The distribution board shall be sheet steel clad (Fabricated / ready made), concealed/recessed mounted, constructed from 14 SWG sheet steel finished with rust proof red oxide coating and two coats of paint with hinged gasketted door. | | | | |
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| | DBs shall have following features/Compliances: | | | | |
| 1) | Conforms to IS8623-1&3,IEC61439-1&3 | | | | |
| 2) | IP-43 or 42 :- Ensures DB are protected against Foreign bodies and liquids. | | | | |
| 3) | IK-08,09 :- Ensures that the DB are well protected against Mechanical Impact | | | | |
| 4) | ROHS Compliance | | | | |
| 5) | Double door type with Reversible doors | | | | |
| 6) | Earthing facility with star washer (Per phase earthing strip) | | | | |
| 7) | Independently packed door, frame, shield cover | | | | |
| 8) | Removable Chasis | | | | |
| 9) | With Wiring kit (Insulated Busbars,Cablesties,Sticking saddles, Blanking plates shall be provided) | | | | |
| 10) | Shall have high quality gaskets ensuring IP for life time. | | | | |
| 11) | Front shield cover with kNos.bs and locked screws | | | | |
| 12) | Locks with padlock facility | | | | |
| 13) | Cable kNos.ckouts on all sides | | | | |
| 14) | Mark for insertion on DB | | | | |
| 15) | Cement spill cover | | | | |
| 16) | Neutral Shrouded (per phase neutral links) | | | | |
| 17) | Per phase isolation (PPI Type), Prewired up to the connector strip. | | | | |
| 18) | PVC insulated copper busbars with interconnections | | | | |
| 19) | Horizontal/Vertical series type Distribution boards with MCB/MCCB as Incommer as per descriptions mentioned below: | | | | |
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| | The unit rate for each item shall include : | | | | |
| 1) | Supply of DBs | | | | |
| 2) | Delivery of the DB's to site. | | | | |

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| 3) | Shifting of the DBs from site store to the suitable location. | | | | |
| 4) | Assembly and wiring of component supplied separately. | | | | |
| 5) | Installation of DBs as per Location arranged by site Engineer in charge including removing packing. | | | | |
| 6) | Earthing all components, frame etc. to a common internal earth bar. | | | | |
| 7) | Touching of body with powder coating for damaged parts. All the nuts bolts & joints exposed to the air shall be covered with suitable anti - oxidant material or as directed by the Engineer incharge. | | | | |
| 8) | Supply and fixing all accessories and supporting structure. | | | | |
| 9) | Checking of Internal connection & wiring, operation of switches, MCCB, MCB etc. | | | | |
| 10) | Supply of necessary tools, hardware, testing hardware, testing equipment during testing at site. | | | | |
| 11) | To prepare submission drawing and to take approval of consultant at each stage. | | | | |
| 11) | To prepare & submit as-built drawing and handing over document to end user. | | | | |
| | Note :The DBs shall be supplied at site to be used during civil construction activity. It should be supplied with proper protection to avoid any physical damage or ingress of water / cement during construction. | | | | |
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| 2.1.1 | Supply , Installation , Testing and commissioning of Double door type 6 WAY TPN LDB as per specifications and relevant IS. Drawing Incomer : 32A TPN MCB- C Class Outgoing: 3Nos. 25A DP ELCB (One in each phase - 30mA) C Class 12 Nos. 10-16A SP MCB - C Class | Nos. | 1 | | |
| 2.1.2 | Supply , Installation , Testing and commissioning of Double door type 8 WAY TPN RPDB & AC DB as per specifications and relevant IS. Drawing Incomer : 63A TPN MCB C Class Outgoing: 3 Nos. 40A DP ELCB (One in each phase - 100mA) 18 Nos. 16 - 32A SP MCB - C Classs | Nos. | 0 | | |
| 2.1.3 | Supply , Installation , Testing and commissioning of Double door type 4 WAY V TPN UPS DB as per specifications and relevant IS. Drawing Incomer : 63A TPN MCB Outgoing : 12 Nos. 32A SP MCB - C Class | Nos. | 2 | | |
| 2.1.4 | Supply , Installation , Testing and commissioning of Double door type 12 WAY SPN DB as per specifications and relevant IS. Drawing Incomer : 32A DP MCB- C Class Outgoing: 10 Nos. 16A SP MCB | Nos. | 1 | | |
| 2.1.5 | Supply , Installation , Testing and commissioning of 32 Amp DP MCB C Class With Encloser | Nos | 2 | | |
| 2.1.6 | Supply , Installation , Testing and commissioning of 63 Amp 4P MCB C Class With Encloser | Nos | 4 | | |
| 2.1.7 | Supply , Installation , Testing and commissioning of 16 Amp DP sequence controller. | Nos | 1 | | |
| 2.1.8 | Supply , Installation , Testing and commissioning of 32 Amp 4P sequence controller | Nos | 1 | | |
| 2.1.9 | Supply , Installation , Testing and commissioning of 32 Amp 4P MCB C Class With Encloser | Nos | 2 | | |

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| 2.1.10 | Supply , Installation , Testing and commissioning of 125A 4P Mccb 25 AK With Outdoor Type Encloser | Nos | 1 | | |
| 3.0 | LOW VOLTAGE CABLE | | | | |
| 3.1 | Supply, laying, connection, testing and commissioning of heavy duty, low voltage, XLPE (IS 7098 - PART-II) insulated, stranded AL / Cu conductor Armoured cables as per specification & IS. | | | | |
| | The cable shall have inner sheeth of XLPE and outer sheath of PVC ST2 (FRSL) type with stranded AL/Cu conductor wherever specified. | | | | |
| | Outside Building Installation: The cable shall be laid underground in excavated trench / prepared trench / hume pipes when laid outside the building. Cost of excavation, trenches, hume pipes shall be considered under separate head | | | | |
| | Within Building Installation: Cable shall be laid throught preapred trench / cable tray / duct / hume pipe / channel / floor trunks etc when laid inside the building. Cost of excavation, trenches, trays, hume pipes, channel, trunks shall be considered under separate head. | | | | |
| | The scope shall include: | | | | |
| | 1) Supply of Cables. | | | | |
| | 2) Delivery of the cables at site. | | | | |
| | 3) Unloading at site store. | | | | |
| | 4) Shifting of cable from site store to place of installation. | | | | |
| | 5) Excavation in hard or soft murrem / rocky area upto required depth, supply and laying of protection bricks, supply and backfilling with fine sand, leveling the ground to match with the existing condition. | | | | |
| | 5) Laying of cable in the excavated trench / prepared trench / cable tray / duct / hume pipe / channel / floor trunks when laid inside or outside the building. | | | | |
| | 6) Connection of cable. | | | | |
| | 7) Supply & fixing of cable clamps, brackets, supports, route markers etc. where ever required to fix the cables safely. | | | | |
| | 8) Earthing the glands and armouring with earthing clamp and jumper and also connecting to common earth bar. | | | | |
| | 9) Testing of insulation and continuity of cable and submission of reports to the client's representative. | | | | |
| | 10) To prepare submission drawing and to take approval of consultant at each stage. | | | | |
| | 11) To prepare & submit as-built drawing and handing over document to end user. | | | | |
| 3.1.1 | 4C X 240 mm ² AL XLPE - FRLS | Mtr. | 0 | | |
| 3.1.2 | 4C X 50 mm ² CU XLPE - FRLS | Mtr. | 100 | | |
| 3.1.3 | 4C X 10mm ² CU XLPE CABLE - FRLS | Mtr. | 20 | | |
| 3.1.4 | 4C X 4 mm ² CU XLPE CABLE - FRLS | Mtr. | 100 | | |
| 3.1.5 | 4C X 6 mm ² CU XLPE CABLE - FRLS | Mtr. | 50 | | |
| 3.1.6 | 1C x 25 Sq.mm FRLS Flexible Cable | Mtr. | 200 | | |
| 3.2 | CABLE END TERMINATION AND CONNECTION | | | | |

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| | Supply, fixing, connection, testing & commissioning of Double compression brass cable glands and crimping type Bimetalic lugs / sockets with necessary tools and equipments as specified in specifications and IS. For outdoor installations, double compression glands shall be considered. The glands and lugs / sockets shall be suitable for cable size and type mentioned above. The job also includes, if necessary, supply and fixing of extension busbar of same material on circuit breaker or panel board terminal / connector to connect more than one Nos. of parallel cables or to connect higher size cable to lower size unit. The job also includes earthing the glands and armour of the cable with common earth bar or flexible copper mesh. | | | | |
| 3.2.1 | 4C X 240 mm ² AL XLPE - FRLS | Nos. | 0 | | |
| 3.2.2 | 4C X 50 mm ² CU XLPE - FRLS | Nos. | 8 | | |
| 3.2.3 | 4C X 10mm ² CU XLPE CABLE - FRLS | Nos. | 16 | | |
| 3.2.4 | 4C X 4 mm ² CU XLPE CABLE - FRLS | Nos. | 8 | | |
| 3.2.5 | 4C X 6 mm ² CU XLPE CABLE - FRLS | Nos. | 4 | | |
| 3.2.6 | 1C x 25 Sq.mm FRLS Flexible Cable | Nos | 16 | | |
| 4 | CABLE TRAY WITH COVER | | | | |
| 4.1 | Supply and laying of pre galvanised, GI readymade Perforated Cable Tray With Support & Cover | | | | |
| 4.1.1 | 300 X 50 X 2 MM Thick Perforated Cable Tray With Cover | Mtrs. | 80 | | |
| 4.1.2 | 150 X 50 X 2 MM Thick Perforated Cable Tray With Cover | Mtrs. | 40 | | |
| 5.0 | LIGHT FIXTURES AND FANS | | | | |
| 5.1 | Supply, Installation, assembling, connection, testing & commissioning of fixtures complete with suitable rating LED luminaries, high power factor improving capacitor, control gears and all other necessary accessories to complete the installations. Power rating of light fixture mentioned below is bare minimum. Vender to supply equal or higher rating luminaries | | | | |
| 5.1.1 | Supply, Installation, testing and commissioning of 15-18 W CEILING MOUNTED DOWN LIGHTER - 4000K LED | Nos. | 12 | | |
| 6.0 | INTERNAL WIRING | | | | |
| 6.1 | Wiring for Light Points Controlled from Switch Boards | | | | |
| | Supply, installation, connection, testing & commissioning of following outlet points as per Specification & IS. The unit rate for the point shall consist of the circuit wiring from LDB and/or switch board to outlet point through switch as required & including the outlet points with connector & sockets. A point shall include in addition to phase & neutral wire, earth continuity wire from LDB to the final termination at outlet points. All the wiring, outlet points shall be done in a surface / concealed manner with metal conduit of minimum 25 mm. dia. using 1100 V FRLS copper conductor wire. Supply and installation of Modular switches with suitable plate, PVC/GI back box with brass chromium / cadmium plated machine screws etc. shall be part of job. | | | | |

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| | Wire Size: | | | | |
| | Phase & Neutral : 1.5 mm² Cu FRLS flexible wire (1100 V) | | | | |
| | Earth : 1.5 mm² Cu FRLS flexible wire (1100 V) | | | | |
| 6.1.1 | light points controlled by one 6A switch or Loop Light Point | Nos. | 12 | | |
| 6.1.2 | 6A socket with one 6A switch on switch board with cover plate and all required accessories | Nos. | 4 | | |
| 6.1.3 | Supply ,fixing, connection and testing of 5-pin 16A power plug socket alongwith 16A switch with top cover plate, PVC/GI back box suitable for modular plate with all accessories to complete the job. | Nos. | 8 | | |
| 6.1.4 | 32 Amp PVC Industrial Socket With Plug | Nos. | 8 | | |
| 6.2 | Mains Wiring for Lighting Circuits | | | | |
| | Supply, laying, connection and testing of lighting wiring from DB to switch board with following wires to be laid through Metal conduit in concealed/surface manner. | | | | |
| 6.3.1 | Supply, laying, connection and testing of 2R x 2.5 Sq.mm & 1R x 1.5 Sq.mm Cu FRLS flexible wire (1100 V) to be laid Metal conduit. | Mtr. | 100 | | |
| 6.2.1 | Supply, laying, connection and testing of 2R x 4 Sq.mm & 1R x 2.5 Sq.mm Cu FRLS flexible wire (1100 V) to be laid Metal conduit. | Mtr. | 100 | | |
| 6.2.3 | Supply, laying, connection and testing of 3C x 6 Sq.mm Cu FRLS flexible wire (1100 V) to be laid Metal conduit. | Mtr. | 140 | | |
| 6.2.4 | Supply, laying, connection and testing of 3C x 1.5 Sq.mm Cu FRLS flexible wire (1100 V) to be laid Metal conduit. | Mtr. | 100 | | |
| 6.2.5 | Removing existing cabling from the back side area near the electrical panel and refixing all cables properly in the cable tray using required materials and accessories | Job | 1 | | |
| 7.0 | EARTHING SYSTEM & LA | | | | |
| 7.1 | Earthing Stations | | | | |
| | Supply, installation, connection and testing of plate type / pipe type earthing station for various electrical equipments and systems as per IS with following. | | | | |
| | 1) Excavation in soft soil / hard marrum | | | | |
| | 2) Supply of copper plate electrode / G.I. Pipe electrode. | | | | |
| | 3) Supply & fixing of watering 'B'Class pipe. | | | | |
| | 4) Supply of civil material and preperation of brick masonry earth pit chamber with Heayy Duty C.I. frame and hinged covers of suitable size as per drawing. | | | | |
| | 5) Supply and providing of charcoal and salt for filling in earth pit. | | | | |
| | 6) Supply of tools and tackles necessary for excavation to a desire depth and doing necessary civil work etc. | | | | |
| | 7) Testing earth resistivity before earthing and electrode resistance after completion of work. | | | | |
| | 8) Supply and fixing of Equipotential bar with housing alongwith necessary mounting accessories. | | | | |
| 7.1.1 | SITC of 600 MM X 600 MM X 3 MM PURE COPPER PLATE , 50 MM DIA 3 MTR GI FUNNEL PIPE, 50 MM X MM COPPER STRIP 6 MTR], SALT [50 KG],CHARCOAL [50 KG], WITH AS PER NOMS | Nos. | 6 | | |
| 7.2 | Earthing Conductor | | | | |

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| | Supply, laying, connection and testing bare earthing conductor for inter-connecting the earthing stations and various equipment in built up trenches, walls/ceiling, buried in ground generally as specified and shown on the drawing complete with : | | | | |
| 1) | Supply & fixing accessories like earthing clamp, saddle, etc. | | | | |
| 2) | Supply of corrosion protection of buried conductors with bitumi Nos.us coating | | | | |
| 3) | Supply of Test links (Copper/GI) etc. | | | | |
| 7.2.1 | 10 Sq.mm Earthing Cable | Mtr. | 100 | | |
| 7.2.2 | 16 Sq.mm Earthing Cable | Mtr. | 100 | | |
| 7.3 | Equipotential bar | | | | |
| | Supply, installation, testing and commissioning of below mentioned Equipotential bar with suitable size junction box to inter connect different earthing conductor. | | | | |
| | Scope covers: | | | | |
| 1) | Supply and installation of Equipotential bar | | | | |
| 2) | Supply and installation of suitable size CRCA sheet junction box | | | | |
| 3) | The bar shall be provided with min. six knockouts for connecting the equipment to earthing station. | | | | |
| 7.3.1 | 50 x 12 mm CU Equipotential bar of 500 mm length | Nos. | 2 | | |
| 7.4 | ESE TYPE LIGHTING ARRESTER | | | | |
| 7.4.1 | ESE 45 MTR REDIUS TYPE LIGHTING ARRESTER 45 Meter Lightning Arrester(4.1) with non electronic ESE (earthly steame Eremission) standardized accordng to norms UNE 21.186 and NFC 17.102 duly tested and certified by CPRI Bangalore, having coverage area 107 mtr. Level -1. Having Lightning charge capacity 40 kA with 15 micro seconds delay. Mounting Pole 50 mm Diameter 3 mtr length insulated mounting pole made of GI material to mount Ligthning Aresster. (Height as per level selection withnylon insulation for isolation Wind capecity 120 kmph Mounting Base. Mounting Base for counting and supporting mast With Down Conductor 50 sq mm CABLE PURE COPPER INSULATORE ALL ACCESSORIES LIKE SADDLES & ANCHOR FASTNER NUT BOLTS. EARTHING 50 MM DIA 3 MTR COPPER BONDED EARTHING ELECTRODE INSTOLLATION As per noms proper instollation | SET | 1 | | |
| 8.1 | SAFETY ACCESSORIES | | | | |
| 8.1.1 | Supply and installation of 440 V DANGER caution board in Gujarati, Hindi & English made from vitreous enameled steel and to be fixed on door/ shutter inside electrical room. | No. | 2 | | |
| 8.1.2 | Supply and fixing of 4.5 Kg. Co2 type portable fire extinguisher with necessary clamps, supports and trolley. | No. | 2 | | |
| 8.1.3 | Supply of First Aid Box with necessary medicine. | No. | 1 | | |
| 8.1.4 | Supply and fixing of First Aid Chart in glassed box with laminated wooden frame mounted on wall. | No. | 1 | | |

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|-------|---|------|---|--|--|
| 8.1.5 | Supply and fixing of 6.0 Kg. abc type portable fire extinguisher with necessary clamps, supports and trolley. | No. | 2 | | |
| 8.1.6 | Supply and fixing For Safety Matt | Rmtr | 4 | | |

BOQ FOR PAC WORK

| Sr. No | Description | Unit | Total Qty | Unit Price (INR) | Total Price (INR) |
|----------|--|------|-----------|------------------|-------------------|
| A | SRC Unit | | | | |
| 1 | Supply, Installation, Testing and Commissioning of 3 TON SRC Cooling Unit with Outdoor Unit. | Nos | 2.00 | | |
| 2 | Supply, Installation, Testing and Commissioning of Standard Piping and Cabling. | Nos | 2.00 | | |
| 3 | Supply, Installation, Testing and Commissioning of Fabrication stand | Nos | 2.00 | | |
| 4 | SITC of 1 tr split inverter ac With CU Piping and Stand | Nos | 2.00 | | |

BOQ FOR ELV WORK

| Sr.No. | Description of items | Unit | Qty | Unit Price (INR) | Total Price (INR) |
|----------|---|------|--------|------------------|-------------------|
| 1 | RODENT REPELLANT SYSTEM | | | | |
| 1.01 | Supply, Installation, Testing and Commissioning of Master Console without satellites for Rodent Repellent system | Nos | 1.00 | | |
| 1.02 | Supply, Installation, Testing and Commissioning of Satellites to be installed with the Roden Repellant System at a minimum of 24 satellites per master console | Nos | 12.00 | | |
| 1.03 | Supply and surface laying of 2 core x 1 Sq.mm cable flexible cable in 20mm dia PVC conduit | Mtr | 200.00 | | |
| 2 | VESDA SYSTEM | | | | |
| 2.01 | Supply of Laser based Absolute Smoke Detection system with single pipe inlet, 250 m2 coverage; Wide sensitivity range - 0.025%~20% obs/m; 4 alarm levels ; High efficiency aspirator; Clean air barrier optics protection to prevent contamination of detection chamber; Easy to replace dual stage filter with memory; 3 Nos of inbuilt potential free relay outputs; supports linear pipe length of 25m or branched pipe up to 30m; supports 12 Nos of EN54 Class A sampling points, AutoLearn for automatic setup of alarm threshold, Referencing & Event log (18000 events); Approvals-UL, ULC, FM, ActivFire, VdS, CE , EN54-20. | Nos | 1.00 | | |
| 2.02 | Power supply unit with 110/230VAC input and 18 to 29VDC output | Nos | 1.00 | | |
| 2.03 | Sampling Pipe - 25mm OD, 18 to 21mm ID smooth bore PVC/UPVC/CVPC/ABS Plastic Pipe | Mtrs | 30.00 | | |
| 2.04 | Supply & installation of Capillary Set for False ceiling Applications | Nos | 5.00 | | |
| 2.05 | Conventional hooter cum strobe | Lot | 1.00 | | |
| 2.06 | 2 core 1.5 Sqmm FRLS Cable for Power Supply | Mtrs | 100.00 | | |
| 2.07 | Programmig , Testing & Commissioning | Job | 1.00 | | |
| 3 | ADDRESSABLE FIRE DETECTION SYSTEM - | | | | |

| | | | | | |
|------|--|-----|-------|--|--|
| 3.01 | SITC of UL, ULC listed and FM approved (UL 864 listed, 10th Edition) 32-bit Microprocessor based Single loop Intelligent Addressable, Peer-to-Peer networkable, expandable up to 4-loop FACP (Fire Alarm Control Panel). FACP shall accommodate up to 2 nos. of 12V/50AH batteries in its own housing and shall have a battery charging capacity of (up to) 2 nos. of 12V/100 AH housed externally. The cabinet assembly shall be NEMA 1 rated and IP30. FACP shall have 80 ch. LCD display to show 2 simultaneous events at time and at least 5 custom-programmable buttons for user-specific programmable functions. Each Detection Loop of FACP shall accommodate up to 250 detectors and devices in any combination (support of min. 200 detectors per loop). FACP shall accommodate up to 1000 detectors and devices at 100% capacity in any combination. FACP shall have a supervised electronic provision to store site-related back-up of Auto-CAD As-Built Drawings, Configuration Software Back-Up, Reports, Logs etc. with Bacnet / MODBUS Module for 3rd Party Integration | Nos | 1.00 | | |
| 3.02 | SITC of PC based Color Graphic User Interface Station to provide Annunciation, Status display, Monitoring of each and every element connected to Fire Alarm System and Networks. It should support and have future provision for mobile client iOS & Android (as applicable) to access system information. It should support up to 5,00,000 events history logs & 2,50,000 network points. The Centralized software should be capable of monitoring up to 687 total Nodes with 100 Mbps Transmission rate on Fibre Optics Network and up to 12 Mbps Transmission on Cu cable. The software should be capable to offer multiple password access levels for different users. It should work on Windows10, 64 bit OS | Nos | 0.00 | | |
| 3.03 | SITC of UL, ULC listed and FM approved Active Repeater Panel with 80-Character (2x40) display with supervised power supply from FACP. Repeater Panel shall monitor and control (Scroll, Acknowledge, Reset & Mute) all the events of the FACP to which it is connected and it shall have Port Vectoring / Event Filtering capability of showing only ALARMS, TROUBLES or SUPERVISORY or customized combinations of user selected events. | Nos | 1.00 | | |
| 3.04 | SITC of UL, ULC listed and FM approved Intelligent Addressable Multi-Sensor (Optical Smoke + Heat + RoR) detector with base. The optical sensor element shall have multiple selectable sensitivity levels from 0.2% Obs/ft to 3.1% Obs/ft. The ROR detection element shall have selectable rate of rise setting of 8°C per minute & 11°C per minute (or close to this value not deviating more than 1°C). Fixed temp detection element shall have two selectable settings of 57°C and 68°C (or closer to this value not deviating by 1°C). Multisensor detector shall have a configuration mode that gives separate alarms for smoke detection and heat detection and shall indicate the cause of alarm (smoke or heat). Also the multi-sensor shall have combined configuration mode of smoke and heat detection that gives only one evaluated alarm from a multi-sensor detector in case of a fire event. The detector shall have operating temperature range from -9°C to 50°C and humidity tolerance range up to 95% RH, Non-Condensing. | Nos | 12.00 | | |

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|----------|---|-----|--------|--|--|
| 3.05 | SITC of UL, ULC listed and FM approved Intelligent Addressable Double Action Indoor Application Manual Pull Stations / Manual Call Points suitable for wall/column mounting. MCP shall have red coloured housing with molded, raised-letter operating instructions of contrast colour. The MCP shall latch mechanically upon operation and shall remain so until manually reset with its key by an authorized operator. The MCP shall have operating temperature range from 0°C to 50°C and humidity tolerance range up to 93% RH, Non-Condensing. | Nos | 2.00 | | |
| 3.06 | SITC of UL, ULC listed and FM approved Addressable Notification Devices (Hooter with Strobe). Hooter with Strobe unit shall sit directly on addressable NAC (Notification Appliance Circuit) of FACP, fully supervised and powered from FACP. Hooter and Strobe elements of the combined unit shall have independent activation & deactivation criteria. Hooter shall stop at alarm "Acknowledge" and the Strobe shall stop at panel "Reset". The Hooter and Strobe element of Hooter cum Strobe combined unit shall be selected and triggered independently from FACP for performance check and maintenance. Hooter with Strobe unit shall have provision to be tested by a hand-held field diagnostic tool in "Silent Mode" and "Full Operation Sound Mode". The Strobe shall have multiple selectable candela settings configured and selected from the FACP. The hooter cum Strobe unit shall deliver output up to 94 db at 3m from its installed location. The sounder/strobe unit shall display the voltage received by them at the control panel. The activation & deactivation requirement of Notification devices shall not be deviated. | Lot | 2.00 | | |
| 3.07 | Supply, Installation, Testing and commissioning of Addressable UL and FM approved Control Module with Feature of Polarity Incesentative and inbuilt fault isolator for third party integration like AHU, Access control. | Nos | 6.00 | | |
| 3.08 | Supply, Installation, Testing and commissioning of Addressable UL and FM approved Monitor Module with Feature of Polarity Incesentative and inbuilt fault isolator. | Nos | 2.00 | | |
| 3.09 | Supply, Installation, Testing and Commissioning of Junction box for Detector, MCP and Sounder. | Nos | 12.00 | | |
| 3.10 | Supply, Installation, Testing and Commissioning of 2 core 1.5 Sq. MM CU PVC sheathed armoured cable in open manner on wall through saddling. | Mtr | 200.00 | | |
| | | | | | |
| 4 | PA SYSTEM | | | | |
| 4.01 | Supply, Installation, Testing & Commissioning of 2 zone Digital Voice Evacuation Master controller with built in 180 watt Amplifier. The System shall meet the standards of BS EN54 - 32 & EN 60849. The System Shall have Built in 180W Amplifier and it should be capable for the EVAC, Paging, PA and BGM functions. The Controller shall have Speaker line supervision record out and amplifier auto changeover. The Controller shall have following features: Separate Zone volume control at the front side of panel, Status indications on the Panel for EVAC, Fault, AC, DC, Fault, ALERT & Fireman mic, Zone capacity up to 2 Zones, | NOS | 1.00 | | |
| | Supply installing, testing and commissioning of 2 zone paging microphone (call station) with necessary Zone wise, Group Zones and all call facility. The Microphone should have LED Indication, Can be Expand with additional units, Compress function through microphone input to avoid distortion, Auxiliary input which supply local background music. Power 24V DC, Microphone should be able to Control the Music also. Microphone Should supply with all accessories and with standard specification, complete. | NOS | 1.00 | | |

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|----------|--|-----|--------|--|--|
| | Supplying, installing, testing and commissioning of 6W Recessed Ceiling speakers with following features:-Speaker Drive 5", Complete metal grille and line matching transformer 100/70V line. Variable wattage tapings of 6 / 3 / 1.5 at 100v, Effective frequency range 90-18kHz (BS6840), SPL@1m/1W=90dB, Peak SPL 98dB complete with necessary mounting hardware & accessories. | NOS | 4.00 | | |
| 4.02 | Supply and laying of the 2C X 1 sq mm Speaker Wire With MMS ISI Pipe | RM | 150.00 | | |
| | | | | | |
| 5 | ACCESS CONTROL SYSTEM | | | | |
| 5.01 | Supply, Installation, Testing and Commissioning of Biometric Reader with standalone controller | Nos | 1.00 | | |
| 5.02 | Supply, Installation, Testing and Commissioning of EM Lock Single lef | Nos | 2.00 | | |
| 5.03 | Supply, Installation, Testing and Commissioning of Prox Card. | Nos | 20.00 | | |
| 5.04 | Supply, Installation, Testing and Commissioning Resettable Emergency release Boxetc. | Nos | 1.00 | | |
| 5.05 | Supply, Installation, Testing and Commissioning of Cat 6 cable in PVC MMS ISI conduit. | Mtr | 100.00 | | |
| | | | | | |
| 6 | WLD SYSTEM | | | | |
| 6.01 | Supply, Installation, Testing and Commissioning of 10 Mtr Water leak Detection Cable. | Nos | 2.00 | | |
| 6.02 | Supply, Installation, Testing and Commissioning of 20 Mtr Water leak Detection Cable. | Nos | 2.00 | | |
| 6.03 | Supply, Installation, Testing and Commissioning of 8 Zone water leak detection panel with battery backup. | Nos | 1.00 | | |
| 6.04 | Supply and Installation of Sounder cum Strobe for waterleak Detection. | Nos | 1.00 | | |
| 6.05 | Supply and surface laying of 2 core x 1 Sq.mm cable flexible cable in 25mm dia PVC conduit | Nos | 100.00 | | |
| | | | | | |
| 7 | CCTV Surveillance | | | | |
| 7.01 | Supply, Installation, Testing and Commissioning of 2 MP Fix Dome Camera. | Nos | 6.00 | | |
| 7.02 | Supply, Installation, Testing and Commissioning of 2 MP Fix Bullet Camera. | Nos | 1.00 | | |
| 7.03 | Supply, Installation, Testing and Commissioning of 16 Ch Network Video Recorder with 4 sata HDD. | Nos | 1.00 | | |
| 7.04 | Supply, Installation, Testing and Commissioning of 8 TB sata HDD. | Nos | 1.00 | | |
| 7.05 | Supply, Installation, Testing and Commissioning of 55" LED Display for Monitoring | Nos | 1.00 | | |
| 7.06 | Supply, Installation, Testing and Commissioning of Standard Workstation without Display for Monitoring. | Nos | 1.00 | | |
| 7.07 | Supply, Installation, Testing and Commissioning of 16 Port POE switch. | Nos | 1.00 | | |
| 7.08 | Supply, Installation, Testing and Commissioning of Cat 6 cable in PVC conduit. | Mtr | 200.00 | | |
| | | | | | |
| 8 | Building Monitoring System (iBMS) | | | | |
| 8.01 | Supply, Installation, Testing and Commissioning of BMS Grafic Software with capacity 2000 point with Email Notification as per requirememnt. | Nos | 1.00 | | |
| 8.02 | Supply, Installation, Testing and Commissioning of Standard Workstation for BMS with Standard Display for Monitoring. | Nos | 1.00 | | |
| 8.03 | Supply, Installation, Testing and Commissioning of TCP IP Base Controller with dual RS 485 port Control for Soft integration enclosure and internal wiring as per requirement. | Nos | 1.00 | | |
| 8.04 | Supply, Installation, Testing and Commissioning of TCP IP Base Controller with Hard IO controller Hard integration enclosure and internal wiring as per requirement. | Nos | 1.00 | | |
| 8.05 | Supply, Installation, Testing and Commissioning of Room Mount Temperature and Humidity sensor with Display. | Nos | 3.00 | | |
| 8.06 | Supply, Installation, Testing and Commissioning of Third Party Soft Integrator. | Lot | 1.00 | | |
| a | Online UPS - 2 Qty | | | | |

| b | DG Set - 1 Qty | | | | |
|--|--|-------------|------------|-------------------------|--------------------------|
| c | Smart Cooling Unit (SRC) - 2 Qty | | | | |
| d | Fire Detection System - 1 Qty | | | | |
| e | Fire Suppression System - 1 Qty | | | | |
| f | Waterleak Detection System - 1 Qty, RODENT - 1 Nos | | | | |
| g | Electrical Panel - 1 Qty | | | | |
| 8.07 | Supply and surface laying of 4 core x 1 Sq.mm cable flexible cable in 25mm dia PVC conduit | Mtr | 150.00 | | |
| 8.08 | Supply and surface laying of 8 core x 1 Sq.mm cable flexible cable in 25mm dia PVC conduit | Mtr | 250.00 | | |
| 8.09 | Supply and surface laying of 2 core x 1 Sq.mm cable flexible cable in 25mm dia PVC conduit | Mtr | 300.00 | | |
| BOQ FOR SUPPRESSION SYSTEM WORK | | | | | |
| Sr.No. | Description of items | Unit | Qty | Unit Price (INR) | Total Price (INR) |
| 1 | VDS APPROVED - SUPPRESSION SYSTEM - SERVER ROOM | | | | |
| 1.01 | Supply of PESO / CCOE Approved UL Listed FK5112 Seamless 80L Cylinder (Main) of below capacity from OEM Factory filled with FK5112 Liquid of below capacity & Pressurised to 25 BAR as per requirement with Valve assembly, pressure guage, protection cap, container straps etc. with complete required assembly. | Nos. | 1 | | |
| 1.02 | Supply of FK5112 Fire Protection Fluid in Kg.(Factory Filled) | Kgs | 45 | | |
| 1.03 | Supply, installation, testing & commissioning of Cylinder Low Pressure Switch with required accessories. UL Listed / FM approved | Nos. | 1 | | |
| 1.04 | Supply, installation, testing & commissioning of Discharge Pressure Switch with required accessories. UL Listed / FM approved | Nos. | 1 | | |
| 1.05 | Supply, installation, testing & commissioning of Electrical(Solenoid) Actuator with required accessories. UL Listed / FM approved | Nos. | 1 | | |
| 1.06 | Supply, installation, testing & commissioning of Flexible Cylinder Discharge Hose complete with all accessories, UL Listed / FM approved | Nos. | 1 | | |
| 1.07 | Supply, installation, testing & commissioning of Manual Actuator with required accessories. UL Listed / FM approved | Nos. | 1 | | |
| 1.08 | Supply, installation, testing & commissioning of Pneumatic Actuator with required accessories. UL Listed / FM approved | Nos. | 0 | | |
| 1.09 | Supply, installation, testing & commissioning of WARNING PLATE-DO NOT ENTR | Nos. | 1 | | |
| 1.1 | Supply, installation, testing & commissioning of WARNING PLATE-VACATE AREA | Nos. | 1 | | |
| 1.11 | Supply installation Testing & commissioning of Cylinder mounting straps | Nos. | 2 | | |
| 1.12 | Supply, installation, testing & commissioning of Nozzles, 360 Deg / 180 Deg Throw, selection as per approved hydraulic flow calculations. | Nos. | 4 | | |
| 1.13 | Supply, installation, testing & commissioning of MS Seamless Pipes, Supports, with angles, painting to Indian Standards. | Lot. | 1 | | |
| 1.14 | Supply installation Testing & commissioning of UL Listed Single zone Gas Release Panel facility to connect Manual Abort/Release switches. The Panel shall provide Potential free contacts for Trouble / Fault Status. The Panel shall be Complete with Red Colour Housing, Monitored Power supply units for Notification devices & warning signages of the system, including with Battery charger & batteries. | Nos. | 1 | | |
| 1.15 | Supply installation Testing & commissioning of UL Listed Manual Abort Stations with DPDT Relay, The Abort will be monitored simultaneously by Fire Alarm and BMS System. Complete with required mounting accessories. | Nos. | 1 | | |

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|------|--|-------|-----|--|--|
| 1.16 | Supply installation Testing & commissioning of UL Listed Manual Release Stations with DPDT Relay, The Release switch will be monitored simultaneously by Fire Alarm and BMS System. Complete with required mounting accessories. | Nos. | 1 | | |
| 1.17 | Supply installation Testing & commissioning of Conventional smoke detector with base. | Nos. | 4 | | |
| 1.18 | Supply installation Testing & commissioning of Response Indicator. | Nos. | 2 | | |
| 1.19 | Supply installation Testing & commissioning of Hooter. | Nos. | 1 | | |
| 1.2 | Supply installation Testing & commissioning of Hooter cum Strobe. | Nos. | 1 | | |
| 1.21 | Supply installation Testing & commissioning of Warning Sign Board with Marking "GAS DISCHARGE. DO NOT ENTER". Shall Operate on 24 V DC, Driven Through Gas Release Panel. (for use outside room) | Nos. | 1 | | |
| 1.22 | Supply installation Testing & commissioning of Warning Sign Board with Marking "GAS DISCHARGE. EVACUATE IMMEDIATELY". Shall Operate on 24 V DC, Driven Through Gas Release Panel. (for use inside room) | Nos. | 1 | | |
| 1.23 | Supply installation of ISI Marked 2 Core x 1.5 mm ² , Multistranded Annealed Tinned Copper, Shielded FRLS, Armoured cable, RED in Colour. The cable shall be laid on surface with hot dip GI Saddels and spacers every 0.3 meters. Complete with GI Junction Box, lugs, cable compression glands, cable tags and Ferruling. | Mtrs. | 100 | | |
| 1.24 | Towards Conducting Room Integrity Test : Door Fan test to meet the Requirements of the NFPA 2001, and predicting the efficacy of the Protected Area Enclosure from the perspective of Fire Suppression. | Nos. | 1 | | |
| 1.25 | Towards Hydraulic Flow Calculations for the Suppression areas, and vetting of the Software Results from the OEM Factory Engineer. | Nos. | 1 | | |

BOQ FOR NETWORKING, RACK, CCTV & ACCESS CONTROL

| Nos | SPECIFICATION | Unit | Qty | Unit Price (INR) | Total Price (INR) |
|-----|--|------|-----|------------------|-------------------|
| | BILL OF QUANTITY FOR PASSIVE LAN CABLING AND RACKS & INTELLEAGENT PDU | | | | |
| A | Multimode OM4 Fiber Connectivity | | | | |
| 1 | SITC of 12 core Multimode OM4 indoor fiber cable with LSZH jacket | RM | 300 | | |
| 2 | SITC of 19" 1U 48 LC Duplex Fiber panel fully loaded | Nos | 2 | | |
| 3 | SITC of LC to LC duplex Multimode OM4 fiber patch cord of 3 meters l | Nos | 24 | | |
| 4 | SITC of Splicing fiber Cable | Nos | 216 | | |
| 5 | SITC of Fiber Compass Box | Nos | 18 | | |
| 6 | SITC of 48 Port 2 Nos SFP Network Mangable Switch L3 | Nos | 1 | | |
| B | Network and Server Racks | | | | |
| 1 | SITC of 42U Server Cabinet frame UL Listed with top panel (800 X 1200) With All Accessories | Nos | 3 | | |
| 2 | SITC of 42U Network Cabinet frame UL Listed with top panel (800X1200) With All Accessories | Nos | 1 | | |
| 3 | SITC of Intelligent PDU of 32 Amps Single Phase Vertical mounted PDU | Nos | 8 | | |
| C | CCTV Camera | | | | |
| 1 | Supply and Installation of 6 MP IR Fixed Dome Indoor Network Camera with Audio and other Accessories, Night Vision, Day/Night/Auto/Schedule, IP 67, IR range 30 Meter, ONVIF protocol Compliant | | | | |
| 2 | Qty | Nos | 6 | | |
| 3 | Model | | | | |
| | Part Code | | | | |
| D | Access Control | | | | |
| 1 | Supply and Installation of Biometric Access Control of Door, Matrix make, Model no: COSEC VEGA FAX, DOOR FOP Fingerprint and RF Card Based Premium Door Controller with LCD & Keypad, Algatech EM Lock 600 Lbs for Single/Double Door Exit Switch. Compitible with existing COSEC Software | Nos | 1 | | |

| BOQ FOR UPS | | | | | |
|-------------|---|------|-----|------------------|-------------------|
| Nos | SPECIFICATION | Unit | Qty | Unit Price (INR) | Total Price (INR) |
| 1.0 | SITC of 20 KVA Online UPS With IGBT 3P IN & 3P Out | Nos | 2 | | |
| 2.0 | Battery Pack for 20 KVA UPS With 30 Minut Battery Back Up | Nos | 0 | | |
| 3.0 | Battery Rack & Link For 20 KVA UPS | Nos | 2 | | |
| 4.0 | SITC of 6 KVA Online UPS With IGBT 1P IN & 1P Out | Nos | 1 | | |
| 5.0 | Battery Pack for 6 KVA UPS With 30 Minut Battery Back Up | Nos | 1 | | |
| 6.0 | Battery Rack & Link For 6 KVA UPS | Nos | 1 | | |

| BOQ FOR STABILIZER | | | | | |
|--------------------|--|------|-----|------------------|-------------------|
| Nos | SPECIFICATION | Unit | Qty | Unit Price (INR) | Total Price (INR) |
| 1.0 | Providing, installation, testing, and commissioning of 60 KVA oil-cooled servo voltage stabilizer having the following specifications: Input Voltage Range: 320 VAC to 480 VAC Output Voltage: 400 / 415 VAC ($\pm 1\%$) Type: Oil-cooled, automatic, floor-mounted type Protection: Equipped with MCCB having shunt trip coil Accessories: Mandatory manual bypass switch and all necessary connections, fittings, and accessories for complete operation. | Nos | 1 | | |
| 2.0 | Providing, installation, testing, and commissioning of 125 KVA MCCB With Enclosed | Nos | 2 | | |

| BOQ FOR IT STORAGE | | | | | |
|--------------------|---|------|-----|------------------|-------------------|
| Nos | SPECIFICATION | Unit | Qty | Unit Price (INR) | Total Price (INR) |
| 1.0 | Primary Storage Infrastructure (60 TB Usable) | Nos | 1 | | |
| 2.0 | Backup Storage Infrastructure (60 TB Usable) | Nos | 1 | | |