BILL OF QUANTITIES

VOLUME II FOR

INTERIOR RENOVATION OF SECP CRO, 3RD &4TH FLOOR, ASSOCIATED HOUSE, **EGERTON ROAD, LAHORE**

| Issued To | : |
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| Issued On | : |
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SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN

Sohail A Khan Associates

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BILL OF QUANTITIES

MAIN SUMMARY OF COST

| S.No | Description | Amount (Rs) |
|------|---|-------------|
| 1 | CIVIL & INTERIOR WORKS 3RD AND 4TH FLOOR | |
| 2 | ELECTRICAL WORK | |
| 3 | HVAC WORK | |
| 4 | PLUMBING WORK | |
| 5 | FURNITURE WORKS | |
| | Total (A+B+C) | |
| | | - |
| 6 | OWNER'S SUPPLY ITEMS COST (ELECTRICAL WORK) | |
| | GRAND TOTAL | |

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SUMMARY OF COST

| S.No | Description | Amount (Rs) |
|------|----------------|-------------|
| 1 | INTERIOR WORK | |
| 2 | FURNITURE WORK | |
| | TOTAL AMOUNT | |

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|-----------|--|-------------|------|------------|--------------|
| and Mo | Contractor to submit Shop drawings for approval of the Arc ck-ups as desired by the Architect. All work shall be finished s while making good any damage to existing surface or equ | as per enti | | | |
| 3rd 8 | 4th Floor | | | | |
| 1 | Dismantling existing works including removal of debris from site and its disposal as required by law and away from the site. Contractor to hand over all salvageable items to Owner's representative for further disposal. And follow complete all safety rules, complete in all respect. | | | | |
| a. | Dismantling of Existing masonry wall any type and any height. | | | | |
| b. | Dismantling of Existing ceiling any type and any height. as directed by engineer-in-charge. | | | | |
| C. | Dismantling of existing floor any type, as directed by engineer-in-charge. | | | | |
| d. e. | Removing of any type of Doors with due care to not break, as directed by the Engineer-in-charge. Dismantling of Existing Column Cladding any type and | | | | |
| f. | any height, as directed by engineer-in-charge. Removal of glass partitions with due care to not break | job | 1 | | |
| g. | glass, as directed by engineer-in-charge. Removal of wooden partitions with due care to not break, as directed by engineer-in-charge. | · | , | | |
| h. | Removal of old paint from Masonry wall, concrete member etc., as directed by engineer-in-charge. | | | | |
| i. | Dismantling of Existing wash room tiles floor and wall any type and any height. as directed by engineer-in-charge. | | | | |
| j. | Removal of electrical conduits, switch sockets, lights etc. from site with accessories, as directed by the Engineer-incharge. | | | | |
| k. | Dismantling of existing plumbing any type, in pantry area as directed by engineer-in-charge. | | | | |
| L. | Dismantling of masonry, concrete steps etc., as directed by engineer-in-charge. | | | | |
| m | Dismantling of existing planters any type as directed by the Engineer-in-charge. | | | | |
| 2 | BRICK MASONRY WORK:- Providing and laying 4.1/2" & 9" 1st Class burnt Brick masonry of any height with (OPC) Cement mortar (1:4) in straight or curved walls, including scaffolding, racking out joints and curing etc. complete in all respect or as directed by the Engineer-in-charge. | Cft | 1320 | | |
| 3 | FAIR FACE BLOCK MASONARY:- Providing and laying of approved 4" Thick both side Fair Face Block solid wall Compressive strength 1500psi in superstructure at any height and floor laid and jointed with cement and approved sand (1:4), machine mixed mortar to be laid in course true to line level and plumb protected and properly cured, scaffolding and providing rendering all work to be completed as per drawings and specification including specified anchorage with concrete member and as directed by the Engineer. | Sft | 318 | | |

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| 4 | FAIR FACE CLADDING WALL 3" THICK(Lift Wall): Providing and laying approved 1.1/2" Thick Fair Face Block where required, Compressive strength 1500psi in superstructure at any height and floor laid and jointed with cement and approved sand (1:4), machine mixed mortar to be laid in course true to line level and plumb protected and properly cured, scaffolding and providing rendering all work to be completed as per drawings and specification including specified anchorage with concrete member and as directed by the Engineer. | Sft | 340 | | | | | |
| 5 | RCC LINTEL:- Providing, and laying reinforced cement concrete having a minimum cylinder crushing strength of 3000 psi at 28 days, as specified in drawings including form work and its removal, compacting, leveling and curing etc. complete in all respect as directed by the Engineer Incharge. | Cft | 254 | | | | | |
| 6 | REINFORCEMENT:- Providing and laying M.S deformed steel reinforcement bars including the cost of straightening, cutting, bending, binding, over laps complete in all kinds of R.C.C work or as directed by the Engineer Incharge. | Kg | 86 | | | | | |
| 7 | NEW PLASTER:- Providing and laying 1/2" thick 1:4 cement sand Plaster on Block Masonry Walls, Concrete members in two layers including chipping, scaffolding, leveling, curing etc. complete in all respect as per drawings or as directed by the Engineer In charge. Note: Acrylic plaster mesh to be provided and fixed on the joints between concrete and block masonry and at every joints of electrical conduits or as directed by the Engineer-In-Charge. | Sft | 5570 | | | | | |
| 8 | REPAIR WORK PLASTER:- Providing and laying 1/2" thick 1:3 cement sand plaster on chipping, trenching for electrical wiring and conduits with scaffolding, leveling, curing etc. complete in all respect as per drawings or as directed by the engineer in charge. Note: Acrylic plaster mesh to be provided and fixed on the joints between, concrete and masonry and at every joints of electrical conduits and at every dismantling with chemical used as directed by the Engineer-In-Charge. | Sft | 1800 | | | | | |

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| 9 | PCC (1:2:4):- Providing and laying plain cement concrete having ratio (1:2:4) where required laid by using Ordinary Portland Cement (OPC), or gravel with approved quality sand including all formwork as specified, roding, leveling, compacting and curing etc. complete as per specifications, drawings and as directed by Engineer Incharge. | Cft | 187 | | |
| 10 | GYPSUM BOARD DRY WALL (3" Thick):- Providing and fixing of Gypsum dry board wall with 2"x2"x1mm Gl channel at 2' c/c vertically and 4' c/c horizontally clad with 12mm thick gypsum board sheet on both sides. inner gaps to be filled with mineral wool insulation, complete with cutting holes and installing back boxes, conduits, water supply pipes and other services, with all hardware accessories, and compound filling of joints with fabric tape complete in all respect, and specification or as directed by the Engineer-in-charge. | | 2808 | | |
| 11 | WOODEN PARTITION (3" Thick):- Provide and fixing of Ash ply wood partition with 1.1/2"x1.1/2" at 2' c/c vertically and horizontally wood frame, clad with 3/4" thick ash ply sheet on both side, inner gaps to be filled with mineral wool insulation, complete with cutting holes and installing back boxes, conduits, water supply pipes and other services, with all hardware accessories, including polish finish, as per drawing, complete in all respect, and specification or as directed by the Engineer-incharge. | Sft | 399 | | |
| 12 | CEMENT BOARD DRY WALL (3" Thick):- Providing and fixing of cement board dry board wall with 2"x2"x1mm GI channel at 2' c/c vertically and 4' c/c horizontally clad with 12mm thick cement board sheet on both sides. inner gaps to be filled with mineral wool insulation, complete with cutting holes and installing back boxes, conduits, water supply pipes and other services, with all hardware accessories, and compound filling of joints, complete in all respect, and specification or as directed by the Engineer-in-charge. | Sft | 177 | | |

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| | IOR WORKS | 1 | 1 | | |
|------------------|---|---------------|-----|------------|--------------|
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| 13 | CEMENT BOARD BOX:- Providing and Fixing of cement board box with 2"x2"x1mm GI channel at 2' c/c vertically and 4' c/c horizontally cladding with 12mm thick gypsum board sheet on one side. Provisions are to be made for fixing of light fittings, if any as per drawing, complete in all respect. and specification or as directed by the Engineer-in-charge. | Sft | 126 | | |
| 14 | WOODEN PLY BOX:- Providing & fixing of Ash ply box, made of 2"x2" acacia wood frame with 3/4" thick imported ply cladding on side, including polish finish with all surface preparation ,complete with all hardware used as per drawings, as approved by the Architect or as directed by the engineer In charge. | Sft | 351 | | |
| 15 | GYPSUM BOARD BOX:- Providing and Fixing of gypsum board box with 2"x2"x1mm GI channel at 2' c/c vertically and 4' c/c horizontally cladding with 12mm thick gypsum board sheet on one side on existing wall and other surface. Provisions are to be made for fixing of light fittings, if any as per drawing, complete in all respect. and specification or as directed by the Engineer-incharge. | Sft | 162 | | |
| 16 | WOODEN PLY PANELING ON WALL:- Providing & fixing of Ash ply box, made of 2"x2" acacia wood frame with 3/4" thick imported ply cladding on side, including polish finish with all surface preparation ,complete with all hardware used as per drawings, as approved by the Architect or as directed by the engineer In charge. | Sft | 451 | | |
| 17 | LOW HEIGHT PARTITION:- Providing and fixing low height partition made of 2"x2"x1mm Gl channel at 2' c/c vertically and 4' c/c horizontally clad with 12mm thick gypsum board sheet on both sides with 2" x 4" solid ash wood frame and 8mm (3M) frosted glass fixed with wood frame, as per drawing with polish and paint finish, fixed to slab with bolt, complete in all respects. or as directed by the Engineer-Incharge. | Sft | 829 | | |
| 18 | WOODEN PANELING:- Providing & fixing of wooden paneling, made of 3/4" thick imported ash ply with wood frame including polish finish with all surface preparation ,complete with all hardware used as per drawings, as approved by the Architect or as directed by the engineer In charge. | Sft | 91 | | |

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| 19 | GRANITE CLADDING ON COLUMN:- Providing and fixing neatly cut to specified sizes and geometry pre-polished 3/4" thick Granite approved color and shade, laid with dry bond, including jointing with Quartz Lock Groute of approved color, rounding and polishing of edges, as and where required or so directed; including re-polishing as and where required or so directed and cost of scaffolding upto the height as shown in the drawings. Complete in all respect. MARKET BASE RATE 1000/SFT Excl GST | Sft | 1239 | | | | | |
| 20 | MARBLE / TILE CLADDING ON WALL:- Providing and fixing neatly cut to specified sizes and geometry pre-polished 3/4" thick marble / tileclaading approved color and shade, laid with dry bond, including jointing with Quartz Lock Groute of approved color, rounding and polishing of edges, as and where required or so directed; including repolishing as and where required or so directed and cost of scaffolding upto the height as shown in the drawings. Complete in all respect. MARKET BASE RATE MARBLE / TILE 375/SFT Excl GST | Sft | 149 | | | | | |
| 21 | GYPSUM BOARD FALSE CEILING:- Providing and fixing of Gypsum Board false ceiling, at least 1/2 thick of imported Elephant Brand, with Metal suspension system consisting of galvanized steel channel, intermediate channel, splices, hangers, hanger adjustment clips with fabric tape on edge and including of painting, as per design and compound filling of joints with fabric tape, Provisions are to be made for fixing of A.C.Grills, light fittings as per consultants instructions, as per drawing, complete in all respect. (For payment exposed horizontal and vertical areas shall be measured) complete in all respects. | Sft | 1633 | | | | | |
| 22 | PLY WOOD CEILING:- Providing and fixing ply wood ceiling made of 2"x2" acacia wood frame, with 19mm thick ply sheet cladding, with Metal suspension system hangers, hanger adjustment clips, including polish finish, approved color, Provisions are to be made for fixing of A.C.Grills, light fittings as per drawing & consultants instructions including making holes and to assist in fixing, as per drawing, complete in all respect. and specification or as directed by the Engineer-in-charge. | Sft | 1125 | | | | | |

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| 23 | Providing & laying laser cut imported Porcelain tiles 2' x 4' of Malaysian/Spanish or Equivalent make in approved color and shade laid with dry bond including jointing with Quartz Lock Grout of approved color, including Leveling, washing and curing. complete in all respect. including jointing with Quartz Lock Grout of approved color, including Leveling, washing and curing. complete in all respect. Market Tile Base Rate Rs. 3500/- Sqm Excl GST | Sft | 11645 | | | | | |
| 24 | PORCELAIN TILE FLOOR & WALL (TOILETS):- Providing & laying laser cut imported Porcelain tiles 12" x 24" of Malaysian/Spanish or Equivalent make in approved color and shade laid with cement sand mortar 1:4 (one cement four sand) including jointing with Quartz Lock Groute of approved color, including Leveling, washing and curing. complete in all respect. Tile Base Rate Rs. 2600/- Sqm Excl GST | Sft | 2203 | | | | | |
| 25 | BASE FLOOR PLASTER:- Providing and laying ¾ " thick 1:4 cement sand plaster under floor, including chipping, leveling, curing etc. with steel finish complete in all respect as per drawings or as directed by the engineer In charge. (excluding back filling and pcc) | Sft | 1416 | | | | | |
| 26 | CAPET TILE FLOORING (CONFERENCE ROOM & CHAIRMAN ROOM):- Provide and install interface Carpet tile, fixed with glue on existing PCC floor, complete in all respect with 10 years warranty as per drawings and manufacture specification as approved by the Architect or as directed by the Engineer-in-Charge. Market Base rate Rs.360/Sft Excl GST | | 959 | | | | | |
| 27 | CARPET FLOORING IN PRAYER AREA:- Provide and Supply Carpet dinarsu/Edge make low pile nylon based for Prayer Area PA 6.6 with underlay complete in all respects with 5 years warranty. Market Base rate Rs. 280/Sft Excl GST | | 238 | | | | | |

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| 28 | SPORTS VINYL FLOOR (Day Care Center): - Supply & Fixing sports vinyl flooring in the P1 category (complies with in Standard 14904) 25 to 35% of shock absorption Triple strength, two fiberglass grids and one veil for an outstanding indentation resistance excellent resistance to heavy loads (static and rolling) Abrasion resistance three times greater than that required by the Standard ,cleaning of surface & using suitable adhesive to give smooth & even floor complete in all respect as per drawings and as per manufacture specification as approved by the Architect or as directed by the Engineer-in-Charge. | | 218 | | | | | |
| 29 | 12MM IMPORTED GLASS PARTITION:- Providing and fixing of 12mm thick imported Guardian make glass partition with frosted sheet of approved design, 1-1/2" aluminum concealed ' U' channel, complete in all respect as per drawings and as approved by the Architect or as directed by the Engineer-in-Charge. | Sft | 1380 | | | | | |
| 30 | WOOD FRAME FOR GLASS DOOR:- Providing and fixing of 1-1/2" x 5" Ash wood frame fixed with nuts and bolts as per drawings, including polish with all suface preparation, complete in all respect. as approved by the Architect or as directed by the Engineer-in-charge | | 361 | | | | | |
| 31 | WOODEN DROP BOX FOR GLASS PARTITION:- Provide and Fixing of 3" thick Imported Ply drop box till ceiling from roof made of 1/2" thick Ply, with 2"x2" thick wood frame, as per drawing, as directed by the engineer In charge. | Sft | 553 | | | | | |
| 32 | GLASS DOORS:- Providing and fixing, 12 mm thick imported (Guardian) tempered glass door with 3M frosting including SS door handle 4' height, patch fitting, locks (Myco of Japan or approved equivalent) with imported best quality floor machine (EZ brand of Taiwan or approved equal) complete in all respects, or as directed by the engineer In charge (Full opening area measured) | C# | 545 | | | | | |

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| 33 | SLIDDING GLASS DOORS:- Providing and fixing, 12 mm thick imported (Guardian) tempered glass sliding door with 3M frosting including laguna series Sliding Door system and pelmet. Sliding channel to be fixed in wooden box, including lock, SS door handle 4' height. complete in all respects, or as directed by the engineer In charge (Full opening area measured) | Sft | 58 | | | | |
| 34 | MELAMINE DOOR (TOILETS):- Providing and fixing imported melamine doors with water resistant HDF base, in given sizes, made up of double sheet, 1.5" thickness in total, standard, with 2mm thick pvc edge lipping on all four sides, including D-10 A, 2"x 4" 2mm thick aluminum section door frame powder coating with brush all Hardware / locks / hinges etc. and approved colors and shades, as per drawing and design and directed by the Consultant complete in all respects. | Sft | 276 | | | | |
| 35 | FIRE RATED DOOR (SERVER & ELECTRICAL ROOM):- Providing and fixing of solid door composed of thick monolithic steel plates of 14 gauge MS. sheet thickness on the outside and 16 gauge MS. steel on the inside in between filled with FIRE CLAY. The two plates are electrically welded and riveted for extra strength, thereby forming a monolithic structure of uniform strength. The door frame is made of heavy U-shaped sheet section (6" x 1/4") so as to securely grip the wall opening, front and back. The frame is made up of heavy steel angles in front and with solid steel plates of great strength at the back by selfaligning hinges with emergency push bar lock (Italian origin) is fitted to the door from inside. Minimum fire rating of 2-hour with manufacturers certificate. (Manufactured by a specialized consultant). Door installation must meet all structural/strengthening requirements complete in all respects. | 25. | 51 | | | | |
| 36 | WINDOW MARBLE SILL:- Providing and fixing of 3/4" thick factory grinded and polished Grade A, marble sill in windows, matching with tiles to be laid straight or in two levels for rain protection fixed with dry bond and grouted with white / coloured cement using imported pigments all as per drawing & specifications as approved by the Architect or as directed by the Engineer-in-charge MARKET BASE RATE 450/SFT Excl GST | Sft | 190 | | | | |

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| 37 | PRE-POLISHED MARBLE TOP AND WALL:- Providing and laying of 20 mm thick Pre-polished Granite with bull nosing (Sample as approved by the Architects) fixed on laminated kitchen box with silicon. as per drawing, complete in all respect. Granite Base Rate 450/Sft Excl GST | | 43 | | | | |
| 38 | BASE CABINETS (KITCHEN):- Provide and install, 24" wide & 33" high floor cabinet made of 3/4" thick MDF lamination used for box ,Shutter and drawer with PVC edge lipping, approved color, including imported concealed kitchen hinges, magnetic catchers, locks, SS handles complete with all hardware used ,as per drawing ,complete in all respect. (Accessories are not included.) | Sft | 31 | | | | |
| 39 | OVER HEAD CABINETS:- Provide and install 15" deep and 24" high over head cabinets made up of ¾ " thick MDF lamination used for box and shutter approved color with pvc edge lipping, including imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing, complete in all respect. | Sft | 28 | | | | |
| 40 | FULL HEIGHT FILLING CABINETS:- Provide and install 15" deep cabinets made up of ¾ " thick imported MDF lamination sheet used for box and shutter of approved color, including 3/4" thick ash ply with wood edge lipping on exposed sides wooden pelmet, including polish finish, complete with hardware and imported piano hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing ,complete in all respect. | Sft | 1392 | | | | |
| 41 | LOW HEIGHT FILLING CABINETS WITH MS FRAME:- Provide and install 15" deep cabinets made up of ¾ " thick imported MDF lamination sheet used for box and shutter of approved color, with 1.1/2"x 3" x 16 gauge MS pipe with 2mm MS plate with deco finish, fixed rawl bolt in floor, including 3/4" thick marble top fix with marble jelly, complete with hardware and imported piano hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing ,complete in all respect. | Sft | 50 | | | | |

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| 42 | PRINTING AREA CABINETS:- Provide and install 24" deep and 30" high base cabinets made up of ¾ " thick MDF lamination used for box and shutter approved color with pvc edge lipping, imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles, including 3/4" thick marble top fixed with marble jelly complete with all hardware used as per drawing ,complete in all respect. | Sft | 127 | | |
| 43 | DAY CARE CABINETS:- Provide and install 15" deep cabinets made up of ¾ " thick imported MDF lamination sheet used for box and shelves with pvc edge lipping of approved color, complete with hardware, complete with all hardware used as per drawing ,complete in all respect. | Sft | 120 | | |
| 44 | PVC JANITORIAL CABINETS:- Provide and install 24"" deep and 8 feet high PVC sheet cabinets made up of 3/4" thick pvc board sheet used for box and shutter of approved color, with pvc edge lipping, base to be tiled with drain fixing. complete with hardware and imported piano hinges, magnetic catchers, locks, SS handles, aluminum grill, complete with all hardware used as per drawing ,complete in all respect." | Sft | 52 | | |
| 45 | EMULSION PAINT: Providing and Painting of any surface with plastic emulsion/Acrylic paint of approved shade with three coats over a primer coat along with required coats of Putty Filling and preparation of plaster surface complete at any height at any floor, finished smooth as desired by Engineer-Incharge. | Sft | 11288 | | |
| 46 | PAINT ON EXISTING CEILING: Providing and Painting of any surface with emulsion paint of approved shade with three coats over a primer coat along with required coats of Putty Filling and preparation of Plaster/Concrete/Metal surface complete at any height at any floor, finished smooth as desired by Engineer-Incharge | Sft | 16299 | | |

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| 47 | IMPORTED ARCHI + CONCRETE WALL COATING: Providing and applying imported acrylic base archi + concrete wall coating , at any height at any floor, Archi+ Concrete is a mineral plaster coat in powder for interiors. It is made of well-seasoned hydrated lime putties, white cement, specific aggregates and rheological modifiers carefully selected to ensure an excellent workability and the possibility to overlap it with one or more layers of Fase Silossanica, acrylsiloxane colour wash (matt), ensures to achieve cutting-edge elegant concrete effects, in line with the newest trends in the interior design, to be mixed with water and applied with a stainless steel trowel, The thickness of Archi+ Concrete ensures high protection performances on the substrate where it is applied-on. Surface repair must be made in advance coating. The surface must be clean, dry and free of any previous sealers ,all as per drawing & specifications as approved by the Architect or as directed by the Engineer-in-charge. Market Base rate 550/sft | Sft | 654 | | |
| 48 | PVC SKIRTING:- Provide and fixing Pvc wooden texture skirting matching with floor color & grain, 3/4" thick and 4" height with all hardware used complete in all respect. MARKET BASE RATE 200 / Rft Excl Gst | Rft | 2755 | | |
| 49 | ROLLER BLIND:- Providing and fixing of imported fabric Roller blinds With all hardware and smooth operating imported roller rods of approved shade and quality complete in all respect. (Market Base rate Rs.240 Per sft) Excl GST | Sft | 2376 | | |
| 50 | MIRROR:- Supply and fixing of Mirror, any shape and pattern, 5 mm thick, Imported , edges polished, fixed with S.S fitting complete, fixed to concrete, block, stone or wood work all as per drawing and specification complete in all respect, as directed by the Engineer- in-charge | Sft | 77 | | |
| 51 | ANTI SHATTER FILM:- Providing and install 150 micron anti shutter film on external glass, as per drawing as per manifesting specifications as approved by the Architect or as directed by the Engineer-incharge | Sft | 0 | | |

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| 52 | TEA BAR COUNTER:- Providing and install 18" deep and 30" high made up of ¾ "thick imported MDF lamination sheet with 3/4" thick marble top finish fixed on MS bracket, as per drawings and as approved by the Architect or as directed by the Engineer-in-Charge. Marble Market Base rate 450/ sft | Sft | 23 | | | | | | | |
| 53 | ALUMINUM DOORS (DUCT):- Supply and install internal Aluminum louvers door complete, with all hardware required, locks, ironmongeries according to, manufacture specifications and as approved by the Architects. | Sft | 150 | | | | | | | |
| 54 | WINDOWS GRILL:- Provide & install Windows Grill, 1/2" dia MS pipe with 3/4"x3/4"x 16 gauge MS pipe outer frame structure welded together, fixed on inner side of existing windows, including, enamel paint finish with three coats over a red oxide coat along with required coats of steel Putty Filling and preparation surface complete at any height at any floor, finished smooth as desired by Engineer-Incharge. | Sft | 979 | | | | | | | |
| 55 | FACILITATION COUNTERS:- Providing and Fixing Facilitation Counters, 3.1/2" thick top two levels with 24" & 6" vide, made up of 3/4" thick lamination board cladding with 12mm thick Corian fixed on top & front panel and 3/4" thick ply fixed on front panel, including polish finish approved manufacture specification, including drawer unit and all hardware used, as per manufactures specification complete in all respect as per drawings or as directed by architect, As Shown in picture. (Size 10'-6" x 24" x 2'-6" & 3'-6") | | 1 | | | | | | | |
| 56 | PAINTING:- Supplying and installation oil painting of different size with wood frame as per drawing or as directed by architect. complete with all accessories. | NO | 6 | | | | | | | |

BILL OF QUANTITIES

| | IOR WORKS | 1 | I | | |
|-----------|--|---------------|-----|------------|--------------|
| Sr. No | Description | Unit | Qty | Rate (Rs.) | Amount (Rs.) |
| | | | | | |
| and Mod | Contractor to submit Shop drawings for approval of the Arc ck-ups as desired by the Architect. All work shall be finished s while making good any damage to existing surface or equ | l as per enti | | | |
| 57 | SIGNAGE:- Providing and install Aluminium alloy modular signage, change able system complete with, Acrylic: CNC / Laser machine processed acrylic sheet for fine cutting • Printing: Digital UV LED printing on acrylic / Board lite sheet pvc strips for insert for required colours • Fixing: Fixing with double Adhesive Tape tape / screws as per manufacture specifications, as approved by the Architect or as directed by the Engineer-in-Charge. | | | | |
| 57.1 | 6"x 12" Classic Signage | No | 18 | | |
| | 6"x 30" Classic Signage | No | 10 | | |
| | 8"x 6" Classic Signage | No | 12 | | |
| | 6"x 6" Classic Signage | No | 10 | | |
| 58 | MAIN LOGO: Providing and install main logo, made up of 8mm thick acrylic logo with laser cutting including paint finish, UV' LED printing on face for actual colour Fixing with double Adhesive Tape tape / screws as per manufacture specifications, as approved by the Architect or as directed by the Engineer-in-Charge. | No | 1 | | |
| 59 | 3D LETTERING:- Providing and install acrylic 3D letters, made up of 8mm thick acrylic letters with laser cutting including paint finish for actual colour Fixing with double Adhesive Tape tape / screws as per manufacture specifications, as approved by the Architect or as directed by the Engineer-in-Charge. | | | | |
| 59.1 | BUSNISS CENTER | job | 1 | | |
| | INSPECTION | job | 1 | | |
| | INCORPORATION | - | 1 | | |
| | DECO PAINT ON EXISTING CABINETS:- Providing and applying of deco paint on existing filing cabinet. The work include scraping entire surfaces; filling cracks with paint manufacturer's approved material. Prepare the surface using manufacturer's recommended primer. along with required coats of steel Putty Filling and preparation of surface complete at any height at any floor, finished smooth as desired by Engineer-Incharge. | job Sft | 720 | | |
| 61 | MARBLE THERSHOLD:- Providing and fixing of 3/4" thick factory grinded and polished Grade A, thershold sill, to be laid straight fixed with dry bond and grouted with white / coloured cement using imported pigments all as per drawing & specifications as approved by the Architect or as directed by the Engineer-in-charge MARKET BASE RATE 450/SFT Excl GST | Sft | 125 | | |
| | SOLID WOOD POST:- Providing and fixing of 1-1/2" x 3" Ash wood post with 2mm MS plate, fixed with rawl bolt in floor and ceilling as per drawings, including polish with all suface preparation, complete in all respect. as approved by the Architect or as directed by the Engineer-in-charge | Rft | 185 | | |
| | Total Amount | | | | |
| <u> </u> | | | | | |

| FURNIT | URE WORKS | | | | | | | |
|--------|--------------------|--|--------------------|-------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 3rd FL | OOR FURNITURE | | | | | | | |
| INCHAF | RGE ROOM FURNITURI | | | | | | | |
| 1 | TABLE | Providing and Supplying exective table made up of Oak veneer, jacobean polish, leatherite penal on top, solid wood frame, complete as per manufactures specification or as directed by architect, As Shown in picture, | (6'-0''x2'-6''x | | NO | 1 | | |
| 2 | | Provide and supplying side rack made up of Oak veneer, jacobean polish, solid wood frame, and drawers, shutter for storage and keboard, complete as per manufactures specification or as directed by architect, As Shown in picture, | | | NO | 1 | | |
| 3 | Evective Credenza | Provide and supplying credenza made up of Oak veneer, jacobean polish, solid wood frame, and drawers, shutter for storage, complete as per manufactures specification or as directed by architect, As Shown in picture, | (6'-0''x15''x30'') | | NO | 1 | | |

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| FURNII | URE WORKS | | | | | | | |
|--------|------------------------------|---|--------------|-------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 4 | HIGH BACK REVOLVING CHAIR | Provide and supplying revolving chair made up of Oak wood base with castors and Leatherette finish with height adjustable (gas lift) torision bar basic tilt mechinism 360 rotation, and as shown in picture as per approved color and sample, (Interwood or Equivalent). | | | NO | 1 | | |
| 5 | VISITOR CHAIR | Providing & supplying visitor chair made up of leatherette top with master molty foam, oak wood frame and legs with Jacobean finish semi glazed complete as per manufactures specification or as directed by architect, As Shown in picture | | | NO | 2 | | |
| 6 | SINGLE SEAT SOFA | Providing and supplying single seat Sofa with acacia wood stucture and oak wood legs in Jacobean polish finish Leatherette with decorative brass nails of Approved color and shade, design and hardware as per manufacturer's specifications as shown design in picture or equivalent, or as directed by architect, (Interwood or Equivalent) | | | NO | 2 | | |
| 7 | SIDE TABLE | Supplying and provide Side table with 1.5" thick oak wood top in Jacobean finish semi glazed and wood legs, as per design in picture or equivalent design by manufacturer, details as per manufacturer's specification, or as directed by architect. | 18" DIA V18" | | No | 1 | | |

| FURNIT | URE WORKS | | | | | | | |
|---------|------------------------------|--|-------------------------------|--|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 8 | Coat Hanger | Providing and supplying coat hanger made up of ash wood frame, hanger and legs in teak finish semi glazed. as per manufactures specification or as directed by architect, as shown in picture (interwood or Equivalent) | | 1 | NO | 1 | | |
| 3rd FLC | OOR WORKING ZONE F | URNITURE | | | • | | • | |
| 8 | OFFICER DESK | Providing & supplying table Unit Top to be made of 25 mm thick (imported) melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, base with MS powder coated finished frame with side rack having 03 drawer & shelves with all cable management system complete as per manufactures specification or as directed by architect, As Shown in picture. | Table (5'-6"X 2'-6"X2'-6") | INTEGRITY Which are with a single si | No | 29 | | |
| 9 | HIGH BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 29 | | |

| FURNIT | TURE WORKS | | LE OF QUANTITIE | _ | | | | |
|--------|-------------------|---|------------------------|-----------------------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 10 | VISITOR CHAIR | Providing & supplying wooden chair leatherette top with master molty foam, oak wood frame and legs with Jacobean finish semi glazed complete as per manufactures specification or as directed by architect, As Shown in picture. | | Austin WG Chair CH WG 06 | No | 58 | | |
| 11 | OVER HEAD CABINET | Provide and supplying OHC made up of 15" deep and 14" high to be made of imported 3/4" th. melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, used for box and shutter approved color with pvc edge lipping, including imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing ,complete in all respect. Installation detail will be coordinated with Partition. | 4'-0"X 1'-3"X 1'-2" | | Sft | 29 | | |

| FURNIT | URE WORKS | | | | | | | |
|--------|--------------------------------|--|-----------------------------|------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| WORK | STATION | | | | | | | |
| 12 | WORKSTATAION WITH SIDE RACK | Providing and supplying workstation made up of imported melamine laminated 25mm thick top with 2mm thick pvc edge lipping with Ms powder coated frame frame with side rack having 03 drawer & CPU unit with all cable management system, complete all hardware used and Quality as per manufactures specification or as directed by site incharge.Installation detail will be coordinated with Partition. | (4'-0''X 2'-0''X 2'-6'') | | No | 21 | | |
| 13 | OVER HEAD CABINET | Provide and supplying OHC made up of 15" deep and 24" high to be made of 25 mm thick (imported) 3/4" melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, used for box and shutter approved color with pvc edge lipping, including imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing, complete in all respect. Installation detail will be coordinated with the partition. | 4'-0"X 1'-3"X 1'-2" | | No | 21 | | |
| 14 | MEDIUM BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | | 21 | | |
| | | | | | | | | |

| FURNIT | URE WORKS | | <u> </u> | _ | | | | |
|--------|--|---|-------------------------------------|------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| PS WO | RK STATION | | | | | | | |
| 15 | WORKSTATION WITH SIDE RACK PS AND INSPECTION | Providing and supplying workstation made up of imported melamine laminated 25mm thick top with 2mm thick pvc edge lipping with Ms powder coated frame frame with side rack having 03 drawer & CPU unit with all cable management system, complete all hardware used and Quality as per manufactures specification or as directed by site incharge. | 4'-0"X 2'-0"X 2'-6" Side Rack | | No | 2 | | |
| 16 | OVER HEAD CABINET FIXED ON WALL | Provide and supplying OHC made up of 15" deep and 24" high to be made of 25 mm thick (imported) 3/4" melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, used for box and shutter approved color with pvc edge lipping, including imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing, complete in all respect. | 4'-0"X 1'-3"X 1'-2" | | No | 2 | | |
| 17 | MEDIUM BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 2 | | |

| FURNITURE WORKS | | | | | |
|-----------------|----|-------|-----|------|------|
| | 10 | LIITI | IDE | MAIO | DIZC |
| | | | | | |

| FURINIT | URE WORKS | | | | | | | | | | |
|---------|--------------------------|---|------------|-----------------------------|------|-----|------|--------|--|--|--|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount | | | |
| 18 | VISITOR CHAIR | Providing & supplying wooden chair leatherette top with master molty foam, oak wood frame and legs with Jacobean finish semi glazed complete as per manufactures specification or as directed by architect, As Shown in picture. | | Austin WG Chair CH WG 06 | No | 1 | | | | | |
| 19 | SELF SERVICE COUNTERS | Provide and supplying Self service Counters 3'-6" high made up of 30"x18" x 3" thick top shelve with corain coating, 24"x12"x1.5" thick base with corian coating, 3"x3" MS powder coated hollow pipe support connected with base with 1/4" powder coated ms plate, 18"x9"x24" maarle clad wood box for CPU and other accessories complete as picture and manufacturer's specifications. | | | No | 15 | | | | | |
| 20 | STOOL CHAIR | Providing & supplying with cushioned seat fitted in SS frame and base height adjustment mechanism sizes as per manufacturer's specifications complete per Picture or as directed by architect. | | | No | 15 | | | | | |

| FURNIT | URE WORKS | | | | | | | |
|--------|---------------------|---|-----------------------------|-------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 21 | VISITOR CHAIR | Providing & supplying chair with Oak wood legs and frame, seat and back cushion of 1st quality molty foam, covered with fabric finish as per approved color and sample as shown picture design or equivalent as per manufacturer's specification, or as directed by architect, | | | No | 10 | | |
| 22 | PAMPHLET RACK | Providing & supplying pamphlet rack made up of powder coated MS 1" pipe frame with laminated shelves, PVC Edge lipping, approved color, and shape, as per picture and Quality as per manufactures specification or as directed by site incharge | 18"x12"x4' | | No | 1 | | |
| MEETIN | IG ROOM-01 FURNITUI | RE | | | | | | |
| 23 | TABLE | Providing & supplying meeting table Top to be made of 25 mm thick (imported) melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, base with MS powder coated finished frame with all cable management system complete as per manufactures specification or as directed by architect, As Shown in picture. | (5'-0''X 2'-3''X 2'-6'') | | No | 1 | | |

| FURNIT | URE WORKS | | | | | | | |
|---------|--------------------------------|---|------------------------------|------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 24 | CHAIR | Providing & supplying chair with S.S legs and frame and PU seat and back, finish as per approved color and sample as shown in picture or equivalent as per manufacturer's specification, or as directed by architect, | | | No | 4 | | |
| FACILIT | TATION COUNTER | | | | | | | |
| 25 | MEDIUM BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 2 | | |
| CONFE | RENCE ROOM FURNIT | TURE | | | | | | |
| 26 | MEETING TABLE 17 PERSON | Providing & supplying Meeting Table Oak Wood veneer and board with wood edge lipping, in Jacobean finish semi glazed. Leatherette panel in centre with Cable management system and 3# wire grommete with under table cable tray, Imported Hardware with brass screws, complete as per manufactures specification or as directed by architect, As Shown in picture | (19'-0''X 4'-6''X 2'-6'') | | No | 1 | | |

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|--------|--------------------------------|--|--|------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 27 | HIGH BACK REVOLVING CHAIR | Provide and supplying revolving chair made up of SS base with castors and Leatherette finish as per approved color and sample, with height adjustable (gas lift) torsion bar basic tilt mechinism, Having 5-star revolving adjustable threaded pedestal, durable & load bearing caster wheels.and as shown in picture as per approved color and sample, | | | No | 31 | | |
| RECEP | TION AREA FURNITUR | E | | | | | | |
| 28 | RECEPTION TABLE | Providing and Fixing Reception Counters, 3" thick top and sides, three levels with 30" & 9" wide, made up of 3/4" thick lamination cladding with 12mm thick Corian fixed on top & sides and 3/4" thick ply fixed on front panel with two level, including polish finish approved manufacture specification, including drawer unit and all hardware used, as per manufactures specification complete in all respect as per drawings or as directed by architect, As Shown in picture. | L: 6'-0"xW: 2'-0" x H: 2'-6",3'-0" & 3'- 6" | | No | 1 | | |
| 29 | MEDIUM BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 1 | | |

| FURNIT | URE WORKS | | | | | | | |
|--------|------------------|---|-------------------------|-------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 30 | SOFA CHAIR | Providing and supplying Sofa with Oak wood frame and legs in teak polish finish. fixed with 1st quality molty foam and covered with fabric as per approved color and sample,. wood size, design and hardware as per manufacturer's specifications as shown in picture or equivalent, or as directed by architect. | | | No | 3 | | |
| 31 | CENTER TABLE | Providing and supplying center table 3 person made up of imported melamine laminate 1.5" thick top with 2mm tick pvc edge lipping and powder coated S.S frame and legs, approved color complete as per manufactures specification, as Shown in picture or equivalent | 18" DIA & 18" HEIGHT | | No | 1 | | |
| KITCHE | N AREA FURNITURE | | | | | | | |
| 32 | BAR STOOL | Providing & supplying Bar stool made up of Seat PU frame with hydraulic action with 15" dia S.S Base plate and foot rest, Imported Hardware complete in all respect as per Picture as per manufacturer's specification, or as directed by architect, | | | No | 6 | | |

| FURNIT | URE WORKS | | | | | | | |
|--------|------------------------------|--|---|--|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 33 | VISITOR CHAIR | Providing & supplying chair with Oak wood legs and frame, seat and back cushion of 1st quality molty foam, covered with fabric finish as per approved color and sample as shown picture design or equivalent as per manufacturer's specification, or as directed by architect, | | | No | 2 | | |
| 34 | CENTER TABLE | Providing and supplying center table 3 person made up of imported melamine laminate 1.5" thick top with 2mm tick pvc edge lipping and powder coated S.S frame and legs , approved color complete as per manufactures specification, as Shown in picture or equivalent | 18" DIA & 18" HEIGHT | | No | 1 | | |
| 4TH F | LOOR Work Zone | | | | | | | |
| 35 | MANAGER DESK | Providing & supplying table Unit Top to be made of 25 mm thick (imported) melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, base with MS powder coated finished frame with side rack having 03 drawer & shelves with all cable management system complete as per manufactures specification or as directed by architect, As Shown in picture. | (5'-6''X 2'-6''X 2'-6'') Side Rack : (5'-6''X 1'-6''X 2'-6'') | INTEGRITY White has registered and the state of the stat | No | 10 | | |
| 36 | HIGH BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 10 | | |

| FURNIT | URE WORKS | | | | | | | |
|--------|--------------------------------|---|-----------------------------|-----------------------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 37 | VISITOR CHAIR | Providing & supplying wooden chair leatherette top with master molty foam, oak wood frame and legs with Jacobean finish semi glazed complete as per manufactures specification or as directed by architect, As Shown in picture. | | Austin WG Chair CH WG 06 | No | 20 | | |
| 38 | OVER HEAD CABINET | Provide and supplying OHC made up of 15" deep and 14" high to be made of imported 3/4" th. melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, used for box and shutter approved color with pvc edge lipping, including imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing ,complete in all respect. Installation detail will be coordinated with Partition. | 4'-0"X 1'-3"X 1'-2" | | No | 10 | | |
| WORK | STATION | | | | | | | |
| 39 | WORKSTATAION WITH SIDE RACK | Providing and supplying workstation made up of imported melamine laminated 25mm thick top with 2mm thick pvc edge lipping with Ms powder coated frame frame with side rack having 03 drawer & CPU unit with all cable management system, complete all hardware used and Quality as per manufactures specification or as directed by site incharge.Installation detail will be coordinated with Partition. | (4'-0''X 2'-0''X 2'-6'') | | No | 6 | | |

| FURNIT | URE WORKS | <u>DI</u> | | <u>QUANTITIO</u> | <u></u> |
|--------|-------------|----------------|-----|------------------|---------|
| Sr# | Description | Specifications | Dim | ensions | |

| FURNII | URE WORKS | | | | | | | |
|--------|--------------------------------|--|------------------------|------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 40 | OVER HEAD CABINET | Provide and supplying OHC made up of 15" deep and 24" high to be made of 25 mm thick (imported) 3/4" melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, used for box and shutter approved color with pvc edge lipping, including imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing, complete in all respect. Installation detail will be coordinated with the partition. | 4'-0"X 1'-3"X 1'-2" | | No | 6 | | |
| 41 | MEDIUM BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 6 | | |
| MEETIN | IG ROOM | | | | | | | |
| 42 | MEETING ROOM 8 PERSON | Providing & supplying Meeting Table Top to be made of 50 mm thick (imported) melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, base with MS powder coated finished frame with approved color, Imported Hardware with brass screws, with all cable management system with top Grommettes complete as per manufactures specification or as directed by architect, As Shown in picture. | | | No | 1 | | |
| 43 | HIGH BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 8 | | |

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| FURNIT | URE WORKS | | | | | | | |
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| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| DOCTO | R'S ROOM | | | | | | | |
| 44 | WORKSTATAION WITH SIDE RACK | Providing and supplying Table top made up of imported melamine laminated 25mm thick top with 2mm thick pvc edge lipping with Ms powder coated frame complete all hardware used and Quality as per manufactures specification or as directed by site incharge. | (7'-3"X 1'-3"X 2'-6") | | No | 1 | | |
| 45 | OVER HEAD CABINET | Provide and supplying OHC made up of 15" deep and 24" high to be made of 25 mm thick (imported) 3/4" melamine laminated particle board, all edges to be covered with 2 mm thick pvc edging, used for box and shutter approved color with pvc edge lipping, including imported Kitchen Concealed hinges, magnetic catchers, locks, SS handles complete with all hardware used as per drawing, complete in all respect. | 4'-0"X 1'-3"X 1'-2" | | No | 1 | | |
| 46 | MEDICAL BED PATIENT | Providing and supplying Medical bed patient made of heavy duty Ms powder coated frame and leg with protective and top made of High-density stretchy sponge and Artificial Leather, 2pcs gas spring adjustable head board ,1pc imported hydraulic pump control hi-low height, head adjustable 87-35 degree, Weight capacity: 230 Kg Quality, as per manufactures specification or as directed by site incharge. | 6'-0"x2'-6"x 2'-6" | | No | 1 | | |

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| URNITURE WORKS | | | | | | | | |
|----------------|------------------------------------|--|--|----------------------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| 47 | MEDICAL STAINLESS STEEL TROLLEY | Providing and supplying Medical stainless steel trolley made of Stainless steel structure, with rail at top, One drawer, 4 castors, Smooth handmade welding, durable & load bearing caster wheels. and as shown in picture as per approved color and sample, | | alterneen armod.on. ambata | No | 1 | | |
| 48 | MEDICAL STOOL | Providing and supplying medical stool made of Stainless steel structure, Economical, fashionable and comfortable, load capacity 200kg, durable & load bearing caster wheels. and as shown in picture as per approved color and sample, | Seat size: 16" diameter Seat height: 23" to 25" | | No | 1 | | |
| 49 | MEDIUM BACK REVOLVING CHAIR | Providing and supplying revolving chair with cushioned Seat and Back, frame as per manufacturer's specs, approved color and sample, Having 5-star revolving adjustable threaded pedestal, durable & load bearing castor wheels. complete as per manufactures specification or as directed by architect, As Shown in picture. | | Director-J | No | 1 | | |

| FURNIT | URE WORKS | | | | | | | |
|-----------------|-------------------------------------|--|--|------------------------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| DAY CARE CENTER | | | | | | | | |
| 50 | BABY COTS | Providing & supplying wooden cots with 3" thick master molty foam, as shown in picture, as per manufacturer's specification, or as directed by architect, complete in all respect | | warw.bubsngrubs.com.au | No | 2 | | |
| 51 | EASY CHAIR | Providing & supplying easy chair with ottoman, Oak wood frame and legs in teak polish finish, fixed with 1st quality molty foam and covered Leatherette of Approved color and shade. wood size, design and hardware as per manufacturer's specifications as shown in picture or equivalent, or as directed by architect. | | | No | 1 | | |
| 52 | FLOOR PUZZLE FOAM MATT | Providing and supplying 20 XL Puzzle foam matt floor for play area toy, approved color, infant baby kids approved by the consultant, complete in all respect | Tile size 60x60x 1cm | | Sft | 36 | | |
| 53 | CENTER TABLE WITH CHAIR FOR KIDS | Providing and supplying center table with chair made up of imported PVC and powder coated Ms frame , approved color complete as per manufactures specification, as Shown in picture | Table Size (15"X 24"&18") HEIGHT | | Set | 4 | | |

| FURNIT | URE WORKS | | | | | | | |
|--------------|---------------|---|---------------------|-------|------|-----|------|--------|
| Sr# | Description | Specifications | Dimensions | Shape | Unit | Qty | Rate | Amount |
| PRAYER AREA | | | | | | | | |
| 54 | QURAN CABINET | Providing and book shelves made up of 3/4" imported MDF sheet used for box and sheleves with deco paint finish, approved color, complete as per manufactures specification, As Shown in picture | 4'-0''X 1'-3*X 30'' | | No | 1 | | |
| 55 | SHOE RACK | Providing & making shoe rack painted made up of 3/4" thick MS pipe with approved color, complete all hardware used and Quality as per manufactures specification or as directed by site incharge, | /'-0"v12"v2'-0" | | No | 1 | | |
| 56 | CHAIR | Providing & supplying chair with S.S legs and frame and PU seat and back, finish as per approved color and sample as shown in picture or equivalent as per manufacturer's specification, or as directed by architect, | | | No | 2 | | |
| TOTAL AMOUNT | | | | | | | | |

MEP WORKS BILL OF QUANTITIES



MEP SUMMARY OF COST SECP LAHORE OFFICE

Electrical Works 1.0 Vol-1 Electrical Works Rs. Total Rs. **HVAC Works** Vol-1 HVAC Works 1.0 Rs. Total Rs. **Plumbing Works** 1.0 Vol-1 Plumbing Rs. Total Rs. Owner's Supply Items Cost 1.0 Owner's Items Rs. Total Rs.

Signed & Stamped Of Contractor

SUMMARY OF COST (Electrical Works)

| Vol-1 | | | |
|-------|------|--------------------------------|-----|
| | 0.1 | INVERTER (INSTALLATION) | Rs. |
| | 1.0 | LT SWITCHGEAR | Rs. |
| | 2.0 | CIRCUIT POINT WIRING | Rs. |
| | 3.0 | POWER CABLES AND CONDUITS | Rs. |
| | 4.0 | FITTING FIXTURES AND FANS | Rs. |
| | 5.0 | TELECOMMUNICATION SYSTEM | Rs. |
| | 6.0 | FIRE ALARM SYSTEM | Rs. |
| | 7.0 | CC TV SYSTEM | Rs. |
| | 8.0 | EARTHING SYSTEM | Rs. |
| | 9.0 | ACCESS CONTROL SYSTEM (ONLINE) | Rs. |
| | 10.0 | WI-FI NETWORKING SYSTEM | Rs. |
| | 11.0 | MISCELLANEOUS ITEMS | Rs. |
| | | Total Rs | • |
| | | | |

Signed & Stamped Of Contractor

ELECTRICAL & ALLIED WORKS

<u>Vol-1</u>

| S. No. | Description | Qty | Unit | Rate | Amount |
|--------|---|--------|------|------|--------|
| 0.1 | INVERTER (INSTALLATION) | - , | | | |
| 0.1 | Installation at designated location, connection of cables, | | | | |
| | - | | | | |
| | and commissioning of owner's supplied Inverter (UPS) | | | | |
| | with Dry Batteries Bank of following size: | | | | |
| | UPS "20 KVA", (3-Phase-In; 3-Phase Out 415V) with 15 | | | | |
| а | | 1 | Set | | |
| | minutes back-up time with battery module cabinet. | | | | |
| 1.0 | LT SWITCHGEARS | | | | |
| 1.01 | Main Panel Board (MPB-3F) | | | | |
| | Fabrication, supply at site, installation at designated | | | | |
| | location, testing and commissioning of Main Panel Board | | | | |
| | (MPB) comprising of cubicles, frame made of sheet steel | | | | |
| | 12 SWG and doors of 14 SWG, with flexible earthing | | | | |
| | straps, degreased and de-rusted, finished with electro- | | | | |
| | static powder coating of 50 micron thickness in approved | | | | |
| | color. | | | | |
| | panel housing to comply with protection class IP-54, | | | | |
| | indoor floor mounting, in free standing design, with | | | | |
| | hinged door, lockable handle, all auxiliaries, internal | | | | |
| | wiring, designation labels on MCCBs, earthing bar, | | | | |
| | numbering beads on the control wires, panel suitable for | | | | |
| | system Voltage 415 V, 50 Hz, 3 Phase and neutral | | | | |
| | bus bars of 99.8% purity electrolytic copper with tin | | | | |
| | plating, including cost of cable termination lugs, brass | | | | |
| | cable glands for incoming & outgoing cables, wiring from | | | | |
| | breakers, indication lamps, instruments and control all | | | | |
| | accessories complete in all respects. | | | | |
| | All incoming and outgoing breakers shall be accessible by | | | | |
| | opening the front door having additional M.S. sheet | | | | |
| | cover. Gaskets shall also be provided where necessary. All | | | | |
| | MCCBs shall be suitable to operate without any de-rating | | | | |
| | at 50°C ambient temperature and shall be of one make | | | | |
| | only and not a mixture of more than one make. | | | | |
| | only and not a mixture of more than one make. | | | | |
| | The front and back sides of MPB shall also have louvers at | | | | |
| | bottom and sides of panel for hot air exhaust. The panel | | | | |
| | shall have a front access. Circuits layout shall conform to | | | | |
| | the single line diagrams. Main Panel Board shall be | | | | |
| | manufactured by any one of the manufacturer as | | | | |
| | mentioned in List. | | | | |
| | Also note that For Control Purpose 2Amps SP MCBs | | | | |
| | should be used & RS-485 Terminals should be provided | | | | |
| | for remote monitoring though EAs. | | | | |
| | Incoming From Existing Source | | | | |
| I | Raahim Asso | ciates | | I | I |

| Tube light with rod to be installed inside each cubicle with micro switch on each door. | | |
|--|--|--|
| exhaust, including cost of thermostat ON/OFF switches wire mesh, air filters and all accessories / wiring, complete in all respects. | | |
| Volts robust exhaust fan 6"/8" dia. to be installed on inner sides on back or on top of synch panel for hot air | | |
| Each cubicle to have 2 thermostatically controlled 230 | | |
| (MCCB) having rupturing capacity =>15 KA at 415 V. 3-Spaces for installation of MCCBs in future Brass Cable Glands & Space for BTD/Cable as per SLD | | |
| having rupturing capacity =>15 KA at 415 V. 01-100 Amps 3 pole Moulded Case Circuit Breaker | | |
| 01-60 Amps 3 pole Moulded Case Circuit Breaker (MCCB) | | |
| 02-50 Amps 3 pole Moulded Case Circuit Breaker (MCCB) having rupturing capacity =>15 KA at 415 V. | | |
| 05-30 Amps 3 pole Moulded Case Circuit Breaker (MCCB) having rupturing capacity =>15 KA at 415 V. | | |
| Outgoing | | |
| 1-Shunt Trip (ST). | | |
| 1-Under Voltage Trip (UVT). | | |
| 1-Energy analyzer make Smart controller type X - 485. 2-Breaker ON-OFF indication lamp. | | |
| Amps of appropriate size suitable for operation with CTs. | | |
| 03-Digital type Ammeter square shaped scaled 0-250 | | |
| make Phonix / ABB or approved equivalent. 03-Digital type Voltmeter square shaped scaled 0-500 V. | | |
| 1-Surge Protective Device (SPD) arrestor 100 KA class:1 | | |
| 03-Air cooled ring type current transformers ratio 250/5Amps having suitable output and accuracy.3-Phase indication lamps of colour Red, Yellow, Blue. | | |
| not less than (20x10)mm for each phase and neutral (3P+N) +(20mx 5mm) for earth. | | |
| (MCCB) having rupturing capacity =>15 KA at 415 V. 5-Main copper bus bars of electrolytic copper 99.9% size | | |

Supply installation and commissioning of recessed wall mounting/slab mounted key tagged type Distribution Boards fabricated from 16 SWG sheet steel with electrostatic paint of approved colour and with back box, comprising of incoming 3 phase moulded case circuit breakers or earth leakage circuit breakers (as specified) and outgoing single phase Miniature circuit breakers (having magnetic & thermal trip devices) as given below, complete with internal wiring earthing, neutral link, termination blocks and cable chamber at the top of incoming 3 phase moulded case circuit breakers or earth leakage circuit breakers (as specified) and outgoing single phase Miniature circuit breakers (having magnetic & thermal trip devices) as given below, complete with internal wiring earthing, neutral link, termination blocks and cable chamber at the top of the DB. Each D.B. shall have Digital Voltmeter, Voltmeter / Selector switch, LED Phase indication lights & control fuses on incoming. All breakers & instrumentation and other materials shall be as listed in Annexure "A" it shall be manufactured by any one of the manufacturers as mentioned in Annexure "A" and conforming to single line diagram. Conforming to same constructional specification as 1.20 but equipped with following: Distribution Board DBL-3F Incoming: 1-30 ATP MCCB (RC=>10 KA) 03- Phase Indication Light 01 - Voltmeter 0 - 500V (Smart Control) with Volt selector switch Outgoing: 18-10 ASP MCB (RC=>6 KA) 3- MCB Single Pole - Spaces For Futures Nos Distribution Board DBP-3F Incoming: 1-50 ATP MCCB (RC=>10 KA) 03- Phase Indication Light 01 - Voltmeter 0 - 500V (Smart Control) with Volt selector switch Outgoing: 39-10/16 ASP MCB (RC=>6 KA) 3- MCB Single Pole - Spaces For Futures 1 Nos Distribution Board DBAC-3F **Incoming:**

i

ii

iii

| i | | • | • |
|--|--------|------|---|
| 1-100 ATP MCCB (RC=>10 KA) 03- Phase Indication Light 01 - Voltmeter 0 - 500V (Smart Control) with selector switch Outgoing: 5-20 ATP MCB (RC=>6 KA) 18-20 ASP MCB (RC=>6 KA) 3- MCB Single Pole - Spaces For Futures | h Volt | Nos | |
| 3 Web single Fole spaces for Futures | | 1103 | |
| iv <u>Distribution Board DBU-3F</u> | | | |
| Incoming: 1-60 ATP MCCB (RC=>10 KA) 03- Phase Indication Light 01 - Voltmeter 0 - 500V (Smart Control) with selector switch 2- 5 Pin 63 Amps Three Phase Industrial Power Sock | | | |
| Outgoing: | | | |
| 1-30 ATP MCCB (RC=>10 KA) | | | |
| 21-16 ASP MCB (RC=>6 KA) 3- MCB Single Pole - Spaces For Futures | 1 | Nos | |
| v <u>Distribution Board DBL-4F</u> | | | |
| Incoming: 1-30 ATP MCCB (RC=>10 KA) 03- Phase Indication Light 01 - Voltmeter 0 - 500V (Smart Control) with selector switch Outgoing: 12-10 ASP MCB (RC=>6 KA) 3- MCB Single Pole - Spaces For Futures | h Volt | Nos | |
| vi Distribution Board DBP-4F | | | |
| Incoming: 1-30 ATP MCCB (RC=>10 KA) 03- Phase Indication Light 01 - Voltmeter 0 - 500V (Smart Control) with selector switch Outgoing: 21-10/16 ASP MCB (RC=>6 KA) 3- MCB Single Pole - Spaces For Futures | h Volt | Nos | |
| vii <u>Distribution Board DBAC-4F</u> | | | |
| Incoming: 1-50 ATP MCCB (RC=>10 KA) 03- Phase Indication Light 01 - Voltmeter 0 - 500V (Smart Control) with selector switch Outgoing: 2-20 ATP MCB (RC=>6 KA) | h Volt | | |

| | | | | • | |
|------|--|-----------|--------------|---|--|
| | 12-20 ASP MCB (RC=>6 KA) | | | | |
| | 3- MCB Single Pole - Spaces For Futures | 1 | Nos | | |
| viii | Distribution Board DBU-4F | | | | |
| | Incoming: | | | | |
| | 1-30 ATP MCCB (RC=>10 KA) | | | | |
| | 03- Phase Indication Light | | | | |
| | 01 - Voltmeter 0 - 500V (Smart Control) with Volt | | | | |
| | selector switch | | | | |
| | Outgoing: | | | | |
| | 12-20 ASP MCB (RC=>6 KA) | | | | |
| | 3- MCB Single Pole - Spaces For Futures | 1 | Nos | | |
| | SUB TOT | AL SECTI | ON (1.0) | | |
| 2.0 | CIRCUIT POINT WIRING | | | | |
| | <i>Note:</i> - For list of approved manufacturer's see Annexure | | | | |
| .01 | "A". Supply and wiring of light circuit from DB to switchboard | | | | |
| .01 | / Presence Detector (PD) with 2x2.5mmsq single core | | | | |
| | insulated 300/500 volt grade cables(P+N) and 2.5mmsq | | | | |
| | cable as protective conductor (PC) in & including PVC | | | | |
| | conduit installed/ recessed in walls / R.C.C. Slab, on | | | | |
| | ceiling or as required as per site conditions. Complete | | | | |
| | with all conduit accessories junction boxes, pull boxes as | | | | |
| | required complete in all respects as per specifications and | | | | |
| | drawings. | | | | |
| | | 20 | Each | | |
| .02 | Same as item # 2.01, circuit point wiring from switch | | | | |
| | board to switch board (Loop Circuit). | 6 | Each | | |
| | | · · | | | |
| .03 | Supply and wiring of first light / Exhaust fan point | | | | |
| | consisting of one point controlled by one switch with | | | | |
| | 2x1.5mmsq (P+N) PVC insulated 300/500 volt grade wire | | | | |
| | in and including PVC conduits recessed in walls/R.C.C. | | | | |
| | slab, on ceilings or as required including all conduit | | | | |
| | accessories junction boxes, pull boxes, pull wire, 2.5mm2 | | | | |
| | cable as CPC complete with 10 Amp. single way switch | | | | |
| | make as approved by consultant (annexure-A) installed | | | | |
| | on & including 16 SWG sheet steel boards duly powder | | | | |
| | coated paint with earth bolt recessed in wall/column | | | | |
| | l l | | | | |
| | complete in all respects as per drawing & specifications. | | | | |
| | complete in all respects as per drawing & specifications. | 88 | Each | | |
| 04 | complete in all respects as per drawing & specifications. Same as item No. 2.03 above but point to point wiring. | 88 160 | Each Each | | |

| Od 30 in sla ac ca | upply and wiring of first light / wall / Exhaust fan point / occupancy Sensor with 2x2.5mm2 (P+N) PVC insulated 00/500 volt grade wire from distribution board breaker and including PVC conduits recessed in walls/R.C.C. lab, or installed on ceilings including all conduit occessories junction boxes, pull boxes, pull wire, 2.5mm2 able as PC,complete in all respects as per drawing & pecifications. | | | | |
|--|---|----|------|--|--|
| | | 2 | Each | | |
| 2.06 Sa | ame as item No. 2.05 above but point to point wiring. | 20 | Each | | |
| po m pl | ame as item No. 2.03 above but wiring of ceiling fan oint including cost of M.S. fan hook box and fan dimmer nake as approved by consultant (annexure-A) fitted on lastic plates installed on 16 SWG sheet steel boards ecessed in wall/column. | 5 | Each | | |
| po ne in cc ce pu sh | upply and wiring of first 2 pin 5/10 Amps socket outlet oint make as approved by consultant (annexure-A) from earest switch board with single core 2x1.5mmsq PVC insulated 300/500 volt grade cable in & including PVC onduit recessed in walls/R.C.C. slab, or on surface of eiling including all conduits accessories, junction boxes, ull boxes etc. 2.5mm2 cable as PC; & including 16 SWG heet steel board recessed in walls complete in all espects and as per specifications & drawings. | | | | |
| | | 15 | Each | | |
| 2x fro sv (a | upply and Wiring of one 15A power sockets outlet with x 4mmsq single core cables (P+N) and 2.5 mmsq as CPC rom DB to point including cost of one Nos. 15A 3 pin witch socket outlet make as approved by consultant annexure-A) installed on & including 16 SWG sheet steel oards recessed in walls /columns, Complete in all | | | | |
| re | espects. | 30 | Each | | |
| po (P cc as in | ame as item No.2.09 above but loop wiring of 15A ower sockets outlet with 2x 4mmsq single core cables P+N) and 2.5 mmsq as CPC from point to point including ost of one Nos. 15A 3 pin switch socket outlet with make approved by consultant (annexure-A) installed on & including 16 SWG sheet steel boards recessed in walls columns, Complete in all respects. | | | | |
| | | 16 | Each | | |
| 2. fro sv (a | upply and Wiring of one 5A light sockets outlet with 2x .5mmsq single core cables (P+N) and 2.5 mmsq as CPC rom DB to point including cost of one Nos. 5A 3 pin witch socket outlet with make as approved by consultant annexure-A) installed on & including 16 SWG sheet steel oards recessed in walls /columns, Complete in all | | | | |
| | espects. Raahim Associated MEP Consultar | | Each | | |

| .12 | Same as item No.2.11 above but loop wiring of 5A power sockets outlet with 2x 2.5mmsq single core cables (P+N) | | | | |
|------|--|----------|----------|--|--|
| | and 2.5 mmsq as CPC from point to point including cost | | | | |
| | of one Nos. 5A 3 pin switch socket outlet with make as | | | | |
| | approved by consultant (annexure-A) installed on & | | | | |
| | including 16 SWG sheet steel boards recessed in walls | | | | |
| | /columns, Complete in all respects. | 53 | Each | | |
| | | | | | |
| .13 | Supply and Wiring of one 13A light sockets outlet with 2x | | | | |
| | 4mmsq single core cables (P+N) and 2.5 mmsq as CPC | | | | |
| | from DB to point including cost of one Nos. 13A 3 pin switch socket outlet with make as approved by consultant | | | | |
| | (annexure-A) installed on & including 16 SWG sheet steel | | | | |
| | boards recessed in walls /columns, Complete in all | | | | |
| | respects. | 65 | Each | | |
| 2.14 | Same as item No.2.13 above but loop wiring of 13A | | | | |
| | power sockets outlet with 2x4mmsq single core cables | | | | |
| | (P+N) and 2.5 mmsq as CPC from point to point including | | | | |
| | cost of one Nos. 13A 3 pin switch socket outlet with make | | | | |
| | as approved by consultant (annexure-A) installed on & | | | | |
| | including 16 SWG sheet steel boards recessed in walls /columns, Complete in all respects. | | | | |
| | , , | 150 | Each | | |
| | | | | | |
| 2.15 | Wiring for Group Control emergency & Exit Light | | | | |
| | Fixtures from DB to first light point with 3X2.5 Sq.mm (P+N+E) 60 minutes Fire Rated cable in 25mm dia PVC Conduit as | | | | |
| | exposed / concealed shown on drawings. Complete in all | _ | | | |
| | respects. | 2 | Each | | |
| .16 | Supply & installation of flexible connection between light | | | | |
| | point above false ceiling to light fitting in false ceiling with | | | | |
| | 3 core 40/.076 flexible cable in & including corrugated | | | | |
| | PVC flexible pipe, 15A Bakelite connector & pipe | | | | |
| | accessories etc as required. | 75 | Each | | |
| | | | l | | |
| | SUB TOT | AL SECTI | ON (2.0) | | |
| | SUB TOT | AL SECTI | ON (2.0) | | |

| | Supply at site, installation, testing and commissioning of PVC insulated PVC sheathed non armoured copper conductor (99.9% Pure) power cable 600 / 1000 Volt grade manufactured by any one of the manufacturers as mentioned in Annexure in preinstalled cable tray / trenches cables to be installed as per routes shown on drawings including cost of all necessary materials, connections of cables and identification tags at both ends, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the employers electrical engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed. | | | |
|--------|--|----|----|--|
| 3.01 A | 1 Core Cable PVC/PVC | | | |
| i | 1 core 120mm.sq | 79 | Rm | |
| > ii | 1 core 185mm.sq | 45 | Rm | |
| 3.01 B | 4 Core Cable PVC/PVC | | | |
| i | 4 core 10mm.sq. | 38 | Rm | |
| ii | 4 core 16mm.sq. | 20 | Rm | |
| iii | 4 core 25mm.sq. | 15 | Rm | |
| iv | 4 core 35mm.sq. | 23 | Rm | |
| 3.01 D | Circuit Protective Conductor (CPC) | | | |
| i | 1 core 6mm sq. PVC insulated colour Green/Yellow. | 76 | Rm | |
| ii | 1 core 10mm sq. PVC insulated colour Green/Yellow. | 40 | Rm | |
| iii | 1 core 16mm sq. PVC insulated colour Green/Yellow. | 76 | Rm | |
| iv | 1 core 70mm sq. PVC insulated colour Green/Yellow. | 62 | Rm | |
| 3.02 A | P.V.C. Conduit and Accessories | | | |

| | | • | | |
|---|-----|-----|--|--|
| Supply at site, installation of PVC / UPVC conduit heavy duty make Shavyl, Plasco / Beta Pipes to be installed on RCC slabs, walls, floor, columns above false ceiling or as | | | | |
| required as per site conditions including cost of all PVC conduit accessories, steel pull wires, complete in all respects. | | | | |
| i 1-1/2" dia. PVC conduit. (Class D) | 190 | Rft | | |
| ii 2" dia. PVC conduit. (Class D) | 125 | Rft | | |
| iii 3" dia. PVC conduit. (Class D) | 102 | Rft | | |
| 3.02 B PVC Pipe and Accessories | | | | |
| Supply at site of 6" dia PVC heavy duty pipe make Shavyl, Plasco / Beta Pipes to be installed under ground, including cost of excavation of trench 30" deep, including cost of all PVC pipe accessories like bends, sockets, laying of PVC pipe with 4" thick layer of sand beneath pipe, 4" thick layer of brick protection and sand tape above pipe, refilling of excavations with sweet earth, ramming, watering cost of labour, material, complete in all respects. | | Rft | | |
| 3.02 C Powder Coated Ceiling Suspended / Horizontal Cable Tray in Corridor | | | | |
| Fabrication, supply at site and installation of perforated cable tray made of M.S. sheet 14 SWG 8 ft. to 10 ft. long with sides 3" high with cover of cable tray made of 18 SWG M.S sheet to be installed on wall, or in vertical, or above false ceiling in horizontal position or as shown on drawing, including cost of the following:- | | | | |
| -2 M.S threaded hanging rod 1/2" dia. Length 12" or as required as per site. -M.S strip 2" wide x 1/4" thick. -Hilti rawal bolts as per required quantity & size. -2 coats of antirust paint. -2 coats of enamel paint (Oven hot) or powder coating of approved colour with Black Color/approved by the consultant. -Complete hanging system shall be installed at every 36". | | | | |
| The above mentioned cable tray shall be complete in all respects including cost of all accessories / materials. Cable tray shall be of the following sizes. | | | | |
| 6" X 3" Cable Tray 14 SWG & Cover 18 SWG (For redressing of electrical cables inside Archive Room) | 200 | Rft | | |
| 9" X 3" Cable Tray 14 SWG & Cover 18 SWG (For redressing of electrical cables inside Archive Room) Raahim Asso MEP Consults | | Rft | | |

| С | 12" X 3" Cable Tray 14 SWG & Cover 18 SWG (For Electrical Room) | 25 | Rft |
|------|---|----------|--------------|
| | SUB TOT | AL SECTI | ON (3.0) |
| 4.0 | FITTING FIXTURES AND FANS | | |
| 4.01 | | | |
| i | Damp Proof LED tube light with 1x18 Watt having color temperature ranging from 2700K to 4500K, lumen efficacy of 80 lm/W (Lumen/Watt) and operational power factor of 0.9 with necessary hanging/fixing arrangement, complete in all respects. Providing & fixing of Mirror / Glass / Picture Light 1x8 | 5 | Each |
| " | Watt having color temperature ranging from 2700K to 4500K, lumen efficacy of 80 lm/W (Lumen/Watt) and operational power factor of 0.9 complete in all respects. | 8 | Each |
| iii | Supply and installation of Ceiling suspended hanging light with 1x12/15 Watt LED Lamp installed complete hanging arrangement, complete in all respects. | 106 | Each |
| iv | Supply and installation of 4 feet long 1x30 Watt Linear LED Light having lumen efficacy no less than 100 lm/W (lumen/watt), CRI>=80, color temperature ranging from 2700K to 4500K, having ingress protection of no less than IP-20 and operational power factor of 0.9 installed with complete hanging/fixing arrangement, complete in all respects as per instruction of engineer incharge. (Make Opple/Zess/approved by the consultant) | F0 | Cock |
| V | Supply & Installation of self contained Non maintained "EXIT LIGHT" No. CFS-EXT 300 make Alco/ Honeywell Esser or approved by the consultant with Fluorescent lamp NICAD batteries for 3 hours back up. | 50 17 | Each Each |
| vi | Supply & Installation of dual head "Emergency Light" No. CFS-EMG 300 battery operated (2xHLD Lamp) make Alco / Honeywell or approved by the consultant. | | |
| vii | Supply and installation of Ultra sonic rodent repeller complete in all respects. | 22 12 | Each Each |

| viii | Supply and installation of 1'x1' open type LED panel with 1x15 Watt having color temperature ranging from 2700K to 4500K, lumen efficacy of 80 lm/W (Lumen/Watt) and operational power factor of 0.9 complete in all respects. (For Archieve Area) | 90 | Each | |
|------|--|-----|------|--|
| ix | Supply and installation of Downlight Covered with Glass 1x3/4 Watt SMD having color temperature ranging from 2700K to 4500K, lumen efficacy of 80 lm/W (Lumen/Watt) and operational power factor of 0.9 complete in all respects. | 10 | Each | |
| х | Supply and installation of Downlight Covered with Glass 1x7/9 Watt SMD having color temperature ranging from 2700K to 4500K, lumen efficacy of 80 lm/W (Lumen/Watt) and operational power factor of 0.9 complete in all respects. | 35 | Each | |
| хi | Supply and installation of Downlight Covered with Glass 1x3 Watt COB having color temperature ranging from 2700K to 4500K, lumen efficacy of 80 lm/W (Lumen/Watt) and operational power factor of 0.9 complete in all respects. | 10 | Each | |
| xii | Supply and installation of Downlight Covered with Glass 1x7/9 Watt COB having color temperature ranging from 2700K to 4500K, lumen efficacy of 80 lm/W (Lumen/Watt) and operational power factor of 0.9 complete in all respects. | 35 | Each | |
| xii | Supply and installation of rope light complete in all respects. | 200 | Rft | |
| 4.02 | Supply and installation of following epic gang controller including following outlets complete in all respects as per specification make Schneider/equivalent: | | | |
| | i) Usb Port ii) HDMI Port iii) VGA & SVGA Port iv) Telephone & Data Outlet v) 5 Amp/International Socket Outlet | 2 | Each | |
| 4.03 | Supply, installation, testing & commissioning of 1200 Watt dual technology with daylight sensing Presence Detector make Ventilux / Schneider as approved by the consultant. | 8 | Each | |
| 4.04 | Supply and installation of plastic body exhaust fan complete with louvered make as approved by consultant (annexure-A) ,complete as per specifications and drawings. | | | |
| I | i) Exhaust fan 12" dia (Plastic Body one way) Raahim Assoc MEP Consultar | | Each | |

| | ii) Wall bracket fan 18" dia (Plastic Body one way) | 1 | Each | |
|------|--|-----------------------------|--------------|--|
| 4.05 | Supply and installation of following ceiling fan make as approved by consultant (annexure-A) complete in all respects as per specification i) 56" ceiling fan ii) 2'x2' False ceiling Recessed Revolving fan | | Each Each | |
| | | l ² TAL SECTI | | |
| | 305 101 | AL SECTI | (4.0) | |
| 5.0 | TELECOMMUNICATION SYSTEM: | | | |
| 5.0 | TELEPHONE ,DATA & MATV | | | |
| 5.01 | Supply & Laying of 1" dia PVC pipe to be laid under floor including floor cutting as required as per drawings & specifications for Telecommunication system | | Rft | |
| 5.02 | Supply & Installation of adjustable 12 SWG die cast aluminum 12"x12"x4" Floor boxes having base box of 16 SWG G.I. sheet with 3 sets of 15A PVC connectors, including floor cutting as required as per drawings for following outlets. i) 1-Telephone & Computer outlet. ii) 2-13 Amps 3 Pin Flat Pin Switch Socket Outlet iii) 1-5 Amp 3 pin Round Pin Switch socket outlets. | | Each | |
| 5.03 | Supply & Installation of 12 SWG die cast aluminum 18"x12"x4" Technology Boxes having base box of 16 SWG G.I. sheet with 3 sets of 15A PVC connectors, including cutting as required as per drawings for following outlets. i) 1-Telephone & Computer outlet. ii) 2-13 Amps 3 Pin Flat Pin Switch Socket Outlet iii) 2-5 Amp 3 pin Round Pin Switch socket outlets. | | Each | |
| | Supply and installation of RJ-11 Telephone outlet on single/double port face plate to be installed on M.S back box in floor/tech box/wall, with all accessories including face plate and I/O ,complete in all respect. Supply and installation of RJ-45 Computer (Data) outlet | 83 | Each | |
| | on single/ double port face plate, to be installed on M.S back box in floor/tech boxes/wall with all accessories including face plate and I/O, complete in all respect. | | Each | |
| 5.06 | Supply, Installation & connecting of 4 pair UTP CAT-6 cable from each telephone to telephone junction box for telephone system to be drawn in given prelaid PVC pipe complete in all respects. | | Rft | |
| 5.07 | Supply, Installation & connecting of 4 pair UTP CAT-6 cable from each computer to computer junction box for computer networking to be drawn in given prelaid PVC pipe complete in all respects. Raahim Asso MEP Consulta | cia <u>tr</u> 9812 | Rft | |

| 1 | I | | | |
|--|--|-----|------|--|
| cable seco | oly, Installation & connecting of 4 pair STP CAT-6 e from each networking switch to main server rack as ondary backbone to be drawn in given prelaid PVC complete in all respects. | 100 | Rft | |
| | allation of owner's supplied Network Switch with all essary accessories, complete in all respects. Forts | 3 | Each | |
| | allation of owner's supplied Core Network Switch all necessary accessories, complete in all respects. | | | |
| i 8 Por | rts | 1 | Each | |
| Cat-6 ANSI suita mana powe / ma for p the CISCO Patch | oly at site, installation, testing and commissioning of 6 patch panels (meeting or exceeding relevant I/TIA standards),input / output RJ-45 connectors able for Cat 6 cables patch guides along with cable tagers for under mentioned nodes, including cost of the bus bar, IDC connectors, all necessary accessories aterials, whether mentioned or not but are required proper functioning shall be deemed to be included in cost of this item, complete in all respects make CO/or approved equivalent. The panel shall be installed after obtaining necessary mission from the computer specialist of the Client. | | | |
| i 48 Po | orts | 3 | Each | |
| data 32"x: shee 4 exh switc modi acces cabir respe acces | oly at site, installation, testing and commissioning of a cabinet of following approximate size (Size probably 32"x88") make Tesco/HP/IBM/CISCO made of M.S. et, powder coated, having lockable glass door at front, haust fans on top, suitable for above mentioned data ches, consisting of the ports to be terminated on lular data cabinet, including cost of all necessary essories / materials for passive equipment. The data net and all passive equipment shall be complete in all sects including cost of all necessary materials / essories. Patch panel shall be installed after obtaining essary permission from the computer specialist of the nt. | | | |
| i Same | e as above but for 27 U data Cabinet | 2 | Each | |
| speci | oly and installation of Patch Cord , to be installed on cified location as per advised by architect / engineer's arge:- | | | |
| i Cat-6 | 6 Patch Cord (1 Mtr) Raahim Asso | | Nos | |

| ii | Cat-6 Patch Cord (3 Mtr) | 10 | Nos | | |
|-----|---|----|-----|--|--|
| 5.1 | Supply, installation, testing and commissioning of rack mounted Power Distribution Unit (PDU) of following sizes, to be installed on specified location as per advised by architect / engineer's incharge:- | | | | |
| i | Single Cord (1x16A/20A) PDU (2.5 kW) with minimum 10 extensions (meeting or exceeding relevant IEC/ANSI standard) | | Nos | | |

| 5.15 | Supply and installation of HDMI cable of following sizes, to be installed on specified location as per advised by architect / engineer's incharge:- | | | | |
|-----------|--|-----|--------------|--|--|
| i | HDMI Cable (10 Mtr) | 3 | No. | | |
| 5.16 | Supply and installation of VGA cable of following sizes, to be installed on specified location as per advised by architect / engineer's incharge:- | | | | |
| i | VGA Cable | 1 | No. | | |
| 5.17 i | Supply, Installation & Connecting up of Telephone cables 0.6mm solid conductor, polyethylene insulated, 2 insulated conductors twisted together and PVC sheathed of following pairs: 20 Pairs cable | 100 | Rft | | |
| ii | 80 Pairs cable | 75 | Rft | | |
| 5.18 | Supply at site, installation, testing and commissioning of telephone distribution boards with following telephone points to be terminated, complete in all respects: | | | | |
| i | Telephone DB (20 pair) | 1 | Each | | |
| ii | 100 Pair Main Distribution Frame (MDF) | 1 | Each | | |
| 5.19 | Supply, installation of junction box 16 SWG to be concealed in wall with 2 coats of antirust paint, earthing terminal, complete in all respects. i) Telephone Junction Box Size: 4"x7"x4". ii) Computer Junction Box Size: 4"x7"x4". | 1 | Each Each | | |
| | Supply & Installation of "MATV points wiring with all accessories CAT-6 UTP Cable in 1" dia PVC conduit from splitter (MATV- Floor Junction Box) to MATV outlet board complete in all respect. | 7 | Each | | |
| 5.21 | Supply & Installation of "MATV points wiring with all accessories RG-6 Cable in 1" dia PVC conduit from splitter (MATV- Floor Junction Box) to MATV outlet board complete in all respect. | 7 | Each | | |
| 5.22 | Supply and installation of (1 to 8)Way MATV splitter with HDTV booster complete in all respects. | 1 | Each | | |
| 5.23 | Supply, installation of television junction box 16 SWG to be concealed in wall with 2 coats of antirust paint, earthing terminal, complete in all respects. | | | | |
| | i)TV Junction Box Size: 4"x7"x4" deep | 1 | Each | | |
| 5.24 | Fluke testing of Telecommunication nodes complete in all respects. | 189 | Point | | |
| | | | ON (5.0) | | |

| 6.0 | FIRE ALARM SYSTEM | | |
|--------|--|----|------|
| | Note:- The contractor shall provide warranty of parts & | | |
| | service for one year, from authorized Distributor in | | |
| | Pakistan. Supply & Installation of fire Alarm system | | |
| | conforming to EN-54 & NFPA-72 comprising of following | | |
| | components / equipment | | |
| | Addressable System | | |
| 6.01 | Supply, installation and connecting of addressable manual call stations press glass type with test dey, suitable for surface or flush mounting make from any one of the manufacturers as specified in Annexure "A" complete in all respects and conforming to general specifications. | 2 | Each |
| 6.02 | Supply, installation and connecting of electronic alarm sounders ,complete in all respects and conforming to general specifications. | 2 | Each |
| i | Same as above but outdoor hooter for fire alarm of high pitch as approved by the consultant | 2 | Each |
| 6.03 | Supply, installation and connecting of addressable optical smoke detectors, complete in all respects and conforming to general specifications. | 30 | Each |
| 6.04 | Same as above 6.03 but addressable heat detector rate of temperature rise type ,complete in all respects . | 5 | Each |
| > 6.05 | Same as above 6.03 but addressable gas / Carbon Monoxide detectors ,complete in all respects . | 12 | Each |
| 6.06 | Supply, installation and connecting of addressable isolator modules, complete in all respects and conforming to general specifications. | 4 | Each |
| 6.07 | Supply, installation and connecting of addressable fire alarm panel of following mentioned loops. Panel should be equipped with LCD display, integrated BMS Module/Remote Monitoring complete in all respects and conforming to general specifications FACP to be installed at appropriate place as mentioned in drawings. | | |
| | i) FACP 2 Loop | 1 | Each |
| 6.08 | Supply and wiring of Smoke / Heat detector/Manual Call Point/Sounder/Hooter 30 min Fire Rated Fire Alarm (FA) 1x2 core (1.23mmsq) cable in and excluding cost of 1" dia PVC/Steel conduit with all installing accessories, complete in all respect as per drawings and specification. | | |
| | | 57 | Nos |
| | | | |

| 7.02 Supply at site, installation, testing & commissioning of Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR Visibility, Indoor type , including mounting bracket, all fixing and mounting accessories, complete in all respects, including cost of all required accessories / materials. Days as above but dome type make Alco/Honeywell. 7.04 Supply at site, installation, testing & commissioning of Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR LED , Vandal proof Body, with at least 20-30 meters IR visibility, Indoor type , including mounting bracket, all fixing and mounting accessories, complete in all respects, including cost of all required accessories / materials. 14 Each 7.03 Same as above but dome type make Alco/Honeywell. 3 Each 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support, 4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility. IP Filtering,601 Interface, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | | Supply, installation of fire alarm junction boxes 16 SWG to be concealed in wall with 2 coats of antirust paint, earthing terminal, complete in all respects. i)Fire alarm junction boxes of appropriate size 4"x7"x4" deep. Supply at site of PVC/GI conduit heavy duty, to be installed on RCC slabs, walls, floor or as required as per site conditions including cost of all PVC/GI conduit accessories, steel pull wires, complete in all respects. | 2052 | Each Rft. | |
|---|------|--|------------|--------------|--|
| 7.01 Wiring for each IP Based POE CCTV Cameras to be installed on walls / slabs or on false ceiling with cable CAT 6 UTP Cable cable in 1" dia PVC conduit (excluding cost of pipe) make Plasco / Beta Pipes, complete in all respects. 7.02 Supply at site, installation, testing & commissioning of Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR LED, Vandal proof Body, with at least 20-30 meters IR visibility, Indoor type , including mounting bracket, all fixing and mounting accessories, complete in all respects, including cost of all required accessories / materials. 14 Each 7.03 Same as above but dome type make Alco/Honeywell. 3 Each 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support,4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | 6.11 | | | | |
| 7.01 Wiring for each IP Based POE CCTV Cameras to be installed on walls / slabs or on false ceiling with cable CAT 6 UTP Cable cable in 1" dia PVC conduit (excluding cost of pipe) make Plasco / Beta Pipes, complete in all respects. 7.02 Supply at site, installation, testing & commissioning of Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR LED, Vandal proof Body, with at least 20-30 meters IR visibility, Indoor type , including mounting bracket, all fixing and mounting accessories, complete in all respects, including cost of all required accessories / materials. 14 Each 7.03 Same as above but dome type make Alco/Honeywell. 3 Each 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support, 4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | | SUB TOT | AL SECTION | ON (6.0) | |
| 7.01 Wiring for each IP Based POE CCTV Cameras to be installed on walls / slabs or on false ceiling with cable CAT 6 UTP Cable cable in 1" dia PVC conduit (excluding cost of pipe) make Plasco / Beta Pipes, complete in all respects. 7.02 Supply at site, installation, testing & commissioning of Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR LED, Vandal proof Body, with at least 20-30 meters IR visibility, Indoor type , including mounting bracket, all fixing and mounting accessories, complete in all respects, including cost of all required accessories / materials. 14 Each 7.03 Same as above but dome type make Alco/Honeywell. 3 Each 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support, 4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | 7.0 | CC TH CVCTFAA (ID DACED) | | | |
| installed on walls / slabs or on false ceiling with cable CAT 6 UTP Cable cable in 1" dia PVC conduit (excluding cost of pipe) make Plasco / Beta Pipes, complete in all respects. 7.02 Supply at site, installation, testing & commissioning of Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR LED, Vandal proof Body, with at least 20-30 meters IR visibility, Indoor type , including mounting bracket, all fixing and mounting accessories, complete in all respects, including cost of all required accessories / materials. 14 Each 7.03 Same as above but dome type make Alco/Honeywell. 3 Each 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support,4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | | | | | |
| Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR LED, Vandal proof Body, with at least 20-30 meters IR visibility, Indoor type , including mounting bracket, all fixing and mounting accessories, complete in all respects, including cost of all required accessories / materials. 14 Each 7.03 Same as above but dome type make Alco/Honeywell. 3 Each 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support,4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | 7.01 | installed on walls / slabs or on false ceiling with cable CAT- 6 UTP Cable cable in 1" dia PVC conduit (excluding cost of | 17 | Each | |
| 7.03 Same as above but dome type make Alco/Honeywell. 3 Each 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support,4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | 7.02 | Full HD Indoor Box Type IP Based POE CCTV, Day and Night Type with minimum 2MP resolution pieces IR LED, Vandal proof Body, with at least 20-30 meters IR visibility, Indoor type, including mounting bracket, all fixing and mounting accessories, complete in all respects, including | | | |
| 7.04 Supply at site, installation, testing & commissioning of 24 channel NVR with 512 MBPs network support,4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | | | 14 | Each | |
| channel NVR with 512 MBPs network support,4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories and materials, required for NVR, complete in all respects. | 7.03 | Same as above but dome type make Alco/Honeywell. | 3 | Each | |
| 1 Each | 7.04 | channel NVR with 512 MBPs network support,4K Video Out on HDMI,12 MP max camera support, Event Trigger (alarm input, video loss), Online 2x Gigabit Ethernet Network Facility,IP Filtering,GUI Interfacae, Built In Software including cost of 16 terabyte Hard Disk & KVM Switch, all necessary hardware and software accessories | | F. J | |
| | | | 1 | Each | |

| 7.05 | Supply at site, installation, tagging, connections, testing and commissioning of following Ports Data Networking POE switch Layer-2 type, consisting of following Data points to be terminated on modular patch panel, including cost of power bus bar, IDC connectors, all necessary accessories / materials, whether mentioned or not but are required for proper functioning shall be deemed to be included in the cost of this item, complete in all respects make CISCO/or approved equivalent. | | | |
|-------|--|------------|----------|---|
| i | 24 Port Data Networking POE switch Layer-2 type | 1 | Nos. | |
| 7.06 | Supply at site, installation, tagging and connections of following port Data Patch panels, installed in Data Rack or as per site. Including cost of all accessories and materials required make 3COM/Eqv, Complete in all respect. | | | |
| i | 24 Port Data Patch panels | 1 | Nos. | |
| 7.07 | Supply, installation of Patch cords of following sizes: | | | |
| ii | 1 Meter long | 40 | Nos. | |
| ii | 3 Meter Long | 5 | Nos. | |
| 7.08 | Supply at site, installation, testing & commissioning of coloured CCTV monitor LCD 32", including cost of all necessary accessories and materials (like bracket and mounting arrangements), complete in all respect. | 1 | Each | |
| 7.08A | Supply at site, installation, testing & commissioning of Android Ethernet/Wifi Supported LED 40", including cost of all necessary accessories and materials (like bracket and mounting arrangements), complete in all respect. | 7 | Each | |
| | | , | Lacii | |
| 7.09 | Supply and fabrication of close circuit junction boxes 16 SWG to be concealed in wall with 2 coats of antirust paint, earthing terminal, complete in all respects. | | | |
| | i)Junction boxes of appropriate size 4"x7". | 1 | Each | |
| 7.10 | Supply at site of PVC conduit heavy duty to be installed on RCC slabs, walls, floor or as required as per site conditions including cost of all PVC conduit accessories, steel pull wires, complete in all respects. | | | |
| | i) 1" dia. PVC conduit. | 1326 | Rft. | |
| | Note:- Above mentoned system should be complete in all respect for proper functioning including cost of items mentioned or not. | -A1 CECT | ON /7 C | |
| | SUB TOT Raahim Asso | AL SECTION | JN (7.0) | |
| l | Kaahim Asso | ciates | | I |

| 8.0 | EARTHING SYSTEM | | | |
|-------|---|---------------------|-----------|---|
| >8.01 | Providing and installation of Earthing Veractor Cone / | | | |
| | Spike Size 2" thick, 12" long as shown in drawings or ¾" | | | |
| | dia & 10 ft long copper rod as earth electrode 100 ft or | | | |
| | upto the water level, below ground level including cost of | | | |
| | boring and lowering the rod (100ft / upto the water level) | | | |
| | down, complete with clamp and 2x120mm2 stranded | | | |
| | copper conductor from rod to ground surface in 3" dia | | | |
| | G.I.pipe (EL Class) with watering cap, Man-hole with | | | |
| | cover as per detail shown in drawings. all earth work | | | |
| | should be done according to the advise of electrical | | | |
| | consultant. | 1 | Each | |
| | | | | |
| 8.02 | Same as item # 8.01 (A), but wired with 2x70mmsq cable | | | |
| | in 2" dia GI Pipe (EL Class) as shown in drawings. | | | |
| | | 1 | Each | |
| 8.03 | Same as item # 8.01 (A), but wired with 2x25mmsq cable | | | |
| 0.03 | in 1½" dia GI Pipe (EL Class) as shown in drawings. | | | |
| | in 1/2 and of tipe (EE class) as shown in arawings. | 1 | Each | |
| | | _ | | |
| 8.04 | Supply and installation and looping with 70mm2 copper | | | |
| | terminal Earth braids (flexible fishnet bonding straps) | | | |
| | along with with necessary accessories duly installed on | | | |
| | cable tray. | 30 | Nos | |
| 0.05 | | | | |
| 8.05 | Supply and installation of Earth connecting points | | | |
| | comprising of 2"x9"x½" (Width x Length x Thickness) copper plate with brass nuts & bolts fitted on M.S. | | | |
| | bracket installed on walls / columns. | 3 | Each | |
| | bracket instance on wans / columns. | 3 | Lucii | |
| 8.06 | Supply & Installation of following sizes of PVC insulated | | | |
| | green color single core copper conductor cables to be | | | |
| | drawn in given PVC / M.S. conduits or laid in cable trays | | | |
| | or installed on vertical surfaces complete with cable lugs, | | | |
| | ties, P.G. clamps markers and accessories as required | | | |
| | complete in all respects. | | | |
| i | 25mm2 | 40 | Rm | |
| ii | 70mm2 | 40 | Rm | |
| > iii | 120mm2 | 50 | Rm | |
| | SUR TO | AL SECTION | ON (8 O) | |
| 9.00 | ACCESS CONTROL SYSTEM (ONLINE) | , 12 JEC 11 | 2.1 (0.0) | |
| | , | | | |
| 9.01 | Wiring for each Node/Gateway to be installed on | | | |
| | walls/ceiling etc with 4 pair Cat. 6, UTP cable pure copper | | | |
| | conductor in and including cost of 1" dia PVC conduit | | | |
| | recessed in walls, columns, slabs, floors or above false | | | |
| | ceiling with all necessary fixing accessories as required as | | | |
| | per site condition, including cost of all PVC conduit | | | |
| | accessories, pull boxes, steel pull wires, powder coated, | | | |
| | including cost of all necessary accessories and materials, | | | |
| | complete in all respects. Raahim Asso | ciates ² | Nos. | |
| | MFP Consults | | | • |

| 0.03 | 1 | | | Ī | Ī |
|----------|---|----------|--------------|---|---|
| 9.02 | Supply at site, installation, testing and commissioning of Proximity Cards ISO bar code card standard size and thickness, thin, flexible polyvinyl chloride laminated, | 20 | Nos | | |
| 9.03 | passive type, easy printable on both sides. Supply at site, installation, testing and commissioning of following Wifi Operated Magnetic Drop Bolt Lock with built in batteries, holder, Proximity Card Reader 125KHz, (for outside door) reading range 6", operating at low voltage DC supply, with mounting base suitable for interior and exterior environment with Door Interface Unit (DIU), and fixing accessories, complete in all respects make Salto Mifare/Approved equivalent. | 30 | Nos. | | |
| a) b) | Single Door Double Door | 7 1 | Nos. Nos. | | |
| 9.04 | Supply at site, installation of Master unit alongwith software, usb encoder for card reader, for access control | | | | |
| | cloud duly installed at ceiling complete in all respects. Note:- Above mentoned system should be complete in all respect for proper functioning including cost of items mentioned or not. | 1 | Nos. | | |
| | SUB TOT | AL SECTI | ON (9.0) | | |
| 10.0 | WI-FI NETWORKING SYSTEM | | | | |
| | Wiring for each POE Wi-Fi Access points to be installed on | | | | |
| 10.01 | walls / slabs or on false ceiling with cable CAT-6 UTP Cable cable in 1" dia PVC conduit (excluding cost of pipe) make Plasco / Beta Pipes, complete in all respects. | 6 | Each | | |
| | Cable cable in 1" dia PVC conduit (excluding cost of pipe) | | Each | | |

| | Supply at site, installation, tagging, connections, testing and commissioning of following PoE Data Networking switch Layer-2 type , consisting of following Data points to be terminated on modular patch panel, including cost of power bus bar, IDC connectors, all necessary accessories / materials, whether mentioned or not but are required for proper functioning shall be deemed to be included in the cost of this item, complete in all respects make Trendnet/or approved equivalent. | | | |
|-------|--|---------------|-----------|---|
| i | 8 Ports PoE Data Switch | 1 | Each | |
| | Supply at site, installation, tagging and connections of following Data Patch panels , installed in Data Rack or as per site. Including cost of all accessories and materials required. Complete in all respect. | | | |
| i | 8 Ports | 1 | Each | |
| 10.05 | Supply and installationn of Patch cord of following sizes. | | | |
| а | 1 Meter long patch cord | 10 | No. | |
| | 3 Meter long patch cord | 5 | No. | |
| | Supply and fabrication of close circuit junction boxes 16 SWG to be concealed in wall with 2 coats of antirust paint, earthing terminal, complete in all respects. | | | |
| | i)Junction boxes of appropriate size 4"x7"x4". | 1 | Each | |
| | Supply, Installation & connecting of STP CAT-6 cable from each networking switch to main server rack as secondary backbone to be drawn in given prelaid PVC pipe complete | | | |
| | in all respects. | 150 | Rft | |
| | Programming, testing, commissioning of complete system in the presence of site engineer. And training of | | | |
| | staff. | 1 | Job | |
| | Note:- Above mentoned system should be complete in all respect for proper functioning including cost of items mentioned or not. | | | |
| | SUB TOT. | AL SECTIO | ON (10.0) | |
| 11.0 | MISCELLANEOUS ITEMS | | - | |
| | Supply and installation of Fire fighting equipment for criterial and non critical areas complete in all respects. | | | |
| i | Dry Powder Fire Balls | 5 | Each | |
| | 25 kg Carbon Dioxide AFFF Fire Trolley | 1 | Each | |
| iii | 5kg Carbon Dioxide Fire Extinguishers Raahim Asso MEP Consults | | Each | l |

| Dismentleing of old items as far as electrical items are concerned and there handing over to the client as where is basis. SUB TOT. | 1 | Job DN (11.0) | | |
|--|--------|-------------------------|-----|--|
| Total Carried Over to | Summai | y of Costs | Rs. | |

Note:

It should be clearly understood by the contractor / bidder that the above mentioned items shall be complete in all respects, including cost of necessary materials / accessories whether mentioned or not but are required for proper functioning of the system shall be deemed to be included in the cost of each above mentioned items, no extra charge shall be paid or claimed by the contractor / bidder.

Signed & Stamped Of Contractor

Raahim Associates MEP Consultant And Contract Management Co.

SUMMARY OF COST (Electrical Works)

Vol-2

| 0.1 | INVERTER (SUPPLY) | Rs. | |
|-----|---|-----------|--|
| 1.0 | ALL IN ONE / KISOK PC | Rs. | |
| 2.0 | QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM | Rs. | |
| 3.0 | NETWORK SWITCHES (SUPPLY) | Rs. | |
| 4.0 | MULTI MEDIA PROJECTOR | Rs. | |
| 5.0 | KITCHEN EQUIPMENT | Rs. | |
| | | Total Rs. | |

Signed & Stamped Of Contractor

ELECTRICAL & ALLIED WORKS

Vol-2

| S. No. | Description | Qty | Unit | Rate | Amount |
|--------|---|---------|--------------|------|--------|
| 0.1 | INVERTER (SUPPLY) | | | | |
| | Supply at designated location/site, testing and | | | | |
| | commisioning of Online-Inverter (UPS) with Dry Batteries | | | | |
| | Bank (as specified below) suitable for operation at 50° C | | | | |
| | (Max) manufactured by any one of the manufacturers as | | | | |
| | specified assembled in accordance with their provided | | | | |
| | drawings, energized by the in coming main supply, | | | | |
| | battery charger, set of spare Copper battery thimble, | | | | |
| | radio interference suppressors, voltmeter displays and | | | | |
| | other allied safeties. | | | | |
| | Suitable for 400 / 230 volts, 50 cycles/second, including | | | | |
| | cost of all necessary material / accessories, conforming to | | | | |
| | technical specifications mentioned below. | | | | |
| | Technical Specification of Inverter: | | | | |
| | Prime Rating: | | | | |
| - | On-Line, Normal and Bypass AC inputs, Interface Port | | | | |
| | Output: | | | | |
| | Efficiency at Full Load :>92% | | | | |
| | Load Power Factor: >0.9 | | | | |
| | Output Voltage Distortion :Less than 2% | | | | |
| | Output Frequency:50Hz | | | | |
| | Output Voltage Regulation: +-1% | | | | |
| | Waveform Type :True Sine wave | | | | |
| | Efficiency at full load: =(should not less than) >90% | | | | |
| | Bypass :Internal Bypass (Automatic and Manual) | | | | |
| | Input: | | | | |
| | Total Harmonic Distortion Index < 3% | | | | |
| | Bypass :Internal Bypass (Automatic and Manual) | | | | |
| | Input: | | | | |
| | Batteries & Runtime | | | | |
| | Battery Type :Maintenance-free sealed deep discharged | | | | |
| | GEL Type battery | | | | |
| | Control panel | | | | |
| | LED status display | | | | |
| | Alarm when on battery : distinctive low battery alarm : | | | | |
| | overload continuous tone alarm | | | | |
| | Emergency Power Off (EPO) :Yes | | | | |
| | Rack Height :6U | | | | |
| | Surge Protection & Filtering | Minim | 2 Vaa= | | |
| - | Warranty: | Minimun | iz year I | | |
| a) | UPS "20 KVA", (3-Phase-In; 3-Phase Out 415V) with 15 | 1 | Set | | |
| a) | minutes back-up time with battery module cabinet. | 1 | Set | | |
| | Raahim Assoc | inter | | | |

| .00 | ALL IN ONE / KISOK PC | | | |
|----------------------|--|-------------------|------------|--|
| 1 01 | Supply Installation Testing and Commissioning of "All in | | | |
| 1.01 | Supply, Installation, Testing and Commissioning of "All in | | | |
| | one PC" with following mentioned specifications | | | |
| | complete in all respects: | | | |
| i | Processor Generation: 9th Generation or above | | | |
| ii | Processor specifications: Core i5, 6C/6T/9MB, 2.2Ghz | | | |
| | base upto 3.7Ghz Turbo (Or Better) | | | |
| iii | Processor specifications: Core i5, 6C/6T/9MB, 2.2Ghz | | | |
| | base upto 3.7Ghz Turbo (Or Better) | | | |
| iv | Memory: Single DIMM 8GB DDR4 latest specs/ speed | | | |
| | (2666 or more) and Upgradable to 16GB | | | |
| V | Hard Disk: 512GB PCIe NVMe – M2 Internal SSD | | | |
| vi | Display: 23 inches or more, Full HD (1920x1080), | | | |
| | Antiglare | | | |
| vii | Wireless: 802.11ac (wave-2) MU-MIMO | | | |
| viii | Sound: Integrated, 3.5 mm audio/ combo jack | | | |
| ix | Camera: Integrated HD minimum 720p | | | |
| Х | Keyboard: Included (Wired) with Universal English | | | |
| | language. | | | |
| χi | Mouse: Included (Wired) with optical tracking. | | | |
| xii | Interface: Minimum 1x USB2.0 ports, 4xUSB3.1, 1x HDMI | | | |
| | Integrated GbE | | | |
| | l = | | | |
| xiii | Operating System: With Windows 10 | | | |
| xiii xiv | Warranty: 1 year Standard warranty | 15 | Each | |
| xiv | Warranty: 1 year Standard warranty SUB TOT | 15 FAL SECTION | | |
| xiv | Warranty: 1 year Standard warranty | | | |
| xiv 2.00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM | AL SECTION | | |
| xiv 2.00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using | TAL SECTION | | |
| .00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make | TAL SECTION | | |
| xiv 2.00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser | FAL SECTION | | |
| .00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at | FAL SECTION | | |
| xiv 2.00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; | TAL SECTION | | |
| .00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's | TAL SECTION | ON (1.0) | |
| xiv 2.00 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; | TAL SECTION | | |
| 2.00 2.01 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. | TAL SECTION | ON (1.0) | |
| 2.00 2.01 | Warranty: 1 year Standard warranty **SUB TOT* QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of | TAL SECTION | ON (1.0) | |
| 2.00 2.01 | Warranty: 1 year Standard warranty GUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make | 180 | ON (1.0) | |
| 2.00 2.01 | Warranty: 1 year Standard warranty **SUB TOT* QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all | 180 | ON (1.0) | |
| 2.00 2.01 | Warranty: 1 year Standard warranty GUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make | 180 | ON (1.0) | |
| 2.00 2.01 | Warranty: 1 year Standard warranty **SUB TOT* QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all | 180 | ON (1.0) | |
| 00 01 | Warranty: 1 year Standard warranty QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. Supply at site, installation, testing & commissioning of | 180 | ON (1.0) | |
| 00 01 | Warranty: 1 year Standard warranty QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. | 180 | ON (1.0) | |
| 00 01 | Warranty: 1 year Standard warranty QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. Supply at site, installation, testing & commissioning of | 180 | ON (1.0) | |
| 00 01 | Warranty: 1 year Standard warranty **SUB TOT* QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. Supply at site, installation, testing & commissioning of main display panels make Qnet as approved by | 180 | ON (1.0) | |
| 2.00 2.01 | Warranty: 1 year Standard warranty QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. Supply at site, installation, testing & commissioning of main display panels make Qnet as approved by electrical consultant, complete in all respects.with 42 | 180 | Rft Nos | |
| 2.00 2.01 2.02 | Warranty: 1 year Standard warranty QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated,CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. Supply at site, installation, testing & commissioning of main display panels make Qnet as approved by electrical consultant, complete in all respects.with 42 | 180 1 | Rft Nos | |
| 2.00 2.01 2.02 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated, CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. Supply at site, installation, testing & commissioning of main display panels make Qnet as approved by electrical consultant, complete in all respects.with 42 inches screen. | 180 1 | Rft Nos | |
| 2.00 2.01 | Warranty: 1 year Standard warranty SUB TOT QUE MANAGEMENT / SELF SERVICE KISOK SYSTEM Supply and Wiring of Queue Management system using PVC insulated, CPT Type STP Cat-6 cable make VeniluxInc/Clipsal Cat-6 cables from Q-matic dispenser unit to each Q Matic Display unit and to control switch at each teller's station in 1" dia heavy duty PVC conduitl; complete as per the owner supplied equipment's specifications. Supply at site, installation, testing & commissioning of kisok devices touch button with ticket printer etc make Qnet as approved by electrical consultant, complete in all respects. Supply at site, installation, testing & commissioning of main display panels make Qnet as approved by electrical consultant, complete in all respects.with 42 inches screen. Supply at site, installation testing & commissioning of | 180 1 | Rft Nos | |

| 2.04 | 1 | | i | |
|-------|---|----------------|--------------|--|
| | Supply at site, installation testing & commissioning of controller keypad make Qnet as approved by electrical | | | |
| | consultant, complete in all respects. | 2 | Nos | |
| 2.05 | Supply at site, installation & commissioning of main server devices including software package ,necessary power feeeding devices Qnet or as approved by electrical consultant, complete in all respects. | | Job | |
| 2.06 | Supply at site of PVC conduit heavy duty make Plasco / Beta Pipes, to be installed on RCC slabs, walls, floor or as required as per site conditions including cost of all PVC conduit accessories, steel pull wires, complete in all respects. i) 1" dia. PVC conduit. | | Rft | |
| • • • | | | | |
| 2.07 | Programming, testing, commissioning of complete system in the presence of site engineer. And training of staff. | | Job | |
| | Note:- Above mentoned system should be complete in all respect for proper functioning including cost of items mentioned or not. | | | |
| | SUB TO | TAL SECTIO | ON (2.0) | |
| 3.00 | NETWORK SWITCHES (SUPPLY) | | | |
| 3.01 | Supply at site of networking switch for under mentioned nodes, consisting of following Gigabit Data points to be terminated on modular patch panel, including cost of power bus bar, IDC connectors, all necessary accessories | | | |
| | / materials, whether mentioned or not but are required for proper functioning shall be deemed to be included in the cost of this item, complete in all respects make CISCO/Rukus or approved equivalent. (Layer-2) | | | |
| i | / materials, whether mentioned or not but are required for proper functioning shall be deemed to be included in the cost of this item, complete in all respects make CISCO/Rukus or approved equivalent. | | Each | |
| | / materials, whether mentioned or not but are required for proper functioning shall be deemed to be included in the cost of this item, complete in all respects make CISCO/Rukus or approved equivalent. (Layer-2) | 3 | Each | |

| | SUB TO | AL SECTION | ON (3.0) | | |
|------|--|------------|-----------|-----|--|
| 4.00 | MULTI MEDIA PROJECTOR | | | | |
| 4.01 | Supply and installation of Multimedia Digital Projector, resolution 1024x768 with wall bracket, HDMI video, VGA inputs make Samsung/Pansonic or approved equivalent with all accessories complete in all respects. | | Each | | |
| 4.02 | One complete Set of VGI cable, 10 Meter long HDMI cable Audio Video cables, CAT-6 UTP Ethernet Cords with fitted with RJ-45 oultets, complete in all respects. | | Set | | |
| Г 00 | | AL SECTI | 014 (4.0) | | |
| 5.00 | KITCHEN EQUIPMENT | | | | |
| 5.01 | Supply and installation of Electric Kitchen Hob with 4 Zones and Front Mounted Touch Controls complete in all respects. (Base price should not be more than 25,000/-) | | Each | | |
| 5.02 | Supply and installation of digital control type 220-250 VAC operated 1000 Watt kitchen embedded type microwave oven make Delonghi/Fuji/or as approved by the consultant complete in all respects. | | Each | | |
| | Total Carried Over to | | | Rs. | |

Note:

It should be clearly understood by the contractor / bidder that the above mentioned items shall be complete in all respects, including cost of necessary materials / accessories whether mentioned or not but are required for proper functioning of the system shall be deemed to be included in the cost of each above mentioned items, no extra charge shall be paid or claimed by the contractor / bidder.

| Signed | & Stampe | ed Of Conti | ractor | |
|--------|----------|-------------|--------|--|

| LIST OF APPROVED MANUFACTURERS (M) | | | | | | | |
|--|---|---|--|--|---|--|--|
| | LIST OF APP | | KS (IVI) | | (Annexure-A) | | |
| Sr# | Particulars | Manufacturers / Vendors | Origin | Landline | Mobile / Cell | | |
| 1 LT / HT PANELS & DB's / Street Poles | | | | | | | |
| i ii iii iv v | Quality Switchgear Pvt Ltd. Bilal Engineering AL-Rehman Switchgear Tariq Electric South Asian Electric Concern PEMPAK | Quality Switchgear Bilal Engineering AL-Rehman Switchgear Tariq Electric South Asian Electric PEMPAK | Pakistan Pakistan Pakistan Pakistan Pakistan Pakistan | 042- 111-786-774 042-37523812 - 042-3-6522861 042-3-6530000 111-736-725 | 0300-8404301 0331-4999119 0322-4466011 0300-8492515 0300-8477067 0345-844229 | | |
| 2 | CIRCUIT BREAKERS | | | | | | |
| a) | ACBs/TP MCCBS | | | | | | |
| i) ii) iii) | L.S Terasaki Legrand | Sheikh Waliyat & Sons Jubliee Corporation Shahid International | Korea Japan EU | 021-3-2624011 042-111-000-520 042-37670980-1-4 | 0307-5553960 0300-8548550 0321-8472264 | | |
| b) | SP MCBS / ELCBS | | | | | | |
| i) ii) iii) | LS Terasaki Legrand | Sheikh Waliyat & Sons Jubliee Corporation Shahid International | Korea Japan EU | 021-3-2624011 042-111-000-520 042-37670980-1-4 | 0307-5553960 0300-8548550 0321-8472264 | | |
| 3 | CONTACTORS | | | | | | |
| i) ii) iii) 4 | Terasaki L.S Lovato SELECTOR SWITCHES | Jubliee Corporation Sheikh Waliyat & Sons Jubliee Corporation | Japan Korea EU | 042-111-000-520 021-3-2624011 042-111-000-520 | 0300-8548550 0307-5553960 0300-8548550 | | |
| i) ii) | GGT KRAUS & NAIMER | E-Links E-Links | EU EU | | 0321 4404025 0321 4404025 | | |
| 5 | VOLTMETER, AMPEREMETERS, I | FREQUENCY METERS, ENER | GY ANALYZEF | RS / ENERGY METERS | | | |
| i) ii) | Smart Controller Lovato | Index Technology Jubliee Corporation | UK Italy | 042-38939166 042-111-000-520 | 0300-8184203 0300-8548550 | | |
| 6 | INDICATION LIGHTS | | | | | | |
| i) ii) | Telemechanique / Schneider GGT | Schneider Pakistan E-Links | EU EU | 042-35912571 | 0321 4404025 | | |
| 7 | SWITCHES & SOCKETS | | | | | | |
| i) ii) | Clipsal Vivace Series Legrand | Clipsal Pakistan Shahid International | China EU | 042-37670980 | 0322-2880057 0321-8472264 | | |

| iii) | Orange Switches | Orange Electric | | | 0322-4834937 |
|-------|---|--------------------|------------|-----------------|--------------|
| 8 | LT CABLES | | | | |
| i) | Coppergat Cables | Coppergat Cables | Pakistan | 111 222 425 | 0300-8453646 |
| ii) | Fast Cables | Fast Cables | Pakistan | 042-35742391 | 0320-8080046 |
| iii) | Newage Cables | Newage Cables | Pakistan | 042 111 777 300 | 0333-4748210 |
| iv) | Golden Star Cables | Golden Star Cables | Pakistan | 042 111 777 300 | 0321-4044297 |
| IV) | Golden Star Cables | Golden Star Cables | Pakistaii | | 0321-4044297 |
| 9 | EARTHING CONDUCTORS | | | | |
| i) | Coppergat Cables | Coppergat Cables | Pakistan | 111 222 425 | 0300-8453646 |
| ii) | Fast Cables | Fast Cables | Pakistan | 042-35742391 | 0320-8080046 |
| iii) | Newage Cables | Newage Cables | Pakistan | 042 111 777 300 | 0333-4748210 |
| iv) | Golden Star Cables | Golden Star Cables | Pakistan | | 0321-4044297 |
| 10 | PVC CONDUIT & ACCESSORIES | | | | |
| i) | PLASCO PIPE | PLASCO PIPE | Pakistan | 053-3589621 | 0321 4113938 |
| | BETA PIPES | BETA PIPES | Pakistan | 042-8880161 | 0321 4113936 |
| ii) | BETA PIPES | BETA PIPES | Pakistan | 042-0000101 | |
| 11 | LIGHTING FIXTURES | | | | |
| i) | VLUX | Index Technologies | China | 042-35857072 | 0300-8184203 |
| ii) | Philips Pakistan. | Philips Pakistan | China | 021-111786777 | |
| iii) | Greenlights | Green LED | China | | 0334-4552505 |
| iv) | Opple Lights | | | | 0301-2440368 |
| , | - FF | | | | |
| 12 | <u>FANS</u> | | | | |
| i) | Lahore Fan | Lahore Fan | Pakistan | 042-35113741 | |
| ii) | Royal Fans | Royal Fans | Pakistan | 042 - 35761308 | |
| 13 | TELEPHONE CABLES | | | | |
| i) | Ventilux | Index Technologies | UK | 042-38939166 | 0300-8184203 |
| ii) | ELAN Cabels | Index Technologies | USA | | 0300-8184203 |
| iii) | Clipsal | Clipsal Pakistan | Australia | | 0322-2880041 |
| , | - Chipsul | empour rumotum | 7140014114 | | .1 |
| 14 | Data Cables (CAT-6 UTP) | | | | |
| i) | Ventilux | Index Technologies | UK | | 0300-8184203 |
| ii) | ELAN Cabels | Index Technologies | EU | | 0300-8184203 |
| 15 | Co-Axial Cables (RG-6/7) | | | | |
| i) | Ventilux | Index Technologies | UK | | 0300-8184203 |
| ii) | ELAN Cabels | Index Technologies | EU | | 0300-8184203 |
| iii) | 3M | ESP Solutions | USA | | |
| 1111) | SIVI | ESP Solutions | USA | | 0333-4666986 |
| 16 | TELEPHONE, JUNCTION BOXES & PATCH PANELS | | | | |
| i) | TESCO | Index Technology | | | 0300-8184203 |
| ii) | 3M | ESP Solutions | USA | | 0300-8184203 |
| 11) | SIVI | LSI SOIULIONS | USA | | 0333-4000300 |
| 17 | TELEPHONE OUTLETS | | | | |
| i) | CLIPSAL (Vivace Series - White) | Clipsal Pakistan | China | 042-37221618 | 0322-2880041 |

| ii) iii) | Legrand Orange Switches | Shahid International Orange Electric | EU | 042-37670980-1-4 | 0321-8472264 0322-4834937 |
|-------------|---------------------------------|---|---------------------|------------------|------------------------------|
| 18 | FIRE ALARM SYSTEM | | | | |
| i) | DETNOV | Index Technology | Spain | | 0300-8184203 |
| ii) | ALCO (fire & security) | Index Technology | USA | | 0300-8184203 |
| iii) | EATON | C-Xor Engineering | UK | | 0300 8477751 |
| 19 | CC TV SYSTEM | | | | |
| i) | SAMSUNG | Vital International | China | 042-35290613 | 0306-6831111 |
| ii) | ALCO | Index Technology | USA | 042-35872817 | 0300-8184203 |
| 20 | PUBLIC ADDRESS SYSTEM | | | | |
| i) | TOA | Index Technology | Japan | | 0300-8184203 |
| ii) | ITC | Index Technology | China | | 0300-8184203 |
| 21 | Cable Trunking / Ladders | | | | |
| i | QUALITY SWITCHGEAR PVT LTD | Quality Switchgear | Pakistan | 042- 111-786-774 | 0300-8404301 |
| ii) | AL-Rehman Swgr | AL-Rehman Switchgear | Pakistan | - | 0322-4466011 |
| iii) | South Asian Electric | South Asian Electric | Pakistan | 042-3-6530000 | 0322-8450362 |
| 22 | Bus Tie Duct / BTD | | | | |
| i) | Pogillano | Jubliee Corporation | EU | 042-111-000-520 | 0300-8548550 |
| ii) | Power Bar | GS Engineering | Ireland | | 0323-440522 |
| v) | Power Plug | C-Xor Engineering | Malaysia | | 0300 8477751 |
| 23 | Early Streamer Emission Lighten | | | | |
| i) | Application Tech | C-Xor Engineering | Spain | | 0300 8477751 |
| ii) iii) | D-Tech LPI | Index Technology Britlite Pakistan | Turkey Australia | | 0300-8184203 0320-1214321 |
| 111) | LPI | Britille Pakistan | Australia | | 0320-1214321 |
| 24 | MV Switchgear | | | | |
| i) | Ring Main Unit / LBS ABB | ABB | EU | | 0303-4443327 |
| ii) | Siemens | Siemens | EU | 042-37636408 | 0303-4443327 |
| ", | Sicinchis | Siemens | LO | 042 37030400 | |
| 25 | <u>Transformers (Dry Type)</u> | · · | | | |
| i) ::\ | Trafo Elettro | C-Xor Engineering | EU | 042 444 000 520 | 0300 8477751 |
| ii) | TMS | Jubliee Corporation | EU | 042-111-000-520 | 0300-8548550 |
| 26 | <u>Oil Type</u> | | | | |
| i) | Pak Electron Limited (PEL) | Pak Electron Limited (PEL) | Pakistan | 042-35920153 | |
| ii) | ELMETEC | ELMETEC | Pakistan | 042-35457311 | |
| iii) | Hammad Engineering | Hammad Engineering | Pakistan | | 0302-4712772 |
| iv) | Transfo Power | Transfo Power | Pakistan | 042-35784025 | |
| 27 | <u>Generator</u> | | | | |
| i) | Cummins | Innovative Engergy Sol | | | 0333-0525552 |
| ii) | Scania | KAN Engineering Services | EU | | 0301-8402312 |
| iii) | Mitsubishi | Masco Energy | Japan | | 0300-7834336 |
| iv) | Powerlink | Meccatech | UK | | 0300-0889690 |
| · | | | | | |
| 27 نا | Generator Control Modules | Hub Engineering | EL! | | 0204 (020272 |
| i) | Sices | Hub Engineering | EU | | 0301-6020372 |

| ii) | Deep Sea | Pyramid Automation | UK | | 0333-4561619 |
|------|------------------------------|------------------------|------------|------------------|----------------|
| 28 | Occupancy Sensor | | | | |
| i) | Ventilux | Index Technology | UK | | 0300-8184203 |
| ii) | Clipsal/Schneider Electric | Clipsal Pakistan | O.C | | 0333-5386439 |
| , | empsury sermender Erective | Chpsair akistan | | | 0333 3300433 |
| 29 | Wifi Router | | | | |
| i) | Ruckus | Netsoft | Australia | | 0321-8480227 |
| ii) | Huawei | CMC | China | | 0330-7470125 |
| | | | | | |
| 30 | GPON Primary Infrastructure | | | | |
| i) | Ruckus | Netsoft | Australia | | 0321-8480227 |
| ii) | Huawei | CMC | China | | 0330-7470125 |
| 31 | Lifts/Escalator/Dump Waiters | | | | |
| i) | Fuji | Innovative Energy Sol. | Japan | | 0300-8504838 |
| ii) | Sanyo | DWP Technologies | Japan | | 0302-8445225 |
| iii) | OTIS | Royal Systems | Japan | | 0300-8548002 |
| iv) | Euksali | Mesi Group | Turkey | | 0300-8446992 |
| v) | Mitsubishi | Wicsi Group | Turkey | | 0300 0440332 |
| ۷) | Wittsdalistii | | | | |
| 32 | <u>PFI Relay</u> | | | | |
| i) | Klemsan | E-Links | Turkey | | 0321 4404025 |
| ii) | Nokian | Jubliee Corporation | Finland | 042-111-000-520 | 0300-8548550 |
| 33 | Terminal Blocks | | | | |
| i) | Klemsan | E-Links | Turkey | | 0321 4404025 |
| ii) | Onka | E-Links | Turkey | | 0321 4404025 |
| , | - Cinca | E Elliko | runcy | | 0321 110 1023 |
| 34 | PFI Capacitors | | | | |
| | | | Czech | | 0321 4404025 |
| i) | ZEZ | E-Links | Republic | | |
| ii) | Groupo Energia | E-Links | Italy | | 0321 4404025 |
| iii) | Nokian | Jubliee Corporation | Finland | 042-111-000-520 | 0300-8548550 |
| iv) | Shizuki | Sheikh Waliyat & Sons | Thailand | 021-3-2624011 | 0307-5553960 |
| 35 | Current Transformers | | | | |
| i) | Revalco | Jubliee Corporation | Italy / EU | 042-111-000-520 | 0300-8548550 |
| ii) | Hubit | E-Links | UK | 0.12 111 000 010 | 0321 4404025 |
| iii) | Effan | E-Links | Germany | | 0321 4404025 |
| iv) | Metelex Pakistan | Metelex Pakistan | Pakistan | | 0302-4712772 |
| 10, | Wicciex Fundam | Wieterex Funistari | rakistari | | 0302 4712772 |
| 36 | Access Control/Door Locks | | | | |
| i) | Salto | ESP Solutions | UK | | 0333-4666986 |
| ii) | Ventilock | | | | |
| 37 | <u>Inverter</u> | | | | |
| i) | APC by Schneider | Innovative Energy Sol. | EU | | 0300-8504838 |
| ii) | Emerson / Liebert | CMC | USA | | 0330-7470125 |
| iii) | ABB | CXOR | China | | 0300-8431263 |
| , | _ | J | 5 | | 0.000 0 .01200 |
| 38 | <u>Qmatic System</u> | | | | |
| i) | Qnet | Matrix Sol. | | | 0321-5022100 |
| | | | | | |

SUMMARY OF COST (HVAC WORKS)

| 1.0 | HVAC Works | Rs. | |
|----------|-------------------------|-----------|--|
| | | Total Rs. | |
| | | | |
| Signed 8 | & Stamped Of Contractor | | |

HEATING, VENTILATION AND AIR CONDITIONING

| ITEM | NG, VENTILATION AND AIR CONDITIONING SCOPE OF WORK | UNIT | QTY | UNIT PRICE | TOTAL PRICE |
|-------|--|------|-----|------------|-------------|
| 1.0 | SINGLE SPLIT (INVERTER TYPE) AIR CONDITIONING SYSTEM | | | | |
| | Supply & Installation of heat Pump (Heat & Cool inverter type) DX Split Type Air Conditioning Units, As Specified & Scheduled including unloading, Lifting, Placing and Fixing at foundations as shown on the drawings | | | | |
| | Cassette Type Units | | | | |
| 1.0.1 | CCU-A (Net Cap: 1.5 Tons) | No. | 5 | | |
| 1.0.2 | CCU-B (Net Cap: 2.0 Tons) | No. | 8 | | |
| 1.0.3 | CCU-C (Net Cap: 3.0 Tons) | No. | 7 | | |
| 1.0.4 | CCU-D (Net Cap: 4.0 Tons) | No. | 6 | | |
| | Wall Mounted Units | | | | |
| 1.0.3 | WMU-A (Net Cap: 1.5 Tons) | No. | 1 | | |
| 1.0.4 | WMU-B (Net Cap: 2.0 Tons) | No. | 2 | | |
| 2.0 | Ventilation Fans | | | | |
| | Supply & installation of inline centrifugle ventilation fans as specified below complete with un-loading, lifting and placing at locations as shown on the drawings | | | | |
| | Exhaust Air Fans | | | | |
| 2.0.1 | EAF-01 (Airflow: 350 CFM & ESP of 0.3" W.C) | No. | 1 | | |
| 2.0.2 | EAF-02 (Airflow: 280 CFM & ESP of 0.3" W.C) | No. | 1 | | |
| 2.0.3 | PF-01 (Airflow: 100 CFM & ESP of 0.05" W.C) | No. | 1 | | |
| 2.0.4 | Supply & Installation Decorative type Kitchen Hoods complete in all respect, all to the satisfaction / approval of the Client / Consultants. | No. | 1 | | |
| 3.0 | Duct Works | | | | |
| 3.1 | Galvanized Steel Ducts | | | | |
| | Supply, Fabrication and Installation of G.I. ducting & Sheet Metal work complete with hangers, bracings, splitter dampers etc | | | | |
| 3.1.1 | 24 gauge | Sft | 212 | | |
| 3.2 | Supply & installation of 18 gauge G.I. Sheet Back Draft dampers as specified | Sft | 4 | | |
| 3.3 | Supply & Installation of pre-assembled flexible duct connectors factory fabricated with coated woven fabric and G.I. Collars both by means of double lock seam on each side as specified and scheduled | Rft | 18 | | |
| 4.0.1 | Supply & Installation of Air Curtains as specified & scheduled including unloading, lifting, placing and fixing at location as shown on the drawings ACN-01 | No | 2 | | |
| | Total Carried to Collection | | | | |
| | | | | | |

| | | | | l |
|-------|--|-------|------|---|
| 5.0 | Air Devices Supply and install ceiling type air outlets along with GI, insulated, plenum box, dampers, accessories and related flexible duct as per drawings& specs. | | | |
| 5.0.1 | Exhaust Air Diffuser (4-way) 6"X6" | No.s. | 10 | |
| 5.0.2 | Exhaust Air Louvers with Bird Screen | Sft | 6 | |
| 5.0.3 | Wire Mesh | Sft | 6 | |
| 6.0 | REFRIGRANT PIPING SYSTEM | | | |
| | Supply and Installation of Gas & Liquid Copper Piping Complete with control wiring between Indoor Units & Outdoor Unit, clamps/hangers/supports and all other related material for installation purpose complete in all respect as specified. | | | |
| 6.0.1 | Ø 5/8" | Rft | 1512 | |
| 6.0.2 | Ø 1/2" | Rft | 576 | |
| 6.0.3 | Ø 3/8" | Rft | 1512 | |
| 6.0.4 | Ø 1/4" Note: Sizes & Lengths of Refrigerant pipes and Amount of required refrigerant will be verfied by the contractor. | Rft | 576 | |
| 6.1 | REFRIGRANT PIPING INSULATION | | | |
| | Supply and Installation of Elastomeric Closed Cell Foam insulation of density 65 Kg/m3 with factory applied fiberglass aluminum embossed jacketing and all other related material for installation purpose complete in all respect as specified. | | | |
| 6.1.1 | Ø 5/8" | Rft | 1512 | |
| 6.1.2 | Ø 1/2" | Rft | 576 | |
| 6.1.3 | Ø 3/8" | Rft | 1512 | |
| 6.1.4 | Ø 1/4" | Rft | 576 | |
| 7.0 | Supply, fabrication and installation of U-PVC Class E piping & fittings, including hangers, anchor bolts, rubber vibration mounts etc. | | | |
| 7.0.1 | Dia 0.75 Inch | Rft | 160 | |
| 7.0.2 | Dia 1.0 Inch | Rft | 720 | |
| 7.0.2 | Dia 1.25 Inch | Rft | 88 | |
| | | | | |
| | Total Carried to Collection | | | |

| i | 1 | i | Ī | 1 | 1 |
|--------|--|--|------------|---|---|
| 7.1 | Supply & installation of 1/4" thick polyethylene insulation (Jumbolon) covered with PVC taping for condensate drain piping | | | | |
| 7.1.1 | Dia 0.75 Inch | Rft | 160 | | |
| 7.1.2 | Dia 1.0 Inch | Rft | 720 | | |
| 7.1.2 | Dia 1.25Inch | Rft | 88 | | |
| 8.1.1 | Supply and wiring of Split AC/Ceiling Casette Units with 2x 6mm2 single core cables (P+N) from Distribution board breaker to the point and 2.5mm2 as CPC in including the cost of PVC conduit recessed in Colums/slabs (as advised by engineer incharge) with all necessary accessories and fittings complete in all respects. This item Includes the cost of flexible control cable 110/0.076 multi core (or as reccomended by the manufacturer's manual) (For 1.5 Tons / 2.0 Ton Units) | Each | 16 | | |
| 8.1.2 | Supply and wiring of Ceiling Casette Units with 4x 6mm2 single core cables (3P+N) from Distribution board breaker to the point and 2.5mm2 as CPC in including the cost of PVC conduit recessed in Colums/slabs (as advised by engineer incharge) with all necessary accessories and fittings complete in all respects. This item Includes the cost of flexible control cable 110/0.076 multi core (or as reccomended by the manufacturer's manual) (For 3 Tons / 04 Ton Units) | Each | 13 | | |
| 9.0 | Powder Coated Ceiling Suspended / Horizontal Cable Tray in Corridor Fabrication, supply at site and installation of perforated cable tray made of M.S. sheet 14 SWG 8 ft. to 10 ft. long with sides 3" high with cover of cable tray made of 18 SWG M.S sheet to be installed on wall, or in vertical, or above false ceiling in horizontal position or as shown on drawing, including cost of the following:- | | | | |
| a | -2 M.S threaded hanging rod 1/2" dia. Length 12" or as required as per site -M.S strip 2" wide x 1/4" thickHilti rawal bolts as per required quantity & size2 coats of antirust paint2 coats of enamel paint (Oven hot) or powder coating of approved colour -Complete hanging system shall be installed at every 36". The above mentioned cable tray shall be complete in all respects including cost of all accessories / materials. Cable tray shall be of the following sizes 4" X 3" Cable Tray 14 SWG & Cover 18 SWG | Rft | 186 | | |
| | I | | | | |
| b c | 6" X 3" Cable Tray 14 SWG & Cover 18 SWG 12" X 3" Cable Tray 14 SWG & Cover 18 SWG | Rft Rft | 100 573 | | |
| | 12 A 5 Capie Hay 145 WO & Cover 105 WO | IXI t | 313 | | |
| 8.0 | Inspection, testing, Gas Charging, Commissioning and Air Balancing of Complete system | Job | 1 | | |
| | Total Carried to Collection | t | | | |
| | | | | | |
| | Carried to Summary | | | | |

| Sr# | | Approved Manufacturer | Approved Country of Origin |
|-----|---|---|----------------------------|
| 1 | Ventilation Fans | Casal, Sisteven, Vent, System Air | Spain, Turkey |
| 2 | Air Curtains | Acson, Fast, Theodore M | Ialaysia, China |
| 3 | Galvanized Iron Sheet | AISL, Pakistan Steel or Imported | Pakistan, China |
| 4 | Duct Flexible Connection | Dura Dyne, Duct Mate, AFS | USA |
| 5 | Round Flexible Duct | Atco, AFS | USA |
| 6 | Air Devices, Dampers, Filters | Steel Craft, Pak Premier, EAP, Shan | Pakistan |
| 7 | Refrigerant Copper Piping & Fittings | Golden Dragon, SAMPO, KHC | Korea, China |
| 8 | PVC Condensate Pipe & Fittings (Class-D) | Dadax, Beta, Plasco | Pakistan |
| 9 | Closed Cell Type Copper Pipe Insulation | Armacell, Aeroflex, Durkee | China |
| 10 | Closed Cell Foam Type Duct Insulation and | Armacell, Aeroflex, Durkee | China |
| 13 | Power Cables | Pakistan Cables, Newage, Fast | Pakistan |
| | | Cables, Golden Star, Coppergat | |
| 14 | Supports & Anchors | Fabricated as per approved sample | |
| 15 | Gaskits | Imported Make | |
| 16 | Concrete Fasteners | Rawl Plug Co, Fischer, Hilti | West Europe |
| 17 | Vapour Barrier Coating | Foster, Zahabiya | USA, Pakistan. |
| 18 | Duct Sealant | Ductmate | |
| 19 | White Glue | Hoechst | Pakistan |
| 20 | Steel Members | Mughal Steel or Equal | Pakistan |
| 21 | Paints | ICI, Berger. | Pakistan |
| 22 | Any item not listed above | Subject to approval of the Project Director/Consultants | |

SUMMARY OF COST (PLUMBING)

| 1.0 Plumbing Works | Rs. | |
|-------------------------------|-----------|--|
| | Total Rs. | |
| | | |
| | | |
| Signed & Stamped Of Contracto | or | |

Plumbing Works BOO

| Plumb | ing Works BOQ | | | | |
|---------|--|------|-----|------------|-------------|
| Sr. No. | | UNIT | QTY | UNIT PRICE | TOTAL PRICE |
| | | | | (Rs.) | (Rs.) |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1.0 | Sanitary Fixtures: | | | | |
| 1.1 | Supply and install Lavatories semi pedestal Type, 1.9LPM maximum Flow rate with Faucets including Flexible pipes, valves, Traps & all other required fittings & Accessories to complete the work, as per the Drawings, Specifications and Standards & for aesthetic details, types and size follow architectural drawings and specifications | No | 8 | | |
| 1.3 | Supply and install floor mounted Western Water Closet with 6L/Flush including Perennial Spray, valves, Traps & all other required fittings & Accessories to complete the work, as per the Drawings, Specifications and Standards & for aesthetic details, types and size follow architectural drawings and specifications | No. | 8 | | |
| 1.4 | Supply and install Kitchen Sinks (types according to architectural design) including Flexible pipes, valves & all other required fittings, Traps & Accessories to complete the work, as per the Drawings, Specifications and Standards. | | 1 | | |
| 1.5 | Supply and Install prefabricated ablution unit with 1.9LPM maximum Flow rate with Faucets including Flexible pipes, valves, Traps & all other required fittings & Accessories to complete the work, as per the Drawings, Specifications and Standards & for aesthetic details, types and size follow architectural drawings and specifications | | 2 | | |
| | Total Carried to Collection | | | | |
| | 10th Chilled to Concentin | | | | |

| 2.0 | Potable Water Supply: | | | |
|-----|---|----------|------------|--|
| 2.1 | Electric Water Heater | | | |
| | Supply and install vertical electric storage water heater of 6.0 Liters capacity, glass lined commercial type including control panel, connections, operating control, control valve, strainer, valves, temperature gauges, pressure gauges, saftey valves, heating coil, vessel, with all necessary accessories required to complete the work as per the Drawings, | No | 3 | |
| 2.2 | Potable Pipeworks & accessories: | | | |
| | Supply and install Potable Water Supply above Grade PPR pipes of PN 16 with Fittings and Joints or Mechanical Coupling Complete with supports, hangers and all type of accesseries like Water hammer arrestors, as per the Drawings, Specifications and Standards. | | | |
| | 2" dia PPR Pipe | ft | 14 | |
| | 1.5" dia PPR Pipe | ft | 88 | |
| | 1" dia PPR Pipe | ft | 42 | |
| | 3/4" dia PPR Pipe 1/2" dia PPR Pipe | ft ft | 148 128 | |
| 2.3 | Hot Water Pipe Insulation: | | | |
| | Supply & installation of Elasomeric/Epdm Closed Cell FM approved Foam Type insulation of density 65 Kg/m3 and thermal conductivity 0.035 W/M of fire performance conforming to UK building regulation of Class-0 rating protected with fire retardent type high density closely woven | | | |
| | 1" dia | ft | 28 | |
| | 3/4" dia | ft | 52 | |
| | 1/2" dia | ft | 102 | |
| 2.4 | Valves | | | |
| | Gate Valves | | | |
| | Supply & installation of Gate Valve, 2" dia (Brass) | No. | 1 | |
| | Supply & installation of Gate Valve, 1-1/2" dia (Brass) | No. | 3 | |
| | Supply & installation of Gate Valve, 1" dia (Brass) | No. | 2 | |
| | Total Carried to Collection | | | |

| 3.0 | Sanitary Draingae : | | | | |
|-----|---|----------------|----------------|--|--|
| 3.1 | Supply and install of UPVC Type Floor complete in all respect as per the Drawings, Specifications and Standards. | | | | |
| 3.2 | Floor Drains 2" dia 4" dia Drainage Pipeworks & accessories: Supply and install below Grade soil/Waste drainage pipe work | No. No. | 11 7 | | |
| | of UPVC class D Pipe including fittings & supports, as per the Drawings, Specifications and Standards. 4" dia UPVC Class D 3" dia UPVC Class D 2" dia UPVC Class D | ft ft ft | 54 62 82 | | |
| 3.3 | Grease Trap: | | | | |
| | Supply & Installation of Grease Trap of Holding capacity 8 gallons (size= 8"X10"X10") including all accessories & fiitings required for its operation asper drawings,specifications & standards. | No. | 1 | | |
| 3.4 | Bone Crusher | | | | |
| | Supply, install, testing & commissioning of Bone Crusher with installed magnetic motor, anti-jam SS Impeller, SS grinding components & corrosion proof sound insulated grinding chamber & power cord attached complete as per drawings. | | | | |
| | Bone Crusher 2000ml | 1 | No | | |
| | Total Carried to Collection | | | | |
| | Carried to Summary | | | | |

| Sr# | Equipment/Material | Approved Manufacturer | Approved Country of Origin |
|-----|---------------------------|---|----------------------------|
| 1 | Sanitory Fixtures | KALE, Porta, Grohe, Approved Equal | Turkey, China |
| 2 | Electric Water Heater | Ariston, IME, Approved Equal | Pakistan, China |
| 3 | Potable Water Pipes | Dadex, BETA, Plasco, Approved Equal | Pakistan, China |
| 4 | Drainage Pipes | Dadex, BETA, Plasco, Vesbo, Approved Equa | Pakistan, China |
| 5 | Hot Water Pipe Insulation | omco, Knauf, Thermobreak, Approved Equ | Kuwait, UAE |
| 6 | Valves | Tozzen, Scon, Approved Equal | Pakistan, China |
| 7 | Grease Trap | Alpine Steel, Pakeeza, Approved Equal | Pakistan |
| 8 | Bone Crusher | Bone Crusher, Approved Equal | China |
| 9 | Any item not listed | Subject to approval of the Project | |
| | above | Director/Consultants | |

BILL OF QUANTITIES

VOLUME II FOR

INTERIOR RENOVATION OF SECP CRO, 3RD &4TH FLOOR, ASSOCIATED HOUSE, **EGERTON ROAD, LAHORE**

| Issued To | : |
|-------------------------|---|
| Issued On | |
| 100000 011 | • |
| Sian of Issuina Officer | |



SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN

Sohail A Khan Associates

Architecture and Designing 159, Street no 4, Race Course Rd, Rawalpindi Tel: 051-5512245, 051-5511587, Fax: 051-5125075 E mail: mail@saka.net.pk, Web: www.saka.net.pk

List of Approved Civil Manufacturer / Supplier

| Item / Work | Manufacturer | Suppliers / Representatives |
|--|---|---|
| Termite | Chemical FMC Bi Flex approved by RE | CHEMICAL FMC BI FLEX Office # 07 First Floor Aneeq Arcade I-8 Markaz Islamabad Mobile: 0333-4261815 - |
| Reinforcement Steel | Pak Steel, Nomi Steel approved by RE | - |
| Gypsum board Ceiling | Elephant or equivalent approved by RE | |
| Aluminum | Alcop, Chawla Aluminum, Prime Aluminum, Gulf Extrusion approved by RE | CHAWLA ALUMINUM, 44 College Road, Block 1 Sector C-1 Block 1 Twp Sector C 1 Township, Lahore, Cell: 0300-8016410 |
| BRICK | A Class Lahore bricks approved by RE | |
| Fair Face Block / Cladding Work, | Concrete Concepts or equivalent approved by RE | CONCRETE CONCEPTS 3rd Floor, Gulberg Heights Near Sherpao Bridge Gulberg II, Lahore, Pakistan UAN: 111-239-239 Phone: 92-42-35873250 Fax: 92-42-35712971 Email: info@concreteconcepts.com.pk |
| Fire Rated Doors(minimum one hour fire resistance) | HORMANN approved by RE | INTEG ENGINEERING & TRADERS A-1 Street 4, Sulman Sheikh Centre, Block 6, gulshn-e-iqbal, Karachi Tel: 021-34978916 021-34979828 021-34989399 Fax: 021-34977211 |
| Water Proofing chemicals | Sika, or Equivalent , as approved by RE | Engr. Gohar Zaman Mob: 0300-8430243 |
| Paint / Polish | ICI, Nippon, Jotun approved by RE | |
| Deco Paint | | |
| Crushed Stone Aggregate | Margala approved by RE | |
| Sand | Ravi sand approved by RE | |
| Cement | Fauji Cement & Bestway Cement, approved by RE | |

| Tiles | White Horse Ceramics by PPL, Benitoz, RAK or equivalent approved by RE | PRISM PREMIUM LOSUNGEN GT Road near DHA ii, Rawalpindi Mob: 0300-8569646 BENITOZ DD/91, opp, PSO pump ojri camp Murree Road Rawalpindi Cell: 051-4575956 RAK CREMIC Plot no 19, sanitary 1-11/3 Islamabad, Metro Cash & Carry Cell: 0321-9460056 |
|-----------------------------------|---|--|
| Tile Grout | Quartz Lock Grout approved by RE | (Mr. Shahzeb) GT Road near DHA ii, Rawalpindi Mob: 0300-8569646 |
| Glass Non specifics use | Guardian or equivalent approved by RE | |
| Glass Processing | Pakistan Safety Glass, Gunj Glass, Al Fateh or equivalent approved by RE | |
| Frosting Sheet | 3M or equivalent approved by RE | |
| Roller Blind | Selection Interior or equivalent approved by RE | Selection Interior(Aslam) 051) 2803231 |
| Anti-shatter film | 3M or equivalent approved by RE | |
| Carpet | Interflor, & Pak Carpet or equivalent approved by RE | INTERFLOR Basement Hamayun Arcade, street # 5 Muhammadi Town Sohan, Islamabad- Tel- 051- 2612231 Cell: 0300-5077551 Pak Carpet Suite # 702, 7th Floor, Liberty Gates Plaza, M. M. Alam Road, Gulberg III Lahore. Tell: 042-35771428 flooring@pcigroup.com.pk |
| Sports Vinyl Floor & Pvc Floor | Interflor, & Pak Carpet or equivalent approved by RE | INTERFLOR Basement Hamayun Arcade, street # 5 Muhammadi Town Sohan, Islamabad- Tel- 051- 2612231 Cell: 0300-5077551 PAK CARPET Suite # 702, 7th Floor, Liberty Gates Plaza, M. M. Alam Road, Gulberg III Lahore. Tell: 042-35771428 |

| | | flooring@pcigroup.com.pk |
|----------------------------------|--|---|
| Ply Wood | AL Noor or equivalent approved by RE | NAEEM TRADERS Head Office 22 Cooper Road, Lahore |
| PVC Sheet | Chawla PVC Board or equivalent approved by RE | 44 College Road, Block 1 Sector C-1 Block 1 Twp Sector C 1 Township, Lahore, Cell: 0300-8016410 |
| Melamine sheet | Imported approved by RE | NAEEM TRADERS Head Office 22 Cooper Road, Lahore |
| Cement Board | SHERA or equivalent approved by RE | DIAMOND THERMOPORE 16 Beadon Road, Lahore, Punjab, Pakistan. Tel: 042-37231295, |
| Corian | LG (Imported) or equivalent approved by RE | SHAZE Roshan center, Jinnah Avenue Blue Area, Islamabad, Pakistan Mobile # 0300-5557300 NAEEM TRADERS Head Office 22 Cooper Road, Lahore |
| Archi + Concrete Acrylic Base | Nova color approved by RE | NOVA COLOR 1 st floor Building # 98, DD Phase 4 Commercial Area, Lahore, Pakistan Hafiz Cell: 0321-2000091 |
| Granite | | |
| Marble | | |
| Signage | Australian or equivalent approved by RE | SIGNSCAPESIGNSCAPE 205, Korang Road, I-10/3 Industrial Area, Islamabad – 44000, Pakistan. Tel: 051-2803098-9 Cell: 0345-5566402 www.signscape.pk |
| FURNITURE | Interwood Mobel (pvt) ltd, Office First & HB Furniture or equivalent approved by Architect | INTERWOOD MOBEL (PVT) LTD, Police Station, Plot # 390, Street No. 16, Potohar Rd, near I- 9/3, Islamabad, Islamabad Phone: (051) 4859103 OFFICE FIRST Unit 7&8, Umer building, 76 west, Main Jinnah Avenue, Blue Area, G 7/3 Blue Area, Islamabad Phone: (051) 2344460 |