



Running Contract Details	
Equipment Name	HDR Brachytherapy with treatment Planning System
Running Contract Valid Till	20-08-2021
Tender Ref No	KMSCL/EP/T329/1253/2019(R)
Tendered Quantity	6
Supplier Name	M/s ELEKTA LIMITED
GST No	06AABCE4949G1ZN
Installation & Delivery Period	12 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
Linac Hosue - Fleming Way Crawley West Sussex RH10 9RR United Kingdom Crawley RH10 9RR	Contact Person	Ravi Chopra
	Phone	+44 (0) 1293 544422
	Mobile No	8860002626
	Email	ravi.chopra@elekta.com

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	<b>HDR Brachytherapy with treatment Planning System</b> <i>Model &amp; Make : Flexitron / Nucletron b. V. (An Elekta Company)</i>	188500 Incl.GST :12%	15570.1	204070.1
2	<b>One source</b>	6500 Incl.GST :0%	536.9	7036.9
3	<b>CIVIL WORKS : Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area 3 sq. metres and below</b>	10318 Incl.GST :12%	760.95	11078.95
4	<b>Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area beyond 3 sq. metres</b>	3108 Incl.GST :12%	229.22	3337.22

Item-wise Price Details				
5	<b>Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.</b>	532.99 Incl.GST :12%	39.31	572.3
6	<b>Dismantling old electrical points, wiring, lights and handing over the same to the hospital authorities</b>	15467.99 Incl.GST :12%	1140.76	16608.75
7	<b>Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar</b>	5168.01 Incl.GST :12%	381.14	5549.15
8	<b>Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm</b>	275 Incl.GST :12%	20.28	295.28
9	<b>Dismantling of toilet fittings including pipe lines , closets, washbasin etc to complete</b>	15467.99 Incl.GST :12%	1140.76	16608.75
10	<b>Anti- Termite treatment : Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyriphos/ Lindane emulsifiable concentrate of 20%</b>	1047.99 Incl.GST :12%	77.29	1125.28
11	<b>Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti- termite treatment (excluding the cost of chemical emulsion) : Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall &amp;rodding etc. complete: With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration</b>	430.01 Incl.GST :12%	31.71	461.72
12	<b>Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)</b>	8257.99 Incl.GST :12%	609.03	8867.02
13	<b>Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift up to 1.5 m, disposed soil to be levelled and neatly dressed : All kinds of soil</b>	1254 Incl.GST :12%	92.48	1346.48

Item-wise Price Details				
14	<b>Providing cable trench for system cables and wherever necessary with metal cover including finishing works and all allied works</b>	1563 Incl.GST :12%	115.27	1678.27
15	<b>Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).</b>	9288 Incl.GST :12%	684.99	9972.99
16	<b>Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth level. Thermo-Mechanically Treated bars.</b>	140.99 Incl.GST :12%	10.4	151.39
17	<b>Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)</b>	9803 Incl.GST :12%	722.97	10525.97
18	<b>Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand)</b>	2593 Incl.GST :12%	191.23	2784.23
19	<b>12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand)</b>	584.01 Incl.GST :12%	43.07	627.08
20	<b>Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer ) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.</b>	2181 Incl.GST :12%	160.85	2341.85
21	<b>Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08%and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm</b>	2387.01 Incl.GST :12%	176.04	2563.05

Item-wise Price Details				
22	<b>Providing and fixing 2.0mm th. Vinyl floor with rubber based adhesive over clean and smooth surface including finishing by rolling a light roller all complete.</b>	2593 Incl.GST :12%	191.23	2784.23
23	<b>Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)</b>	584.01 Incl.GST :12%	43.07	627.08
24	<b>For shutters of doors, windows &amp; ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately). Powder coated aluminium (minimum thickness of powder coating 50 micron)</b>	686.99 Incl.GST :12%	50.67	737.66
25	<b>Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 Grade I Type II, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides.</b>	173 Incl.GST :12%	12.76	185.76
26	<b>Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness</b>	7227.99 Incl.GST :12%	533.06	7761.05

Item-wise Price Details				
27	<b>Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000mm) with double speed adjustment with necessary accessories and screws etc. complete.</b>	3623 Incl.GST :12%	267.2	3890.2
28	<b>Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.</b>	3623 Incl.GST :12%	267.2	3890.2
29	<b>Providing and fixing sun controlled film on glass surface for door/windows,after thoroughly cleaning and dust free the surface to get smooth finish,to get air tight clean surface, ect,complete as directed by Engineer-in -charge</b>	532.99 Incl.GST :12%	39.31	572.3
30	<b>Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete : 125 mm</b>	1254 Incl.GST :12%	92.48	1346.48
31	<b>Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete : 250x10 mm</b>	532.99 Incl.GST :12%	39.31	572.3
32	<b>Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete : 150x10 mm</b>	430.01 Incl.GST :12%	31.71	461.72
33	<b>Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.</b>	224 Incl.GST :12%	16.52	240.52
34	<b>Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.</b>	430.01 Incl.GST :12%	31.71	461.72
35	<b>Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade : One or more coats on old work</b>	430.01 Incl.GST :12%	31.71	461.72

**Item-wise Price Details**

36	<b>Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : One or more coats on old work</b>	367.99 Incl.GST :12%	27.14	395.13
37	<b>Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface.</b>	481 Incl.GST :12%	35.47	516.47
38	<b>Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing&amp; fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.</b>	7742.99 Incl.GST :12%	571.05	8314.04

**Item-wise Price Details**

<p>39</p>	<p><b>Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5mm dia x 50mm long with 6mm dia bolts other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts &amp;bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3layers covering upto 150 mm or both sides of joint and two coats of primer suitable for board, all as per manufacture's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with : 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- Part I.</b></p>	<p align="right">2387.01 Incl.GST :12%</p>	<p align="right">176.04</p>	<p align="right">2563.05</p>
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**Item-wise Price Details**

40	<p><b>"Providing and fixing tiled false ceiling of approved materials of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams per sqm, both side inclusive) consisting of main ""T"" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200mm center to center and cross ""T"" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main ""T"" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross ""T"" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main ""T"" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85x 30x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer -in-charge. 12.5 mm thick square edge PVC Laminated Gypsum Tile size 595x595 mm made of Gypsum plasterboard , manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16 mm thick fire retardant PVC film on the face side and 12 micron metalized polyster on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyster film so as to make the tile a completely sealed unit"</b></p>	<p align="center">2593 Incl.GST :12%</p>	<p align="center">191.23</p>	<p align="center">2784.23</p>
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**Item-wise Price Details**

41	<p><b>"Providing and fixing tiled false ceiling of approved materials of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams per sqm, both side inclusive) consisting of main ""T"" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200mm center to center and cross ""T"" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main ""T"" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross ""T"" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main ""T"" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85x 30x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer -in-charge. GI Metal Ceiling Lay in perforated Tegular global white color tiles of size 595x595 mm and 0.5mm thick with 8 mm drop; made of GI sheet having glavanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient) of 0.5, electro statically polyster powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece."</b></p>	<p align="center">2387.01 Incl.GST :12%</p>	<p align="center">176.04</p>	<p align="center">2563.05</p>
42	<p><b>Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.</b></p>	<p align="center">3108 Incl.GST :12%</p>	<p align="center">229.22</p>	<p align="center">3337.22</p>
43	<p><b>Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690gms. 15 mm nominal bore</b></p>	<p align="center">3108 Incl.GST :12%</p>	<p align="center">229.22</p>	<p align="center">3337.22</p>
44	<p><b>Supplying and fixing Stainless steel soap dish including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.</b></p>	<p align="center">1666 Incl.GST :12%</p>	<p align="center">122.87</p>	<p align="center">1788.87</p>

Item-wise Price Details				
45	<b>Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require : White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.</b>	8773 Incl.GST :12%	647.01	9420.01
46	<b>Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than190gms.</b>	3108 Incl.GST :12%	229.22	3337.22
47	<b>Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes &amp; fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 20 mm pipe 10 Kgf/ cm2</b>	268.01 Incl.GST :12%	19.77	287.78
48	<b>Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 75 mm pipe 6 Kgf/cm2</b>	430.01 Incl.GST :12%	31.71	461.72
49	<b>Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chased and making good the wall etc. 110 mm pipe 6kgf/cm2</b>	568 Incl.GST :12%	41.89	609.89
50	<b>Constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.</b>	15467.99 Incl.GST :12%	1140.76	16608.75
51	<b>Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe 32 mm dia</b>	790 Incl.GST :12%	58.26	848.26

Item-wise Price Details				
52	<p><b>Providing and fixing PVC Door Frame of size 50x47mm with a wall thickness of 5 mm (<math>\pm 0.2</math> mm) made out of single piece extruded PVC profile, with mitred cut joints and joint with 2nos of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 x 15mm &amp; self driven self tapping screws, the vertical door profiles to be reinforced with 40x20mm M.S. rectangular tube of 0.8 mm , including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5mm PVC frame strip with PVC solvent cement on the back of the profile. The door frame to be fixed to the wall using 8x100mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in- charge.</b></p>	<p>1047.99 Incl.GST :12%</p>	77.29	1125.28
53	<p><b>35 mm thick factory made Solid panel PVC Door shutter made out of single piece extruded solid PVC profiles, 5 mm (<math>\pm 0.2</math>mm) thick, having styles &amp; rails (except lock rail) of size 95 mmx 35 mm x 5 mm, out of which 75 mm shall be flat and 20 mm shall be tapered (on both side), having one side thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power, including reinforcing with MS tube of size 40 mmX 20 mm x 1 mm, joints of styles &amp; rails to be mitred cut &amp; joint with the help of PVC solvent cement, self driven self tapping screws &amp; M.S. rectangular pipes bracket of size 190 mm X 100 mm of cross section size 35 mm x 17 mmx 1 mm at each corner. Single piece extruded 5mm thick solid PVC Lock rail of size 115 mm x 35 mm x 35 mm, out of which 95 mm to be flat and 20 mm to be tapered at both ends, having 15 mm solid core in middle of rail section integrally extruded, fixing the styles &amp; rails with the help of solvent and self driven self tapping screws of 125 mm x 11 mm, including providing 5 mm Single piece solid PVC extruded sheet inserted in the door as panel, all complete as per manufacturer's specification and direction of Engineer-in-charge. Non decorative finish (matt finish).</b></p>	<p>7742.99 Incl.GST :12%</p>	571.05	8314.04
54	<p><b>Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Rey, Fume Red Brown, laid on 20mm thick cement mortar 1:4 (1Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigments etc., complete.</b></p>	<p>1872.01 Incl.GST :12%</p>	138.06	2010.07

Item-wise Price Details				
55	<b>Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia &amp; length (hold fast lugs or dash fastener shall be paid for separately), using good quality Anjili wood /jack wood</b>	186963.01 Incl.GST :12%	13788.52	200751.53
56	<b>Providing and fixing paneling or paneling and glazing in paneled or paneled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured) paneling for paneled or paneled and glazed shutters 25 mm to 40 mm thick using good quality Anjili/ Jack wood</b>	3623 Incl.GST :12%	267.2	3890.2
57	<b>Providing and fixing 4 mm thick coir veneer board, ISI marked IS : 14842, plain lining with necessary screws, priming coat on unexposed surface etc., complete</b>	945.01 Incl.GST :12%	69.69	1014.7
58	<b>Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS: 14616 and TADS 15:2001 (Part B), including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, all complete as per directions of Engineer-in-Charge and panelling with panels of: 12 mm thick pre-laminated particle board (decorative lamination on both sides) grade -1, medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT - I, conforming to IS : 3087, bonded with BWP type synthetic resin adhesive as per IS : 848 and prelaminated conforming to IS : 12823, Grade I, Type - II marked :</b>	8257.99 Incl.GST :12%	609.03	8867.02
59	<b>Providing and fixing Thomson Multi wood board or equivalent make, in shelves,shutter with screws and fittings wherever required, edges to be painted with polyurethane primerincluding all fittings as per the direction of site Engineer-in-charge. ( Total area of the shutter only measured).</b>	1563 Incl.GST :12%	115.27	1678.27
60	<b>Steel cupboard (Godrej) for storage 6ft tall 3 feet width</b>	30918 Incl.GST :12%	2280.2	33198.2
61	<b>Cubicle curtain with hanger : Should be track and curtain type, 2. Track shall be made of high quality aluminum, 3. Should have stain free curtain material, 4. Manual operation, 5. Per meter rate for aluminum track and curtain material shall be offered</b>	4138 Incl.GST :12%	305.18	4443.18

Item-wise Price Details				
62	<b>AC TRAP DOOR with multiwood panelling</b>	6198.01 Incl.GST :12%	457.1	6655.11
63	<b>Computer table (long) with keyboard tray, CPU storage at base in a side and storage drawers at other side. (For workstation and reports) reputed brand godrej/featherlite/wipro</b>	25768 Incl.GST :12%	1900.39	27668.39
64	<b>Revolving chair - Pushback, PU arms, Pneutic height adjustment and nylon base. Reputed brand like godrej/featherlite/wipro</b>	15467.99 Incl.GST :12%	1140.76	16608.75
65	<b>MISCELLANEOUS WORKS:- Suppling and fxing Name boards for all rooms and main entrance board</b>	15467.99 Incl.GST :12%	1140.76	16608.75
66	<b>Site cleaning</b>	36067.99 Incl.GST :12%	2660.01	38728
67	<b>Supply, Installation, Testing &amp; Commissioning of LT Panel , cubicle type, made out of 2mm thick CRCA sheet,totally enclosed, IP 42, free standing, floor mounting, dust and vermin proof, indoor, compartmentalised, suitable for operation on 3 phase , 415 V, 50Hz AC system with busbars , including internal wiring with suitable size HFFR wires/cable, interconnection, duly powder coated with seven tank process etc., including all inter connections and following components as per drawing and technical specifications. INCOMER - Suitable capacity for Air conditioners and equipment MCCB with adjustable thermal magnetic release with OL &amp; SC protection - 1 nos. BUSBARS - Suitable capacity TPN busbars of Aluminum alloy high conductivity with heat shrinkable coloured sleeves. INSTRUMENTS - Digital type multifunction meter with CTs of suitable rating for measurement of voltage, current, frequency, power factor, KVA, KW, KWH. - 1No. ON/OFF indication lamps-1set. RYB Indicating lamps LED type - 3 Nos. OUTGOINGS - Suitable Capacity MCCB with adjustable thermal magnetic release with OL &amp; SC protection - 1 nos. 100A/63A/32A FP 25kA MCCB with thermal magnetic release with OL &amp; SC protection - 3 nos.</b>	206018 Incl.GST :12%	15193.83	221211.83
68	<b>Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator). TPN, MCB DB, 4 way (4+12), double door, horizontal type</b>	18558 Incl.GST :12%	1368.65	19926.65

Item-wise Price Details				
69	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator). TPN, MCB DB, 4 way (8+12), double door, horizontal type	21647.99 Incl.GST :12%	1596.54	23244.53
70	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.) 4 way (4+12), TPN, vertical type, MCB DB, double door	18558 Incl.GST :12%	1368.65	19926.65
71	"Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, ""C"" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single Pole 6 A. to 32 A. ratings ""B/c"" curve"	767.99 Incl.GST :12%	56.64	824.63
72	"Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, ""C"" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. 6 A. to 32 A. ratings , DP MCB, ""C"" curve, 10 kA breaking capacity"	767.99 Incl.GST :12%	56.64	824.63
73	"Supplying and fixing Following rating 415 V, 10 kA, ""C"" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63A TP MCB, C-CURVE MCB"	3623 Incl.GST :12%	267.2	3890.2
74	"Supplying and fixing Following rating 415 V, 10 kA, ""C"" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. 32A TP MCB, C-CURVE MCB"	3108 Incl.GST :12%	229.22	3337.22
75	"Supplying and fixing Following rating 415 V, 10 kA, ""C"" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63A FP Isolator"	3623 Incl.GST :12%	267.2	3890.2

Item-wise Price Details				
76	"Supplying and fixing Following rating 415 V, 10 kA, ""C"" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. 32A FP Isolator"	3108 Incl.GST :12%	229.22	3337.22
77	Supplying and fixing following rating, four pole, 415 V, RCBO having a sensitivity current 100 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 100 A 4 Pole	25768 Incl.GST :12%	1900.39	27668.39
78	Supplying and fixing following rating, four pole, 415 V, RCBO having a sensitivity current 100 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63 A 4 Pole	16498 Incl.GST :12%	1216.73	17714.73
79	Supplying and fixing following rating, four pole, 415 V, RCBO having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40A	12378.01 Incl.GST :12%	912.88	13290.89
80	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	4138 Incl.GST :12%	305.18	4443.18
81	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	3623 Incl.GST :12%	267.2	3890.2
82	"Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps ""C"" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required."	5168.01 Incl.GST :12%	381.14	5549.15
83	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	143 Incl.GST :12%	10.55	153.55

Item-wise Price Details				
84	<b>Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 4 X 1.5 sq. mm + 2 X 1.5 sq. mm earth wire</b>	268.01 Incl.GST :12%	19.77	287.78
85	<b>Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire</b>	367.99 Incl.GST :12%	27.14	395.13
86	<b>Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire</b>	618.01 Incl.GST :12%	45.58	663.59
87	<b>Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 2 X 4 sq. mm + 1 X 4 sq. mm earth wire</b>	717.99 Incl.GST :12%	52.95	770.94
88	<b>Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 4 X 4 sq. mm + 2 X 4 sq. mm earth wire</b>	945.01 Incl.GST :12%	69.69	1014.7
89	<b>Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in existing/recessed steel/ PVC conduit as required. 1 run of cable</b>	153.01 Incl.GST :12%	11.28	164.29
90	<b>Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in existing/recessed steel/ PVC conduit as required. 2 run of cable</b>	153.01 Incl.GST :12%	11.28	164.29
91	<b>Supplying and drawing following pair 0.5 sq mm FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required. 2 Pair Cable</b>	103 Incl.GST :12%	7.6	110.6
92	<b>Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. Group C</b>	1872.01 Incl.GST :12%	138.06	2010.07



Item-wise Price Details				
93	"Group control Wiring for light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, with modular switch& plate,suitable GI box and earthing the point with 1.5sq.mm FRLS PVC insulated copper conductor single core cable etc as required. 2 Light Controlled by a 6A Switch "	2078 Incl.GST :12%	153.25	2231.25
94	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Telephone socket outlet RJ 11	2078 Incl.GST :12%	153.25	2231.25
95	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. CAT 6 RJ 45 computer jack	2078 Incl.GST :12%	153.25	2231.25
96	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 1 or 2 Module (75mmX75mm)	1817.99 Incl.GST :12%	134.08	1952.07
97	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 3 Module (100mmX75mm)	2078 Incl.GST :12%	153.25	2231.25
98	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 No's 5 pin 5/6 amps modular socket outlet and 1 No: 16 amps modular switch, connection etc. as required.	1518 Incl.GST :12%	111.95	1629.95
99	8 Module (single row)	1047.99 Incl.GST :12%	77.29	1125.28
100	Supplying and Fixing of Wall / Ceiling mounted type IP 65 circular LED fitting, 18 W along with LED lamp	2593 Incl.GST :12%	191.23	2784.23
101	Supplying and Fixing of Wall / Ceiling mounted type IP 65 LED fitting, 30W 2 Ft x 2Ft along with LED lamp	5168.01 Incl.GST :12%	381.14	5549.15
102	Supplying and Fixing of 6/7 W bayonet cap type LED bulb in the existing angle batton etc as required (Philips, Wipro or similar superior make)	868 Incl.GST :12%	64.02	932.02

Item-wise Price Details				
103	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 120 sq.mm in following ways including all necessary accessories as required. the existing masonry open duct	4644.01 Incl.GST :12%	342.5	4986.51
104	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 120 sq.mm in following ways including all necessary accessories as required. on wall surface ((clamped with 1mm thick saddle))	5056.01 Incl.GST :12%	372.88	5428.89
105	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 95 sq.mm in following ways including all necessary accessories as required. the existing masonry open duct	3726.01 Incl.GST :12%	274.79	4000.8
106	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 95 sq.mm in following ways including all necessary accessories as required. on wall surface ((clamped with 1mm thick saddle))	4035 Incl.GST :12%	297.58	4332.58
107	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 70 sq.mm in following ways including all necessary accessories as required. the existing masonry open duct	2799.01 Incl.GST :12%	206.43	3005.44
108	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 70 sq.mm in following ways including all necessary accessories as required. on wall surface ((clamped with 1mm thick saddle))	3005 Incl.GST :12%	221.62	3226.62
109	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 50 sq.mm in following ways including all necessary accessories as required. the existing masonry open duct	2181 Incl.GST :12%	160.85	2341.85

Item-wise Price Details				
110	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 50 sq.mm in following ways including all necessary accessories as required. on wall surface ((clamped with 1mm thick saddle))	2489.99 Incl.GST :12%	183.64	2673.63
111	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 25 sq.mm in following ways including all necessary accessories as required. the existing masonry open duct	1618 Incl.GST :12%	119.33	1737.33
112	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 25 sq.mm in following ways including all necessary accessories as required. on wall surface ((clamped with 1mm thick saddle))	1974.99 Incl.GST :12%	145.66	2120.65
113	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 16 sq.mm in following ways including all necessary accessories as required. the existing masonry open duct	1254 Incl.GST :12%	92.48	1346.48
114	Supplying, laying and fixing of one number PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade of 4C x 16 sq.mm in following ways including all necessary accessories as required. on wall surface ((clamped with 1mm thick saddle))	1563 Incl.GST :12%	115.27	1678.27
115	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade as required. 4C x 120 sq.mm	2078 Incl.GST :12%	153.25	2231.25
116	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade as required. 4C x 95 sq.mm	1872.01 Incl.GST :12%	138.06	2010.07
117	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade as required. 4C x 70 sq.mm	1618 Incl.GST :12%	119.33	1737.33

Item-wise Price Details				
118	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade as required.4C x 50 sq.mm	1518 Incl.GST :12%	111.95	1629.95
119	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade as required. 4C x 25 sq.mm	1417.99 Incl.GST :12%	104.58	1522.57
120	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE 2, Armoured, Copper power cable of 1.1KV grade as required. 4C x 16 sq.mm	1218 Incl.GST :12%	89.83	1307.83
121	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	36067.99 Incl.GST :12%	2660.01	38728
122	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface for connections etc. as required. copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	918 Incl.GST :12%	67.7	985.7
123	Providing and fixing earth bus of 25 mm X 3 mm copper strip on surface for connections etc. as required. 1C 35 Sqmm Cu Cable for Earthing Conductor	618.01 Incl.GST :12%	45.58	663.59
124	Providing and Fixing 4mm dia copper wire on surface or in recess for loop earthing as required	137.99 Incl.GST :12%	10.18	148.17
125	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	73 Incl.GST :12%	5.38	78.38

Item-wise Price Details				
126	<b>Supplying ,Installation, testing and commissioning of 1200 mm ceiling fans with BEE 5 star rating for energy efficiency, including wiring the down rods of standard length (upto 30cm) with 1.5sq mm FR PVC insulated, copper conductor single core cable etc as required.</b>	3623 Incl.GST :12%	267.2	3890.2
127	<b>Supplying and fixing 2 module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.</b>	767.99 Incl.GST :12%	56.64	824.63
128	<b>Supply, Installation, testing and comissioning of residential type light duty exhaust fan 900-1350 rpm, 250 mm, in plastic housing light duty in the existing opening, including louver shutter, making the hole to suit the size of the above fan, making good the damage, connection, testing commissioning etc as required</b>	2593 Incl.GST :12%	191.23	2784.23
129	<b>24-Port Gigabit manageable smart Network Switch with 2 SFPs. Rack mountable</b>	17528 Incl.GST :12%	1292.69	18820.69
130	<b>Patch panel - 24-Port patch panel with cable tray. Rack mountable</b>	10318 Incl.GST :12%	760.95	11078.95
131	<b>4U Rack- Wall Mountable including 4x 6Amp power distribution box</b>	18558 Incl.GST :12%	1368.65	19926.65
132	<b>Supply of branded 1mtr patch cords with cat 6 cable.</b>	318.01 Incl.GST :12%	23.45	341.46
133	<b>Supply of branded 2mtr patch cords with cat 6 cable.</b>	518 Incl.GST :12%	38.2	556.2
134	<b>Supply of branded 3mtr patch cords with cat 6 cable.</b>	717.99 Incl.GST :12%	52.95	770.94

Item-wise Price Details				
135	<b>Ductable A/C units 8.5 TR x 2 No's (2 outdoor unit of 8.5TR and 2 AHU) Low side works for complete installation &amp; commissioning of AC Supply , installation ,testing &amp; commissioning of 8.5 TR or higher capacity aircooled ductable split air conditioner with ceiling suspended IDU and all standard fitting,GSS sheet metal duct(insulation using resin bounded glass wool with 7 micron aluminium foil) for air distribution 22/24 G, IDU SS drain pan as per specification complete with suitable capacity drive motor , aircooled condensor with all accessories ,hermetically sealed scroll compressor, electronic microprocessor pendant controller with digital display, first charge refrigerant gas, vibration isolator pads, structural support for fixing IDU/ODU, safety devices including thermal protector, pressur releafe valve ,overload relay single phase preventer etc, power wiring and control cabling(indoor to outdoor), thermostat wiring, high-low pressure cut out suitable for 3 phase 440V supply etc complete as required. The two units shall work alternatively. Should have provision to change automatically in prefixed time. Should also have provision to control both unit manually. Quote rate for two 8.5TR outdoor and indoor unit with ducting and other accesories.</b>	87567.99 Incl.GST :12%	6458.14	94026.13
136	<b>Suitable De- Humidifier units : Extraction at least 35 litres/day, compresor : rotary, Air flow : at least 220m3/hr, reputed brand, input 230Vac</b>	36067.99 Incl.GST :12%	2660.01	38728
137	<b>Charges for obtaining electrical inspectorate's approval and regularizing with KSEB</b>	257518.01 Incl.GST :12%	18991.95	276509.96
138	<b>Supply and installation of portable fire extingwisher (4 kg) with wall mounted for fire type ABC classification</b>	10318 Incl.GST :12%	760.95	11078.95
139	<b>2 tonne Split air conditioner with copper condensor / evaporator coil 3 star or above with stabilizer complete installation and commissioning (rate for 1 no) with copper pipes and drain</b>	49458.01 Incl.GST :12%	3647.53	53105.54

Item-wise Price Details				
140	<b>Ductable A/C units 5.5 TR x 2 No's (2 outdoor unit of 5.5TR and 2 AHU) Low side works for complete installation &amp; commissioning of AC Supply , installation ,testing &amp; commissioning of 5.5 TR or higher capacity aircooled ductable split air conditioner with ceiling suspended IDU and all standard fitting,GSS sheet metal duct(insulation using resin bounded glass wool with 7 micron aluminium foil) for air distribution 22/24 G, IDU SS drain pan as per specification complete with suitable capacity drive motor , aircooled condensor with all accessories ,hermetically sealed scroll compressor, electronic microprocessor pendant controller with digital display, first charge refrigerant gas, vibration isolator pads, structural support for fixing IDU/ODU, safety devices including thermal protector, pressur releafe valve ,overload relay single phase preventer etc, power wiring and control cabling(indoor to outdoor), thermostat wiring, high-low pressure cut out suitable for 3 phase 440V supply etc complete as required. The two units shall work alternatively. Should have provision to change automatically in prefixed time. Should also have provision to control both unit manually. Quote rate for two 5.5TR outdoor and indoor unit with ducting and other accesories. (Not taken for evaluation)</b>	566518 Incl.GST :12%	41780.7	608298.7
		<b>2224791.99</b>	<b>165804.16</b>	<b>2390596.15</b>

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
<b>HDR Brachytherapy with treatment Planning System</b>							
Labour	2,05,000.00	2,05,000.00	2,05,000.00	2,05,000.00	2,05,000.00	2,05,000.00	2,05,000.00
Comprehensive	7,20,000.00	7,20,000.00	7,20,000.00	7,20,000.00	7,20,000.00	7,20,000.00	7,20,000.00

### **Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 5% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

## **Technical Specification**

### **Equipment :HDR Brachytherapy with treatment Planning System**

#### GENERAL SPECIFICATIONS

A high dose rate Remote After loading Brachytherapy system capable of Intracavitary, Intraluminal, Interstitial, Intra operative, surface mould radiation therapy.

The HDR system should be microprocessor based with PC control.

The HDR system must be from a well established company with a documented history of reliability.

The HDR system manufacturer should have an ISO 9001 and FDA approval and must conform EMC directives.

The HDR system must have a "check" cable that automatically checks the operation of the complete system prior to treatment. The check cable must also be possible to use as a "Dummy" source to allow simulation of particular source locations.

The system must be able to use standard needles (18 gauge) and the source must be certified to more than 25000 transfers.

The system should be in use in renowned centres in India. The tender document must be accompanied with letters of reference from at least 5 existing users of the offered product in India

#### DETAILED SPECIFICATION:

##### 1. Treatment Unit HDR

(1) Treatment unit should be on wheels for easy mobility within the room.

Separate stepper motors to control the dummy check cable and Iridium Source cable.

A safe to contain the Source which complies with International safety regulations.

Treatment unit should have a built-in integrated radiation detector

Multi channel indexer with a minimum of 18 channels having an automatic / optical verification of channel number and applicator connection.

The source must be retractable in the event of an emergency / power failure by following methods: - By an independent DC motor. - Manual source retraction through hand crank

Battery back up and a detailed circuit for checking the battery condition.

#### CONTROL UNIT:

Stand alone and independent PC based control unit with colour monitor, keyboard, mouse, printer (for hardcopy) Built in audio card, network card and a backup media.

Control unit should be of user friendly console and a graphical user interface and should contain an extensive reporting facility.

Control Unit software should run on Windows application.



Control Unit should have a self-testing feature including battery, indexer/RAM. - Control unit must allow storage of multiple standards and keep track of patients fractionated treatment.

Access must be limited to authorized users with Password protection.

The treatment times must be automatically corrected for the decay of the source. Treatment length must cover 40 cm or more with a corresponding 1mm step source size.

There should at least 48 dwell position for the source in each channel.

Dwell times for each source step to be from 0.1 to 999.9 sec.

Display Window should show step position and corresponding dwell time to 0.1 sec.

Display of Total reference air Kerma and dose.

The control unit should contain:

An inbuilt protection circuit to prevent treatment without proper applicator connection and proper indexer locking.

On line extensive display of status codes with an indication of the action required.

Large patient database should be provided with a backup option to an external storage device.

Control unit should contain an built-in log book and all events should he recorded.

## BRACHYTHERAPY TREATMENT PLANNING SYSTEM

### Hardware

The hardware should be of high end graphics workstation with latest high resolution scanner and multicolour network printer

Two workstations (One Dose calculation engines (licences) and One Floating contouring licences).

The software should be latest and up-datable for next 10 yrs

DICOM3 and full DICOM family Import/export from all existing CT/MR/PET/PACS/C-ARM etc Image registration (rigid / deformable) Import /export- Image/structure set/plan/ dose etc. to all machines and integration with the network.

### SOFTWARE:

The Brachytherapy treatment Planning software should 3D and be able to perform all kinds of 2D/3D planning, isodose plotting and display of patient files,beam data acquisition etc.

It should support treatment modalities including intracavitary, interstitial, intraluminal and surface mould techniques.

All the reconstruction technique like: Orthogonal Semiorthogonal with reconstruction box Variable angle Isocentric must be available.

Dose Calculation based on TG43 - Automatic placement of Basal Dose Points for Paris Technique.

Different Optimization techniques like Dose point Optimization on distance and volume. Geometrical Optimization on distance and volume, Graphical Optimization with local and global control should be available.

Fast and accurate dose calculation considering radial dose function, anisotropy function and geometric function should be there.

Rapid reconstruction of catheter using tracking algorithm and indication of corresponding lines on the images should be present.

For outpatient treatments, extremely accurate and dwell time optimization and dose calculation must be available.

Wide range of dose volume histogram methods, Point dose option. Different planes view must be available.

Inverse brachytherapy planning using simulated annealing should be offered. - Contouring tools should have complete image fusion tools inclusive of PET CT based image fusion.

#### RADIATION SOURCE AND TRANSFER MECHANISM:

The source must be a single, High Dose Rate Iridium-192 specify the source dimension.

The source transfer guarantee must be high to ensure optimal usage of each individual source. Specify the transfers per source.

The source cable must be able to negotiate treatment curvature of 1cm to 1.3cm radius

The source cable must be a multi strand of at-least 49 strands and a diameter of less than 0.9mm

The source cable should move forward or backward with an accuracy of  $\pm 1$  mm and must be controlled by stepper motors. The source drive out length from indexer should at least be 1300 mm to reach farther sites of treatment.

The source transfer guarantee and uninterrupted functioning of each source should be ensured for minimum 6 months.

The Clearance and transport of the offered sources and the Re-export / disposal of the decayed sources must also be included in the offer. Only necessary paper work will be provided by the hospital

Disposal of the source will be the sole responsibility of the supplier at no additional cost at any time during the operation of the unit.

The supplier should execute an agreement regarding the supply of new source and disposal of decayed source

Insurance and freight cost of the source for both onward and return of used sources must be met by the supplier. The clearance and transport of the source and the re export /disposal of the decayed source must be included in the offer.

Should provide 2 sources along with the equipment inclusive of insurance and freight cost for both onward and return of used sources. The rate offered for the main equipment should include rate for 2 sources and all associated charges. The second source shall be supplied after the decay of the first source.

Rate shall be offered for 10 sources (at 2 sources per year) inclusive of insurance and freight cost for both onward and return of used sources. The rate offered will be taken for evaluation. In the BOQ form the price of one source with all associated charges shall be offered. The rate will be automatically multiplied by 10 and will be taken for evaluation. This source will be procured only after the decay of the two sources supplied along with the main equipment.

#### APPLICATORS:

Oesophageal – 1 set, Bronchial – set, Cervix – 3 set (Fletcher suit or similar)

Vaginal cylinder – 2 set,

Breast implant template and needle: 1 complete set with at least 1000 Numbers of Flexible tubes.

Prostrate and perineal template set – 1 no. It should be of constant length to prevent stretching and slippage and also should be quick fit safety connections.

Head and neck implantation kit – flexible implantation kit – 250 tubes.

Rigid interstitial needle Implants complete set with at least 30 Numbers of needles of each size.

Nasopharyngeal applicator – 1 set

Prostrate and perineal treatment one sets must be provided and able to connect all applicators.

Both rigid and flexible types of implant sets to be provided along with necessary x ray catheters and transfer tubes.

#### QUALITY ASSURANCE TOOLS:

Source position check device.

Gamma Zone monitor

CCTV

Well type chamber for source calibration

#### AERB TYPE APPROVAL

The offered HDR system must be type approved by AERB. A copy of type approval must be provided.

#### FDA APPROVALS

The offered State of the art latest HDR Brachytherapy System with dedicated Brachytherapy planning system should have USFDA approval OR European CE certificate.

#### EXISTING INSTALLATION.

The offered HDR system must have a good number of installation in India and abroad. There must be at least 20 clinically working HDR Brachytherapy therapy and planning software available in India. A copy of users list in India must be provided.

#### ALL NECESSARY ITEMS LIKE

Gamma zone monitor with calibration certificate

A contamination monitor with valid calibration certificate

CCTV

Well type ionization chamber for isotope calibration with valid calibration certificate

X ray marker wires for all type pf applicators/needles/tubes/ where ever necessary

Needles transfer tubes templates

Source position verification tools

Reconstruction zig

Guide tubes for all applicators

Any items needed for proper functioning and treatment of patient and radiation safety in HDR unit should also included. All items needed by AERB for the commissioning of the HDR unit must be provided

Service Facilities Factory trained service engineers and application specialist should be available in India to look after the installation and maintenance of the system. Necessary credential certificate to be enclosed

#### SITE MODIFICATION

The vendor shall do the site modification works as per the item rate quoted for the turnkey works in the BOQ. The vendor shall inspect the proposed site on receipt of work intimation from the Tender Inviting Authority. The vendor shall prepare the design, drawing and estimate as per the rate offered for turnkey works in the BOQ. The vendor shall also prepare drawings as per the stipulations of AERB and the drawing required to be submitted to AERB shall be provided by the vendor. The vendor shall also facilitate the end user for

obtaining AERB approval and other related approvals. The vendor should do all steps for AERB approval. The institute will obtain necessary approvals from AERB through eLORA.

The following civil works to be done in the Brachytherapy treatment room and patient preparation and procedure rooms

Flooring with Good quality vitrified tiles

Wall painting with good quality water/fungus free paints

Necessary furniture for the storage of treatment accessories

Electrical wiring

Lights and switches

UPS

AIRCONDITIONING:

Necessary AC should be provided in the treatment room patient preparation room and Treatment planning room.

TRAINING

In order to fully and optimally utilizing the equipment training on the offered Brachytherapy machine and 3D Treatment planning system for one physicist and one radiation oncologist for a minimum period of one week in a reputed institution where such HDR system and procedures are practising. The entire system should be handed over to the user in working condition after One week on site training

SCOPE FOR TURNKEY WORK

Installation, commissioning of the machine with all accessories mentioned.

Minor civil works and finishing works to remodel the existing room and the adjacent rooms for reporting.

Minor demolitions of existing wall.

Fixing of the lead glass on the wall.

Tile flooring on the gantry and console room.

Interior finishing works with false ceiling.

Dadoing work till false ceiling in the console and gantry room

Supply and Installation of the Air Conditioning units of suitable tonnage on the gantry and console room.

Necessary cabling work, lightings, switches and various sockets and electrical distribution paneling works.

The required power at one point in the proposed room shall be provided by the respective user institution.

Obtaining electrical inspectorates approval (necessary drawing by the supplier) by liaisoning with hospital authorities.

The CMC rate offered shall be inclusive of all items supplied along with the machine including Air conditioner etc.

The bill of items with specifications of turnkey is provided in the price bid. Unit rate shall be offered and lumpsum shall be offered wherever requested. The actual requirement of each site and the bill of quantities of each site can be finalized after the award of work.

The rate offered for turnkey shall be taken for L1 evaluation. The split-up items and the quantity taken for evaluation is shown below.

However actual quantity may vary depend upon site.

The rates offered shall be inclusive of labour charges, clearing of debris, storage of materials, loading, Unloading, etc.

#### OTHERS

There shall be no separate licensing fee for the use of software (software by the bidder or third party) supplied by the bidder.

All equipment provided shall be of current production, new and of first rate quality.

Remote diagnostic capabilities must include the ability to remotely connect the system on a regular basis to retrieve information about the system and to correct any software problems.

It is the responsibility of the bidder to provide all items required but erroneously mentioned or omitted above for the full commissioning of the equipment.

Specify the manufacturer's and country of origin (Certificate from chamber of commerce of country of origin should be produced).

All spares should be available for minimum 10 yrs.

Pre-installation requirements should be specified.

#### ITEMWISE TURNKEY

S.No.	Description	Qty.	Unit
1.0	<b>CIVIL WORKS</b>		
1.1	Dismanteling existing doors, windows, partition (Aluminium & wood) handing over the same to the hospital authorities		
	Doors	1	No
	Windows	1	No
	Aluminium / wood partitions	10	Sqm
1.2	Dismantling old electrical points, wiring, lights and handing over the same to the hospital authorities	LS	L.S
1.3	Demolishing existing brick walls and carting away the debries	1.5	Sqm
1.4	Demolishing existing floor & wall tile including top layer i/c mortar etc. and carting away the debries	50	Sqm
1.5	Anti- Termite treatment, providing & injecting chemical emulsion for pre constructional anti termite treatment and creating chemical barrier at junction of wall & floor, wall conduits etc., (Chloropyrophos - 20%)perimeter of building expansion joints, surroundings of pipestrenches, along the external	500	Sqft
1.6	Earth work - Digging & removal of excavated soil for preparing foundation for MR	2	Cum
1.7	Filling with river sand including watering , ramming consolidating & dressing complete.	2	Cum
1.8	Providing & laying cement concrete excluding the cement cost of centering & shuttering. 1:4:8 ( 1 cement 4 coarsesand : 8 graded stone aggregate 40mm nominal size )	2	Cum
1.9	Providing & laying cement concrete excluding the cement cost of centering & shuttering. 1:3:6 ( 1 cement 3 coarsesand : 6 graded stone aggregate 20mm nominal size )	2	Cum
1.10	40 mm thick cement concrete flooring 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) and top layer 10mm th. Consisting of 2 cement : 1 stone dust) finishing with a floating coat of neat cement including cement slurry, rounding off edges and glass strips etc.	2	Cum

1.11	Providing cable trench for system cables and wherever necessary with metal cover including finishing work	10	Rmt
1.12	Lintel work for placing door frames and windows, Lintel concrete, Centering and shuttering including strutting, propping etc. and removal of form work including all leads and heights. 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	1	Cum
1.13	Reinforcement for reinforced cement concrete works including straightening, cutting, bending, binding and placing in position all complete:- Thermo Mechanically Treated bars	100	Kg
1.14	Brick work : Construction of 9" Brick wall with common burnt clay F.P.S (non-modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in cement mortar 1:6 (1 cement : 6 coarse sand)	2.5	Cum
1.15	Brick work : Construction of 4 1/2" Brick wall with common burnt clay F.P.S (non-modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in cement mortar 1:4 (1 cement : 4 coarse sand)	2	Cum
1.16	Plastering work : 15 mm cement plaster of mix 1:4 (1 cement: 4 fine sand)	50	Sqm
1.17	Providing ceramic glazed tiles on wall. Coloured glazed tiles 200x300 or bigger in dado on 12 mm th. cement plaster 1:3 (1 cement :3 coarse sand) and jointed with white slurry using pigment ( Basic cost of tiles = >40 to <50 / Sqft ) cement. JOHNSON, NITCO, ORIENT, KAJARIA or approved make	75	Sqm
1.18	Providing and fixing Vitrified floor 600x600x8.5 mm th. Polished vitrified tile flooring of approved shade laid on a bed of 20mm th. cement mortar 1:3 finished with flush in all respects ( Basic cost tiles =60.00 / Sqft ) pointing matching with tile colour & pigment complete. JOHNSON, NITCO, ORIENT, KAJARIA or approved make	50	Sqm
1.19	Providing and fixing 2.0mm th. Vinyl floor/ skirting tiles with rubber based adhesive over clean and smooth surface including finishing by rolling a light roller all complete.	50	Sqm
1.20	Powder coated Aluminium door : Bottom particle board and top 5 mm plain glass with one side view and all accessories ( open area shall be measure ) including all accessories with related to this door.	2	Sqm
1.21	Hydraulic door closer: Providing and fixing matt finished aluminum exposed type hydraulic door closer of specified make with necessary accessories and screws etc. complete.	3	Nos
1.22	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete..	3	Nos
1.23	Providing and fixing frosted/mat film of thickness 25 microns self adhesive of approved colour, shade and quality with cutting as per approved design and pattern including cleaning of glass and making surface smooth for fixing of film all complete as per direction of Engineer in charge to glazed window/doors	5	sq m
1.23	Providing and fixing aluminium handles ISI marked anodised ( anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete- 125mm	6	Nos
1.24	Providing and fixing aluminium tower bolts ISI marked anodised ( anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete- 250 X 10 mm	3	Nos

	150x10mm	3	Nos
1.25	Providing & fixing Armstrong False ceiling with 2 ft x 2 ft	30	Sqm
1.26	Providing & fixing Gypsum false ceiling including painting	15	Sqm
1.27	Internal wall painting with acrylic emulsion paint of approved shade including base preparation using putty and fillers as specified and directed all complete. ( Primer + 3 coats )	100	Sqm
1.28	External wall painting with cement based water proof external paint of approved manufacture in white shade. (2 coats)	100	Sqm
1.29	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade ( matt ) in two or more coats in approved shades over an under coat of with ordinary paint of approved brand and manufacture.suitable shade: Windows & grills	10	Sqm
<b>SANITARY INSTALLATIONS&amp; WATER SUPPLY</b>			
1.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid Make:Hindware,Cera,Jaquar etc.,	1	no
1.31	Providing and fixing 600 x 450mm bevelled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	1	no
1.32	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15mm nominal bore	2	no
1.33	Supplying and fixing in position white glazed soap tray concealed recessed type of size 200 mm x 150mm , including cost of all materials and labour charges etc. complete.	2	no
1.34	Providing and fixing wash basin with C.I/M.S brackets painted white ,15 mm C.P brass pillar taps, Kingston / Gem / Techno / Parko, 32 mm C.P brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required :- Wash basin size 550x400mm with single 15mm C.P.brass pillar tap	1	no
1.35	Providing and fixing stainless steel towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality colour and make (Prayag or equivalent).600 mm long towel rail with total length of 645 mm	1	no
1.36	Providing and fixing PVC trap of self cleansing design withPVC screwed down or hinged grating with or without vent arm complete including cutting and making good the walls andfloors. 100mm inlet and 75mm outlet.	2	no
1.37	Providing and jointing PVC pipes of (pressure10 K g/cm2) for water supply including testing of joints, concealing the pipes , & trenching & refilling wherever required etc complete. 20mm pvc pipe	10	m
1.38	Providing and fixing unplasticised rigid pvc pipe(pressure 6kg/cm2) in drainage line including cutting, trenching, filling but excluding the cost of fittings and fixtures ect. Complete		
	75mm	5	m
	110mm	5	m
1.39	Constructing soak pit 1.2X1.2X1.2 m filled with brick bats including S.W drain pipe 100mm diameter and 1.2 m long complete as per standard design.	1	no

1.4	Providing and fixing P.V.C waste pipe for sink or wash basin, including P.V.C waste fittings complete :- Flexible pipe :-32 mm dia.	1	no
<b>PVC WORKS</b>			
1.41	Providing and fixing factory made PVC door frame made of PVC extruded section having over all dimensions of 48x40mm (tolerance +1mm) with wall thickness 2.0mm+0.2mm, corners of the door frame to be mitred and joined by means of plastic/MS galvanized brackets and stainless steel screws. The hinge side vertical of the frames reinforced by galvanized MS tube of size 19x19mm and 1mm+0.1mm wall thickness and 3nos stainless steel hinges fixed to the frame complete charge. (Sintex, Plasopan or duroplast or Rajshri) 48x40x2.0mm thick PVC door frame	5	m
1.42	Providing and fixing to existing door frames 24mm thick factory made PVC door shutters made of styles and rails of UPVC hollow section of size 59x24mm and wall thickness 2mm+0.2mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of MS galvanized/plastic brackets of size 75x220mm having wall thickness 1.0mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanized MS tube of size 20x20mm and 1mm +0.1mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x24mm and 2mm+0.2mm wall thickness fixed to the shutter styles by means of plastic/galvanized MS 'U' cleats. The shutter frame filled with a UPVC multi chambered single panel of size not less than 620mm, having over all thickness of 20mm and 1mm +0.1mm wall thickness.	1.5	sq m
<b>FLOORING TILES FOR TOILET</b>			
1.43	Providing and laying anti skid ceramic floor tiles of required size for toilets (7.5mm thickness or nearest size) of 1st quality conforming to IS 15622 of approved make in all colours, shades, except white, ivory, grey, fume red brown laid on 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigments etc complete.	2	sq m
1.44	RF Interior work inside MR room. Providing and fixing wooden paneling consisting of 25x50mm soft wood framing to wall / vertical surface @ 600mm c/c both ways and finishing with 600 mm wide full height prelaminated MDF board 12.5mm th. Panels with 100x15mm TW skirting & 40x40 vertical T.W. members at vertical joints of Novapan board fixed to the framing below all complete as directed including fixing with brass screws and other nonmagnetic accessories only MRI inside and Console side	50	sq m
1.45	Providing & fixing Armstrong False ceiling with Aluminum grids inside MR room.	15	sq m
<b>ELECTRICAL WORKS</b>			
2.1	L.T.PANEL & UPS Panel : Supply, installation, testing & commissioning of cubical pattern floor mounted L.T. Panel & UPS panel made out of 14 SWG CRCA sheet, powder incoming/outgoing cable, suitable entry from top/bottom coated having separate alley for with busbars, ammeter (0-600A), selector switch with CTs voltmeter (0-500V) with protection fuses & selector switch, set of RYB phase indicating lamps, contactors, terminal blocks, interconnections, incoming & outgoing.	1	No
2.2	DISTRIBUTION BOARDS : 8 Way TPN DB for Raw power	1	No.
2.3	DISTRIBUTION BOARDS : 8 Way TPN DB for UPS power	1	No.



2.4	40A breaker with enclosures for Ductable split AC units (2) (rate to be offered for 2 units)	1	No.
2.5	Breaker switch with socket complete box for 2 tonne A/C	4	No.
2.6	Supply, laying and fixing of the following sizes of PVC insulated and PVC sheathed armoured conductor cable of 1.1kv grade as per IS 1554 (part 1) 1976, in trenches, on surface of wall or the ceiling complete with saddles, ties etc. as required. Make Poly Cab Cable and Routing the cable in flexible hose/pvc pipes including termination with suitable copper lugs.		
a	95 Sqmm Copper Cable Flexible (UPS incomer)	50	RM
b	70 Sqmm Copper Cable Flexible (UPS outgoing)	50	RM
c	35 Sqmm Copper Cable Flexible ( Earthing cable )	50	RM
d	25 Sqmm Copper Cable Flexible ( AC units )	50	RM
e	16 Sqmm Copper Cable Flexible ( Earthing cable )	50	RM
f	10 Sqmm Copper Cable Flexible ( Earthing cable)	50	RM
2.7	Submains wiring with 4 x 4.0 + 1 x 2.5 sqmm. PVC insulated stranded copper wires in recessed /surface MS conduit complete with circuit wiring , earth wires etc.. Complete as required.	50	RM
2.8	Supply and making end termination with brass compression glands for PVC insulated and PVC sheathed armoured aluminum conductor cable of 1.1kv grade complete with lugs for following cables		
	5 x 95 Sqmm Conductor	10	Set
	5 x 70 Sqmm Conductor	10	Set
	5 x 35 Sqmm Conductor	10	Set
	5 x 25 Sqmm Conductor	10	Set
2.9	Wiring for light points with 1.5 sq mm. PVC insulated stranded copper wires in recessed /surface MS conduit complete with circuit wiring , earth wires etc.. Complete as required.		
	One light controlled by 6A switch	15.00	No's
	Two light controlled by 6A switch	15.00	No's
	5 Pin socket with 6A switch outlet wiring	15.00	No's
	3 no's 5 pin socket with one 16A switch outlet wiring	15.00	No's
2.1	Wiring for plug points with 4 sq mm. PVC insulated stranded copper wires in recessed /surface MS conduit complete with circuit wiring , earth wires 6 pin, 6/16A socket , 16A modular switches required.		No's
2.11	CFL lights ( 2 ft x 2 ft ) 36 x 2 no's Wipro/Crompton/Philips/ equivalent	10	Nos
2.1	CFL Round fittings 36 Watts Wipro/Crompton/Philips/ equivalent	10	Nos
2.13	Ceiling mounted Fans Wipro/Crompton/Philips/ equivalent	1	Nos
2.14	Exhaust fans in Toilets Wipro/Crompton/Philips/ equivalent	1	Nos
2.15	Earthing with copper plate 600 x 600 x 3mm th. including accessories and 25 x 3mm th. Copper strip from the base plate to the ground level and providing masonry enclosure with CI cover and with GI watering pipes with funnel including charcoal and salt as required upto a depth of 3.5m from the existing ground level all complete.	1	set
2.16	Supply and fixing of 25mm PVC conduit along with accessories and MS boxes in recess / surface including cutting the wall and making good the same as required for telephone and LAN.	20	Mt.
2.17	Supply and drawing of 2 pair, 0.61mm dia unarmoured PVC insulated and PVC sheathed annealed tinned copper conductor telephone cables in recessed/surface conduit and termination complete as required.	20	Mt.
2.18	Supply and fixing in position twin RJ11 jack plate i/c wall recessed GI box for telephone	2	No.
2.19	Supply and drawing CAT 6 wiring in existing conduit including termination.	20	Mt.
2.20	Supply and fixing in position twin RJ45 jack plate i/c wall recessed GI box for	2	No.

	LAN		
2.21	24 port network switch with rack and accessories	1	No.
2.22	Patch cords for networking.	1	No
2.23	Broadband Internet connection ( 3 years)	1	
2.24	24 port network switch with rack and accessories complete	1	No
3	<b>FURNITURE &amp; OTHER WORKS</b>		
3.1	Storage cabinet for accessories in 19 mm ply board construction having sides,top,front,openable panels laminate finish with internal horizontal shelf 19mm commercial plywood painted (enamel) as per approval. Front panels to have a locking arrangements with one panel having tower bolt on the inner side with handles , magnetic hinges and all complete.	150	Sq ft
3.2	Steel cupboard (Godrej) for storage 6ft tall 3 feet width	1	No.
3.3	Computer table (long) with keyboard tray, CPU storage at base in a side and storage drawers at other side. (For workstation and reports) reputed brand godrej/featherlite/etc	1	No
3.4	Office chair - Pushback, PU arms, Pneutic height adjustment and nylon base. Reputed brand like godrej/featherlite/etc	3	No.
3.5	Vaccum cleaner (Basic model) reputed brand	1	No.
3.6	Supply and installation of portable fire extingwisher (2 kg) with wall mounted for fire type ABC classification	1	No.
3.7	Suitable De- Humidifier units	1	No.
4	<b>AC WORKS</b>		
4.1	Ductable A/C units 11 TR x 2 no's Low side works for complete installation & commissioning of AC (rate to be offered for 2 units)	1	No.
4.2	2 tonne Split air conditioner 5 star with stablizer complete installation & commissioning (rate to be offerd for 1 no)	4	No.
5	<b>MISCELLANEOUS WORKS:-</b>		
5.1	PVC Name plates - 24" (L) x 4" (H)	LS	LS
5.2	Charges for obtaining electrical inspectorate's approval	LS	LS
5.3	Others : Rate for any item which are mentioned in the scope of turnkey of the tender but left above splitup or any other item which are not mentioned in the scope or spilt up rate but essential for the installation of the equipment shall be offered in lumpsum. Splitup details shall be provided by the succesful tenderer before award of work.	LS	LS
5.4	Site cleaning	LS	LS
5.5	Fenching ( Chain link) for Chiller	LS	LS
5.6	Shed for Chiller(GI sheet)	LS	LS
5.7	Additional Iron shielding if any	LS	LS
5.8	Copper pipe for O2, N2O, suction & air	50	sqm
5.9	Copper connectors	20	No
5.1	Outlets for O2, N2O, suction & air	3	No
5.11	Flowmeter with humidifier	1	No
5.12	Suction jar	1	No

LIST OF MATERIALS OF APPROVED BRAND AND/OR MANUFACTURED AS PER IS SPECIFICATION

## Civil

Sl. no	Item	Makes
	Vitrified Tiles	RAK, Johnson, Khajaria, Somani
	Ceramic Floor Tiles	RAK, Johnson, Khajaria, Somani
	Ceramic Wall Tiles	RAK, Johnson, Somani, Khajaria
	HD Digital wall tiles	Somani/ Grestek Nxt
	PVC Pipes (10 kg/cm <sup>2</sup> )	Supreme/ Finolex
	PVC pipes (6kg/cm <sup>2</sup> )	Supreme, Phenolex
	Valves	Zoloto/Wiking
	Exterior Emulsion	Jotun, Asian
	Plastic emulsion	ICI, Asian, Nerolac
	Wall putty	Altech, Asian, JK, Birla
	Cement paint	Surfacem, Snowcem, Nerocem
	Plywood	Green Ply, Century
	Patch fittings/ Door locks & Door closers	Godrej, 'Dorma', Merit
	Laminate	Decolam, Formica, Greenlam, Green Ply, Anchor
	False ceiling	Armstrong, AMF, Comceil, India gypsum/Saint Gobain, Vansgypsum
	Glass (all types)	Saint Gobain, Modiguard, Hindustan, Asahi, Triveni
	Hardware (locks)	Godrej, Merit, Dorma
	Cement	Malabar/ Sankar/Ultratech/Ambuja, ACC, RAMCO
	Exterior paint	Jotun / Asian/ Nerolac
	Gypsum or Calcium Silicate	Gypboard, Hilux Ceiling
	Sanitary fittings	Jaguar, Marc, Roca
	Sanitary ware	RAK, Toto, American Standard, Parryware, CERA, Hindware
	Aluminium Powder coating	Bhoruka, Hindalco, Metacoats
	Aluminium Extrusion	Bhoruka, Hindalco, Jindal/Indal

**Electrical**

Sl.No	Item	Make of Materials/Equipment
1	1.1 kV grade XLPE insulated PVC sheathed Al./Cu. Cable	CCI, NICCO, Torrent, Universal, Havells, Gloster, Finolex, KEI
2	<b>MCCB</b>	Siemens, Schneider, GE, L&T, C & S, Legrand,
3	<b>Capacitor</b>	L&T, Saha Sprague, GE, Shreem, Epcos, Schneider
4	Starters, Timer & Contactors	Siemens, L&T, Schneider, C&S, BCH, GE.
5	<b>SDFU, Isolator, SFCOS</b>	L&T, Siemens, Schnieder, GE.
6	Push Buttons	Teknic, Schneider, Siemens, BCH, C&S, L & T
7	<b>Indicating lamps (LED type)</b>	Teknic, Schneider, Siemens, BCH, C&S, L & T

8	<b>Fuses/Fuse carriers</b>	Siemens, L & T, Schneider, GE
10	<b>Integrating meters</b>	SIMCO, L&T, Siemens, AE, Schneider, Secure, Socomec
11	<b>Instrument Transformer</b>	AE, Intrans, Kappa, Intech, PGR, Powertech, Resitech
12	<b>Selector switches</b>	Reco, Essen, Kaycee, L&T, C & S, Siemens, Schnieder, BCH, Teknic
13	<b>660/1100 volt grade stranded unsheathed wire with copper conductor</b>	Finolex, RR Kabel, L&T, Lapp Kabel, V-Guard, Polycab
14	PVC Conduit	Konseal, Balco, Precision, Clipsal
15	<b>TOD meter</b>	L&T, Schnieder, Secure
16	Exhaust Fans	Almonard, Crompton, polar, Khaithan, Baliga
17	Light Fittings	Philips, Wipro, K- lite, Crompton Greaves,
18	LED light fixtures	Philips, Crompton greaves, wipro
19	LED Chip	CREE, Philips, Nichia
20	Modular type switches, sockets, bell push, fan regulator etc.	Crab Tree(Athena), MK India (Blenz), Legrand(mosaic), Wipro (Northwest), Kolors (krest), Anchor(woods)
21	Ceiling fan	Crompton Greaves, Polar Usha, Khaithan
22	Metalclad plug/socket/Decontactor	Legrand, C & S, Schnieder, Hagger,
23	Thermoplastic industrial type plug/ socket / decontactor	Hensel, MK
24	MCB, RCBO, RCCB	Legrand, Siemes, L&T, Hagger, Schnieder, Indoasian (gold plus)
25	MCB Distribution Boards	Legrand, Siemes, L&T, Hagger, Schnieder, Indoasian (gold plus)
26	Nitrile rubber insulation	Armaflex/K-flex/Totaline