

## Construction of a Generator Room for CCU At Medical College Alappuzha

### PART I : CIVIL WORKS

SL No	Description	Unit	Quantity	Rate (in figures & words)	Amount (Rs.)
1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 150 m outside the periphery of the area cleared.	Sqm	63.00		
2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.All kinds of soil	Cum	29.00		
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)	Cum	5.60		
4	Providing and laying in positionspecified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	Cum	24.00		

5	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).	Cum	3.00		
6	Reinforcement for RCC works including straightening, cutting, bending, placing in position and binding all complete. Thermo - Mechanically treated bars (Using Vizac, Tata or SAIL)	Kg	3700.00		
7	Centering and shuttering including strutting, propping etc. and removal of form for Foundations, footings, bases of columns, etc. for mass concrete	Sqm	38.00		
8	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) upto plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand).	Cum	0.60		
9	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 1:4 (1 cement : 4 coarse sand	cum	4.50		

10	Steel work in built up tubular (round, square or rectangular hollow tube etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished welded type tubes	Kg	710.00		
11	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, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/ neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing/panelling. C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and panelling to be paid for separately):For shutters of doors, windows & 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	Kg	75.00		
12	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to openings / wooden frames with rawl plugs screws etc.	Kg	1300.00		

13	<p>Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters. 80x1.20 mm M.S. laths with 1.20 mm thick top cover</p>	Sqm	12.50		
14	<p>Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer incharge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.</p>	Sqm	68.00		
15	<p>Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.</p>	each	1.00		

16	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS12823 Grade 1 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	Sqm	7.20		
17	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete. Single rubber stopper	each	1.00		
18	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: 250 x 10 mm	each	1.00		
19	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	each	2.00		
20	15mm cement plaster on the rough side of single or half brick wall of mix : 1 : 4 (1 cement : 4 fine sand)	Sqm	70.00		

21	Applying one coat of cement primer of approved brand and manufacture on wall surface – Cement Primer	Sqm	70.00		
22	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	70.00		
23	Wall painting with Plastic emulsion paint of approved brand and manufacture to give an even shade –Two or more coats on new work.	Sqm	70.00		
24	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	Sqm	75.00		
TOTAL OF PART I- CIVIL WORK					
<b>TOTAL OF PART II-ELECTRICAL</b>					
<b>GRAND TOTAL: PART I +PART II</b>					