

KATHMANDU UNIVERSITY SCHOOL OF MEDICAL SCIENCES

Dhulikhel, Kavre

Summary of COST For the Construction of Shed for Oxygen Plant At Mental Health

S.N	Description	Amount (NRs.)	Remarks
A	Civil Works		
B	Water supply and sanitary work		
C	Electric and allied work		
	Sub Total		
	13% VAT		
	Grand Total		



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Bill of Quantity

For the Construction of
Shed for Oxygen Plant At Mental Health

Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
A	CIVIL WORKS						
1	Site clearance for starting the construction work and cleaning the site all complete after completion of the work as per the instruction of site incharge.	job	1.00				
2	Earth Work In Excavation Earthwork in excavation in foundation, trenches and pits etc in all kinds of soil including dressing of sides, ramming of bottom, watering, soring, dewatering (if required) all lead and lifts required and removing off surplus excavated earth to a suitable place as per design, drawing, specification and instructions.	Cum.	20.36				
3	Earth Work In Filling Backfilling to structures, foundations pits, side drains, etc. from excavated materials including compaction, levelling all complete as per drawing and instruction of the Engineer.	Cum.	8.14				
4	Flat brick soling: Flat brick soling in wall in perfect line and level including blinding the joints with sand as per design, drawing, specification and instructions	sq.m	41.25				



Piraj

Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
6	P.C.C work for R.C.C Providing, mixing and laying PCC (1:2:4) with stone aggregate 20mm and down gauge for RCC with proper compaction, level and finishing. Rate should be inclusive of required form work	Cum.	8.56				
7	Reinforcement steel for R.C.C work Steel reinforcement bar of fe 500/415 grade including straightening, cleaning, cutting, binding & fixing in position with annealed tying binding wire as per drawing, design & instruction all	Kg	805.98				
8	Brick work 230 mm thick Good quality local chimney made Brick work in 1:6 C/S mortar in perfect line level finish including wetting the bricks, racking the joints, scaffolding and curing the work for at least 7 days all complete.	Cum.	19.43				
9	Cement Plaster 12.5 to 20mm thick cement plaster in (1:4) cement sand mortar in perfect line and level including cleaning, chipping, cutting and raking the joints, curing till 7 days, etc., all complete as per design, drawing, specification and instructions.	Sqm.	86.94				
10	Applying two coats of Emulsion painting of Asian paints (premium quality) or equivalent paint of approved quality over a coat of primer on some internal surfaces.	Sqm.	86.94				
11	Applying two coats of Weather coat of Asian paints (apex ultima) or equivalent paint of approved quality over a coat of primer on external surfaces.	Sqm.	20.25				
12	M.S metal sheet (1.8mm) sliding doors including frame of 50x50x3.2 and 2 nos of 100x100x4 vertical post including one coat of red oxide and two coat of enamel paint all complete as per instruction. Size of sliding metal door 2.0x2.1 sq.m	Sqm.	4.20				

Piraj



Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
13	Supplying and fixing of Aluminium Ventilators, 101 series (1.2mm) glazing and sliding windows with fixed glass panes and fixed ventilator part with sections of different sizes including wire mesh shutters with stainless steel wiremesh, 5mm thick glass panes of approved quality and all the necessary accessories required such as locks, sunkun handles, screws, washers and gaskets etc., all complete as per design, drawing, specification and instructions.	Sqm.	1.44				
14	Fabrication, Supply and installation of roof supporting structure Mild Steel Truss including purlins of approved steel sections, including necessary cleat angles, gussets, base plates, anchoring, hooks and applying two coats of enamel painting over primer on cleaned surface of steel, all complete the work as detailed in drawing, specification and instructions of the Engineer.	kg	665.00				
15	26 gauge coloured C.G.I sheet roofing all complete.	Sqm.	91.79				
16	Supply & fabrication of G.I Plain sheet gutter	Rm	13.70				
17	Providing & laying 24 gauge thick CGI plain sheet (Red Colour) over M.S pipe with all required fixing accessories like J-Hook, clips, clamps, washer etc.all complete s as per design, drawing, specifications instructions of the Engineer.	Sqm	7.80				
18	GSS Ducting work GSS Ducting work (24 gauge) for Supply / Return Air complete with required overlapping, hangers and rods as per site condition.	Sqm	10.00				
				SubTotal			



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Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
B	Water supply and sanitary work						
1	Supply & installation of 4" PVC Rain water pipe including required fittings all complete as per instruction	Rm	12.00				
2	Supply & installation of 4" HDPE pipe pipe necessary ring gaskets, HDPE fittings, including MS clamps, hangers, cutting, jointing, sealing, installation of pipes and specials including making holes and cutting grooves on walls or floor and repairing the same to its original finish. Pipes to be installed on trenches or walls or floor or duct or hung to ceilings as per drawings, specifications, manufacturer's recommendations, instructions, cleaning of the system, testing and ready for operation. The rate shall include for all labour and materials required. The measurement shall be done for running feet, fittings etc not payable separately. including required fittings all complete as per instruction	Rm	12.00				

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Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
3	CPVC pipes SDR-11 including MS clamps and brackets, nails and hooks, and all necessary CPVC/Brass specials required for complete installation, cutting, jointing, sealing of joints etc., installation of pipes and specials including making holes and cutting grooves on walls or floor and repairing the same to its original finish. Pipes to be installed on trenches or walls or floor or duct as per drawings, specifications and instructions, cleaning of the system, testing and ready for operation. The rate shall include for all labour and materials required. The measurement shall be done for running meter, fittings etc not payable separately.						
	- 20 mm	R.m	12.00				
4	CPVC Ball Valve						
	- 20 mm dia.	set	1.00				
Sub Total							

Piray



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Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
C	Electric and allied work						
1	Supply, installation, testing and commissioning of following sizes of PVC insulated copper conductor cable of 1.1 KV grade concealed in specified size of 1.5 mm thick NS approved PVC Pipes laid in ground/Building Structure as deemed including required fixing and cable terminations materials and accessories as per drawings, site conditions and instructions. (Pioneer, Prakash or equivalent)						
	3.5 core 35 mm sq copper armoured cable	Rm	25				

Piray



Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
2	General Service Light/Fan/Exhaust Fan Point Wiring Supplying, wiring, testing and commissioning and putting into operation for lights, ceiling fans, exhaust fans points using 2.5 sq mm stranded copper conductor, 1100 volts grade, PVC insulated wires drawn through pre installed PVC Pipe, cable sleeve/support but including specified dia HDP pipes concealed in wall and floor including all fixing and connecting materials. The rate for point wiring shall include the circuit wiring from designated Distribution Board (DB) up to the first light/fan/ control switch on wards to light/fan then the looping between switches /lights/fans/ etc. (No cable jointing is allowed except switch and fixture). The cost shall be including modular formation control switches/electronic fan dimmers integrated in multi modular plate flushed in required size of GI box, but including GI fish wire, cutting and filling chases for recessed pipes as deemed as per drawing and lay out plan all complete.						
	One Way Light/Fan Point	Pts	6				

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Sn	Description	Unit	Quantity	In Figure	Rate (NRs.) In Word	Amount	Reks
3	6/16 A Round Pin and 13 A Flat Pin Power point Wiring Supplying, wiring, testing and commissioning and putting into operation for 6/16 A and 13 A power point using 2 x 4 sq mm + 1 x 2.5 Sq mm stranded copper conductor, 1100 volts grade, PVC insulated wires drawn through pre installed PVC pipe, cable sleeve/support but including specified dia pipes concealed in wall and floor including all fixing and connecting materials. The rate for point wiring shall include the circuit wiring from designated Distribution Board (DB) up to the first power point then the looping between sockets. The cost shall be excluding modular formation switch sockets and their flushing GI box but including GI fish wire, cutting and filling chases for recessed pipes as deemed as per drawing and lay out plan all complete. Note:only 4 no of power socket should be supply from One supply line(MCB).	no	12				
4	Switch Socket Outlets Supply, installation, interconnection, testing and commissioning of following types of modular formation flush mounted switch socket including corrosion resistance high quality GI box to be installed in specified location and height all complete. (Delta Vega, North West or equivalent)						
	32 A Round Pin Switch Socket	Nos	4				
	16 A Round Pin Switch Socket	Nos	4				
	6 A Round Pin Switch Socket	Nos	4				

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Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
5	LIGHTING FIXTURES AND ACCESSORIES Light Fixture/Luminaire Supply, storing, assembling, installation, testing and commissioning of wall/ceiling, surface/recessed, suspended types Fluorescent/CFL/LED lighting fixtures including lamp, power factor improvement capacitor electronic ballast, control gear etc. and including making connections with 1.5 Sq.mm PVC insulated copper conductor wire complete as per specification.(Greatwhite, Philips Brand or equivalent)						
	1x18 W Surface type LED TL	Nos	6				
6	Earthing Supplying, embedding, installation, testing and commissioning of earthing set with 600X600X3 mm electrically pure copper plate at least 3 m below ground level surrounded by alternate layers of charcoal and common salt to thickness of 300 mm around the electrode effectively grounded by means of 20X3 mm copper strip and 8 SWG bare copper conductor which running from MDB to all DB's through 25 mm dia. HDP conduit including 3m long GI pipe for watering 450 mm dia (Internal) brick chamber with 23 cm thick brick wall in c/m (1:4) and 100 mm thick RCC slab cover, necessary connection, fixing and joining materials as well as earth excavation and back filling works all complete as per design, drawing, specification and instructions.	Set	1				

Piray



Sn	Description	Unit	Quantity	Rate (NRs.)		Amount	Reks
				In Figure	In Word		
7	DISTRIBUTION BOARDS Design, fabrication, supply, delivery, installation, testing and commissioning of fully enclosed front door operation double cover, flush mounting following types of Final Distribution Boards F(DBs) fabricated out of 1.6 mm steel sheet having separate compartments for Incoming and Outgoing systems including all fixing and connecting materials as per drawings specification and instructions. (MCCB/MCB-schneider LEGRAND, Siemens, or equivalent)	Nos	1				
	Incoming						
	100 A, 4 P MCCB - 1 Nos						
	0-500 V Voltmeter with selector Switch - 1 Set						
	3 Nos 22.5 dia LED Type Phase Indicators - 1 set						
	2 A TP Protection MCB - 1 set						
	Required Control Wiring with 2.5 sqmm control cable - 1 Lot						
	Outgoing						
	63 A, 4P MCCB - 1 Nos						
	32 A, 10 kA above TP MCB - 4Nos						
	16 A, 10 kA above SP MCB - 4Nos						
	6A, 10 kA above SP MCB - 4Nos						
	Copper Phase Bar, Neutral and Earth bars						
Sub Total							

