

Bill of Quantities

SUMMARY

Bill #	Description	Total Amount (Pak. Rs.)
1	Civil Works	
2	Electricity	
	Grand Total	

Bill No. 1, Title: Civil Works

Item. #	Description	Quantity	Unit of Measurement	Unit Rate (Pak. Rs.)	Amount (Pak. Rs.)
1	Providing and laying 4" (102 mm) thick not leaner than 1:2:4 cement concrete (minimum works cube crushing strength of 2250 Lbs. PSI (158 Kg. per Sq.cm. at 28 days) in road, paths, crete-ways etc. using graded screened bajri in panels of approved size laid to required gradient and camber over any sub-grade including cost of necessary form work and its removal, compacting with vibrators (immersion or screen or both) belting the surface with canvas belt, roughening the surface after laying concrete with brush and curing etc. complete..	30.00	Cft		
2	Provide and apply one coat of Dulux/ Robbialac Primeon/ Alkali Resisting Masonry Sealer and minimum 2 coats of Dulux Special Plastic Emulsion or Robbialac VIP including surface preparation filling and rubbing etc., as per Specs. Section-6700-5, complete in all respects, upto any height at any floor	150.00	Sft		
3	Distempering with vinyle distemper (ICI) Dulux Paintex of approved make and shade in minimum two coats over and including the cost of one priming coat of lime wash including sand papering, dusting, and filling the holes, cracks and inequalities, if any, at any height in any floor.	100.00	Sft		
4	Repainting two coats with vinyl emulsion ready mixed paint of approved Dulux/Robbialec/ Paintex make and shade to palstered surface etc. i/c sand papering, filling (where requird) the surface as directed by the Engineer Incharge, in any floor.	838.00	Sft		
5	Repainting two coats with weather sheild paint of (ICI) Dulux make and shade on plaster surface (External) including cleaning , sand preparing the surface as directed by the Engineer-In-charge in any floor.	1500.00	Sft		
6	Providing, laying, fixing, testing and disinfecting, polypropylene pipelines for cold and hot water supply as per DIN 8077/8078 PN-20 for pipe and DIN 16962 PN-25 for fittings or equivalent BS specification Dadex, Firat (Turkey make) or formul (Turkey make) make as approved by the Engineer Incharge complete in all respects to their entire				

Item. #	Description	Quantity	Unit of Measurement	Unit Rate (Pak. Rs.)	Amount (Pak. Rs.)
	satisfaction, including specials such as tee, cross, reducer, bend, union, elbow, plug, socket, etc., supported on walls or suspended from slab or run in chases including supports, cutting and making good the same as necessary to the structure, excavation and backfilling in layers complete in all respects.				
	i) 25 mm o/d	100.00	Rft		
	ii) 32 mm o/d	100.00	Rft		
	iii) 40 mm o/d	150.00	Rft		
	iv) 63 mm o/d	150.00	Rft		
7	Providing and fixing un platized polyvinyl chloride pipe (U.P.V.C) "D" class (Acid Proof) of "Dadex" with specials such as bend Tee elbo reducer union floop trap etc. and clamps etc, including cutting and fitting complete with and including the cost of breaking through walls and roof and making good etc., after cleaning the pipe and cartage within 10 miles (16.09 km).				
	i): 4" dia	150.00	Rft		
	ii): 3" dia	150.00	Rft		
	iii): 2" dia	100.00	Rft		
8	Dismantling burnt brick masonry in lime or cement mortar foundation, basement, plinth and ground floor including stacking salvaged material (serviceable) and disposing of surplus material as directed within three chains (91.5 m)..	50.00	Cft		
9	Dismantling cement tiled floor, dado or skirting in basement, plinth and ground floor including base mortar and stacking salvaged material (serviceable) and disposing of surplus stuff as directed within three chains (91.5 m)....	2185.50	Sft		
10	Dismantling cement concrete work in foundation, basement, plinth and ground floor i/c disposing of the material complete.	500.00	Cft		
11	Providing and laying first class solid burnt brick masonry straight or curved walls in Superstructure including scaffolding, raking, out joints and curing etc, complete. 9" and over thick, set in 1:5 cement sand mortar. (Ground Floor)	347.81	Cft		
12	Provide and fixing M.S. grills in 3/8" x 3/8" squar Bar to windows/ventilators etc., complete as per drawing including welding, grinding and finishing as per Specs. i/c two coats of red oxide paint (Fixed at site as per Engineer Incharge instruction).	980.00	Kg		
13	Provide, apply, finish, smooth, cure etc. 3/4" thick 1:4 cement sand external plaster, complete upto any height. Ground Floor	175.00	Cft		
14	Provide, laying 1:2:4 cement concrete 2" thick Khurrahs 2'-0" x 2'-0" size on roof including finishing with cement plaster 1:4, curing etc. complete	2.00	Each		

Item. #	Description	Quantity	Unit of Measurement	Unit Rate (Pak. Rs.)	Amount (Pak. Rs.)
15	Providing and laying terrazzo floor 1-3/4 inches (44 mm) thick consisting of 3/4 inch (19 mm) thick topping 1:2 (1 grey cement 2 approved marble chips No. 0 to 6) in ground floor over a base of 1:2:4 (one cement, two sand and four screened graded bajri) cement concrete 1 inch (25 mm) thick laid in panels or pattern including form work, curing, cutting, rubbing and polishing etc, complete...	900.00	Sft		
16	Provide and laying 1/2" thick marble patties upto 1-1/2" depth in floor and dado of any description in all floor.	576.00	Rft		
17	Provide, lay, joint, cure, etc. 1" total thick glazed (glossy) ceramic tiles dado using "Master" (Supreme Quality) tiles of approved colour and shade in toilets, including 1/4" thick neat cement buttering on back of tiles, remaining thickness made up with 1:3 cement sand rough base, complete "Size: 1.5 sq.ft to 3 sq.ft	1577.50	Sft		
18	P/F flooring comprising 1 square foot to 2 square foot of "Master" supreme quality non glazed skid free tiles of approved shade set in neat cement paste not exceeding 1/4" thick and filling the joint with neat white cement slurry using matching colouring i/c 3/4" thick base in 1:2 cement sand mortar laid over a bed of 1 1/2" thick P.C.C 1:2:4 i/c cleaning & curing etc, complete.	860.00	Sft		
19	Providing and fixing 1/2 inches dia. (15 mm) CP bib cocks. (Faisal Make)	20.00	Sft		
20	Structural excavation of foundation in any type of soil including gravel upto required depth including back filling trenches and in floors, watering, ramming, compacting and disposal of un-suitable and surplus excavated material within the project limit.	1902.00	Cft		
21	P/mix, lay, compact, level, finish cure etc.lean Concrete 1:4:8 with maximum 1" down coarse aggregate (Ref.Specs. Clause 2.28) including form work where required and its removal, complete in all respect.	38.61	Cft		
22	P/mix,lay,compact level, finish cure etc. cast-in situ structural reinforced concrete of 3750 PSI 28 days minimum cube strength having the nominal mix proportions not leaner than 1: 1 1/2: 3 including form work and its removal, complete in all respects excluding cost of steel reinforcement.				
	1): Walls and parapet.	144.38	Cft		
	2): Suspended slab /Motor Pump room slab.	43.13	Cft		
	3): Floor slab on ground.	96.00	Cft		
23	P/clean cut, bend, place in position, bind etc. steel deformed bars including cost of binding wire, spacer locks, steel chairs and the overlaps not shown in drawing, complete in all respect. Grade: 40,000 P.s.I yield strength.	2500.00	Kg		

Item. #	Description	Quantity	Unit of Measurement	Unit Rate (Pak. Rs.)	Amount (Pak. Rs.)
24	Provide and supply 1/2" thick 1:3 cement sand plaster including curing etc. complete.	236.00	Sft		
25	Provide, lay, level repair, cure.etc. total 7/8" thick terrazzo dado on walls and floor in water tank with 1:2 (one part cement and two part of white Marble chips) over 1/2" thick cement sand (1:3) rough plaster base, including curing etc., complete, terrazzo to be 3/8" thick but without grinding polishing.	236.00	Sft		
26	Providing/applying 2 Renewal coats of top coat on Existing graphic paint (Rockwall) (i/c patch/ repair where required) Top Coat of approved colour/shade and scheme complete at any height and any floor as directed by Engineer/ Incharge.	1500	Sft		
27	Providing and installation of community reverse osmosis filtration plant of AQUA FINE/ CLASSIC or approved manufacturer having capacity of 2400 LPH complete in all respect as per drawing/design. Reverse osmosis System Reverse osmosis (RO) membranes are used to reduce the dissolved solids present in the feed water. The product received from RO is called permeate. The concentrate or reject generated from RO system shall be high in TDS and shall be drained locally. Cleaning in Place (CIP) The RO membranes are periodically cleaned to remove sparingly soluble salts on the surface of membranes using the process called CIP. The skid mounted tank shall be supplied for preparation of chemical solution for cleaning of RO membranes. The piping arrangement shall be made in a way that the raw water pump & cartridge filter at RO inlet shall be used in CIP circuit.	4	Each		
	System Operation The RO system shall be fully automatic with levels of the raw water & product water tanks as well as low- & high-pressure tripping provided across high pressure RO feed pump. Specification and instruction of Engineer incharge, i.c cost of fitting community connections etc, Complete.				
	1) Sand filter SS-20 = 1-Vessal 16" x 65" - Design pressure 100psi (FRP Stainless steel with silica sand 200Kg) 2) Carbon filter (1 No) - 1-Vessal 16" x 65" - - Design pressure 100psi (FRP Stainless steel with silica sand 50Kg) 3)Filter Jumbo Housing 20" (5 Micron) 2 Nos 4) High Pressure RO Feed Pump-01 Capacity 3 Ton. Discharge pressure 6-8 bar, Recovery 60-70 %, Raw Water Temperature 25-35 OC. Permeat TDS 10 p.p.m. 5)Pressure Gauge dial size 2.5", Online Flow meter 02 Nos, Online TDS Monitor 01 No,				

Item. #	Description	Quantity	Unit of Measurement	Unit Rate (Pak. Rs.)	Amount (Pak. Rs.)
	Dozing pump for anti sclant 01No. Storage tank food graded 500 G 2Nos, water pressure of stainless steel with flow rate 20- 25 GPM of paper placed imported cartridge. 6) U.V Lamp dosing pump imported philips (Poland/USA) - Size 2 tubes of 33" length.				

Bill No. 2, Title: Electrical Works

Item. #	Description	Quantity	Unit of Measurement	Unit Rate (Pak. Rs.)	Amount (Pak. Rs.)
	i) All cables must be of M/s Pakistan / Newage / GM / Fast / AGE Cable or as approved by Pak. PWD				
	ii) All switches, sockets, power points, light points etc. must be of PPI-Premier Plastic Industries.				
1	Wiring for light or fan point with (3/.029") PVC insulated wire in 20 mm ² , (3/4") dia uPVC conduit recessed in the wall, column, roof , including 1mm ² single core PVC insulated wire as ECC as required.	4.00	Point		
2	Extension/Additional wiring for light, fan ,call bell or light plug point, controlled with same switch with (3/.029") PVC insulated wire in 20 mm (3/4")dia uPVC conduit fitted on surface including 1 mm ² single core, PVC insulated wire as ECC as required.	4.00	Point		
3	Wiring for sub-main with 2x 3/.029", PVC insulated wire in existing or given all kind of conduit/ cable duct including 1mm ² PVC insulated wire single core wire as ECC as required.	200.00	mtr		
4	Wiring for sub-main with 2x 7/.029", PVC insulated wire in existing or given all kind of conduit/ cable duct including 1.5 mm ² PVC insulated wire single core wire as ECC as required.	300.00	mtr		
5	Supply and drawing of 4 mm ² , single core, PVC insulated wire in all kinds of existing or given conduit / cable duct as required.	100	Rft		
6	Wiring for sub-main with 4x 6mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire including 2.5 mm ² PVC insulated wire single core wire as ECC in all kinds of existing or given conduit/cable duct as required.	100	Rft		
7	Providing & fixing 6 to 32 Amps, DP MCCB fixed on metal board recessed in the wall duly covered with fiber sheet, l/c inter-connection as required.	15	Each		
8	Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, l/c inter-connection as required.	5	Each		

Note for Bidders

- i) Cost estimation of above Bill of Quantities has been done using rates of Scheduled Items derived by Pakistan Public Works Department under its CSR 2022, whereas Non-scheduled Items have been costed based on Market Survey.
- ii) Soft Copy of the Bill of Quantities has been uploaded at the website of the University (www.aiou.edu.pk) which the bidders may download for their ease.