



**NATIONAL TEXTILE UNIVERSITY FAISALABAD**  
**GOVERNMENT OF PAKISTAN**  
**MINISTRY OF TEXTILE INDUSTRY**

**Construction of Faculty Hostel and Research Labs at National  
Textile University Karachi Campus**

**BILL OF QUANTITIES**  
**FACULTY HOSTEL**

**June, 2019**



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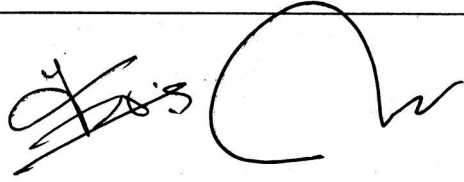

**SUMMARY OF COST**

**CONSTRUCTION OF FACULTY HOSTEL AND  
RESEARCH LABS AT NATIONAL TEXTILE UNIVERSITY,  
KARACHI CAMPUS**

**FACULTY HOSTEL**

**BILL OF QUANTITIES**

S/N	DESCRIPTION	AMOUNT (Rs.)
<b>A</b>	<b>SCHEDULED ITEMS</b>	
1	• CIVIL WORK	
2	• PUBLIC HEALTH WORK	
3	• ELECTRICAL WORK	
	Sub Total (A) :	
<b>B</b>	<b>NON-SCHEDULED ITEMS</b>	
1	• CIVIL WORK	
2	• PUBLIC HEALTH WORK	
3	• ELECTRICAL WORK	
	Sub Total ( B ) :	
	GRAND TOTAL (A+B) :	
	IN MILLION	



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
TEXTILE UNIVERSITY, KARACHI CAMPUS**

**FACULTY HOSTEL  
BILL OF QUANTITIES  
CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
<b>SCHEDULE OF RATES 2012 (GOVERNMENT OF SINDH)</b>							
<b>A-SCHEDULE ITEMS</b>							
<b>Earth Work</b>							
1	CH:1/18(b)	Excavation in foundation of building ,bridges and other structures including dagbelling dressing, refilling around structure with excavated earth watering and ramming lead upto 5 ft. (b) in ordinary soil	1000 Cft	10,320.73	3,176.25		
2	CH:1/21	Filling watering and ramming earth in floors with surplus earth from foundation lead upto one chain and lift upto 5 ft.( Back Filling)	1000 Cft	6,880.49	1,512.50		
3	CH:1/22	Filling watering and ramming earth under floors with new earth (Excavated from outside ) lead upto one chain and lift upto 5 ft. (Under Floor & Plinth)	1000 Cft	2,437.65	3,630.00		
<b>Anti-Termmite</b>							
4	CH:18/92	Providing Anti-termmite treatment by spraying / sprinkling / spreading Neptachlar 0.5% Emulsion as an overall pre-construction teatment in slab type construction under the slab and along attached perches or entrances etc, complete as per directions of Engineer Incharge.	Per/Sft	5,846.64	9.74		
<b>Plain and Reinforement Concrete</b>							
5	CH4/5(i)	Cement concrete plain including placing compacting, finishing and curing, complete (including screeninig and washing at stone aggregate without shuttering. ( 1:4:8)	100 Cft	816.48	11,288.75		
6	CH:4/6	Reinforced cement concrete work including all labour and material except the cost of steet reinforcement and its labour for bending and binding which will be paid separately.this rate also includes all kinds of forms moulds: lifting shuttering curing rendering and finishing the exposed surface ( including screening and washing of shingle.)					
6.1	(a)(i)	(a) R.C Work in roof slab, beams coloumns rafts, lintels and other structural members laid in sity or precast laid in position complete in all respects.					
<b>1-GROUND FLOOR</b>							
		Ratio 1: 1½: 3 (Footing)	Per/ Cft	2,067.89	349.00		
		Ratio 1: 1½: 3 (Column)	Per/ Cft	929.81	349.00		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	427.50	349.00		
		Ratio 1: 2: 4 (Plinth Beam)	Per/ Cft	812.06	337.00		
		Ratio 1:2:4 (Beams)	Per/ Cft	681.33	337.00		
		Ratio 1:2:4 (Slabs)	Per/ Cft	1,240.50	337.00		
		Ratio 1:2:4 (Lintel)	Per/ Cft	90.28	337.00		
		Ratio 1:2:4 (Stair)	Per/ Cft	170.50	337.00		
<b>2-FIRST FLOOR</b>							
		Ratio 1: 1½: 3 (Column)	Per/ Cft	562.78	350.10		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	270.00	350.10		



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**FACULTY HOSTEL  
BILL OF QUANTITIES  
CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
		Ratio 1:2:4 (Beams)	Per/ Cft	608.02	349.10		
		Ratio 1:2:4 (Slabs)	Per/ Cft	1,100.00	349.10		
		Ratio 1:2:4 (Lintel)	Per/ Cft	87.41	349.10		
		Ratio 1:2:4 (Stair)	Per/ Cft	75.00	349.10		
		<b>3-SECOND FLOOR</b>					
		Ratio 1: 1½: 3 (Column)	Per/ Cft	562.78	362.20		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	270.00	362.20		
		Ratio 1:2:4 (Beams)	Per/ Cft	608.02	361.20		
		Ratio 1:2:4 (Slabs)	Per/ Cft	1,100.00	361.20		
		Ratio 1:2:4 (Lintel)	Per/ Cft	77.17	361.20		
		Ratio 1:2:4 (Stair)	Per/ Cft	75.00	361.20		
		<b>4-MUMTY FLOOR</b>					
		Ratio 1: 1½: 3 (Column)	Per/ Cft	28.69	374.30		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	202.50	374.30		
		Ratio 1:2:4 (Beams)	Per/ Cft	74.34	373.30		
		Ratio 1:2:4 (Slabs / Parapit Wall)	Per/ Cft	426.75	373.30		
		Ratio 1:2:4 (Lintel)	Per/ Cft	11.49	373.30		
		<b>Steel Reinforcement</b>					
7	CH:4/8	Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints and fastenings including cost of binding wire ( also includes removal of b) Using Tor Bar.	Per/Cwt	837.70	5,001.70		
		<b>Damp Proof Course</b>					
8	CH:4/28	Damp proof course with (cement sand and shingle concrete 1:2:4 ) including 2 coats of asphaltic micture. ii) 2" thick (50 mm)	100 Sft	450.63	3,912.85		
9	CH:18/70	Vertical Damp proof course .of 3/4" thick cement plaster Ratio (1:2) bitumen at 20 Lbs. per % sft	100 Sft	490.50	2,760.99		
		<b>Block Work</b>					
	CH:4-22	Providing and laying 1:3:6 Cement concrete solid block masonry set in 1:6 cement sand mortar in plinth and foundation including raking out joints & curing etc.	100 Cft	1,192.00	14,268.53		
	CH:4-23	Providing and laying 1:3:6 Cement concrete solid block masonry wall above 6" in thickness set in 1:6 cement sand mortar in Super Structure including raking out joints & curing etc.(8" THICK)					
		Ground Floor	100 Cft	2,198.00	14,621.44		
		First Floor	100 Cft	2,174.84	14,950.41		
		Second Floor	100 Cft	2,203.15	15,381.47		
		Mumty Floor	100 Cft	502.74	15,812.53		

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
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**FACULTY HOSTEL  
BILL OF QUANTITIES  
CIVIL WORKS**

<b>SCH</b>	<b>ITEMS</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate (Rs.)</b>	<b>Rate (Rs.) Quoted by The Contractor</b>	<b>Amount (Rs.)</b>
<b>12</b>	<b>CH:4/-24</b>	Providing and laying 1:3:6 Cement concrete solid block masonry wall 6" and below in thickness set in 1:6 cement sand mortar in Super Structure including raking out joints & curing etc.(6" THICK)					
		Ground Floor	100 Cft	1,192.88	15,771.01		
		First Floor	100 Cft	1,266.53	16,099.98		
		Second Floor	100 Cft	705.78	16,531.04		
		<b>Flooring</b>					
<b>13</b>	<b>CH:5/29</b>	Supplying and filling sand under floor; or plugging in wells	100 Cft	850.49	1,141.25		
<b>14</b>	<b>CH:4/2</b>	Dry rammed brick or stone ballast 1½" to 2" gauge.	100 Cft	1,932.49	3,327.50		
<b>15</b>	<b>CH:4/5(f)</b>	Cement concrete plain including placing compacting, finishing and curing, complete (including screening and washing at stone aggregate without shuttering. (1:2:4) (1½" Thick Under Floor)	100 Cft	725.41	14,429.25		
		<b>Surface Rendering</b>					
<b>16</b>	<b>CH:9/11(a)</b>	Cement plaster 1:4 upto 12' height. 3/8" thick (Ceiling plaster)	100 Sft	6,028.28	2,197.52		
<b>17</b>	<b>CH:9/11(d)</b>	Cement plaster 1:4 upto 12' height. 3/4" thick (Internal plaster)	100 Sft	26,092.00	3,191.76		
<b>18</b>	<b>CH:9/11(d)</b>	Cement plaster 1:4 upto 12' height. 3/4" thick (External plaster)	100 Sft	9,443.88	3,191.76		
<b>19</b>	<b>CH:9/40.a</b>	Preparing surface and painting with plastic emulsion paint of approved make i/c rubbing the surface with sand paper, filling the voids with chalk/plaster of paris and then painting etc complete. Internal, external, ceiling. 3 Coats					
		a) First coat	100 Sft	32,120.28	1,080.80		
		b) Second and each subsequent coat	100 Sft	32,120.28	1,157.20		
<b>20</b>	<b>CH:9/38.a</b>	Preparing the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand paper, filling the voids with chalk / plaster of paris and then painting with weather coat approved make. 3 Coats					
		a) First coat	100 Sft	6,584.00	1,328.25		
		b) Second and each subsequent coat	100 Sft	6,584.00	1,239.70		
		<b>Flooring</b>					
<b>21</b>	<b>CH:8/22</b>	1½"(40 mm) thick mosaic flooring, consisting of ½"(13 mm) mosaic topping of one part of grey cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :-	100 Sft	905.78	9,258.67		
<b>22</b>	<b>CH:8/39</b>	Mosaic dado or skirting with one part of grey cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing: ii) ½"(13 mm) thick	100 Sft	149.50	10,580.93		
		<b>Wood Work</b>					



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Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted By The Contractor	Amount (Rs.)
23	CH:10/7(a)	First class deodar wood wrought joinery in doors and windows, etc, fixed in position, including chowkat, holdfast, hinges, tower bolts, chocks, cleats, handles and chord with hooks, etc. panelled, or panelled or glazed, or fully glazed a) 2" thick (50 mm)	Per/Sft	138.50	1,336.59		
24	CH:10/21	Providing and fixing, approved quality mortice lock complete in all respect	Each	46.00	1,786.13		
25	CH:10-19-A(ii)	Providing and fixing sliding bolt to doors. ii) iron sliding boly 12" long	Each	46.00	222.23		
		<b>Painting and Warnishing</b>					
26	CH:11/7	French polishing new surface	100 Sft	2,278.00	7,746.75		
		<b>Iron Work</b>					
27	CH:17/24	Making & fixing steel grated door with 1/16" thick sheeting including angle iron frame 2"x2"x3/8" and 3/4" squire bars 4" centere to centre with locking arrangement.	Per/Sft	28.00	726.72		
28	CH:17/30	Providing and fixing iron steel grill using solid square bars size 1/2" x 1/2" placed at 4" i/c and frame of flat iron patti of 3/4" x 3/4" i/c circle shape at 1-0 apart equivalent fitted with screwa are pins i/c painting 3 coats with 1st coat red oxide paint etc.	Per/Sft	307.63	194.16		
		<b>ROOF WATER PROFFING</b>					
29	CH:7/5	Single layer of tiles 9" x 1/2" x 2" laid over 4" earth 1" mud plaster without bhoosa grouted with cement sand 1:3 on top of R.C.C slab provide with 34 Lbs, Bitument coating sand blinded.	100Sft	3,776.00	5,310.35		
30	CH:7/18	Khuras on roof (2' x 2' x 6")	Each	8.00	358.68		
31	CH:7/19	Bottom Khuras of brick masonry in cement mortar 1:6 4"x2"x4 1/2" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8	Each	8.00	649.80		
		<b>TOTAL-SCHEDULE ITEMS -A</b>					
		<b>B- NON-SCHEDULE ITEMS</b>					
		<b>Flooring</b>					
32	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x16"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. Granite with dry/wet/venied application,DWV series Polished (Light color)class SB	Per/Sft	4,341.25	216.00		
33	N.S	Providing and laying Glazed Ceramic Tiles size 12"x12"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge.STILE TILES (Shabbir Tiles)	Per/Sft	606.25	158.00		
		<b>Skirting / Dado</b>					



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CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
34	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x4"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. Granite with dry/wet/venied application,DWV series Polished (Light color)class SB Dado/ Skirting	Per/Sft	626.08	229.00		
35	N.S	Providing and laying Glazed Ceramic Tiles size 12"x18"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge. STILE TILES (Shabbir Tiles) Dado/ Skirting	Per/Sft	2,459.57	171.00		
		<b>Face Tiles</b>					
36	N.S	Providing and laying Face Tiles size 12"x18" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge.	Per/Sft	2,859.88	194.00		
		<b>Stair Traed &amp; Riser</b>					
37	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Lasbella uniform texture full width area above 2 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c beveling charges on exposed edges complete in all respect as approved / directed by the Engineer Incharge. (FOR STAIRS STEPS)	Per/Sft	558.50	298.00		
		<b>Kitchen Counter</b>					
38	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Lasbella uniform texture full width area above 4 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c making gola on exposed edges complete in all respect as approved / directed by the Engineer Incharge.	Per/Sft	108.00	381		
39	N.S	Provide and fixing cabinets comprising of 3/4" thick MDF with both sides of approved coloured texture lamination i/c shutter sides top bottom back & shelves i/c best quality hardware deodar wood lipping(1/2"x3/4") and polishing complete in all respects as per sample approved by the Engineer (Floor mounted cabinet shutter only)	Per/Sft	94.50	650		
40	N.S	Provide and fixing cabinets comprising of 3/4" thick MDF with both sides of approved coloured texture lamination i/c shutter sides top bottom back & shelves i/c best quality hardware deodar wood lipping(1/2"x3/4") and polishing complete in all respects as per sample approved by the Engineer (Wall mounted cabinet)	Per/Sft	108.00	700		
		<b>Miscellenious</b>					

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**FACULTY HOSTEL  
BILL OF QUANTITIES  
CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
41	N.S	Providing and fixing all types of glazed aluminium windows of anodized champagne color partly fixed and partly sliding using deluxe section of M.S Al-cop of Pakistan cables having frame size 100mm x 30mm x 2mm using frame at bottom at top and side leaf frame size 60mmx23mmx2mm at top and bottom and size 45mmx25mmx 2mm at centre and size 45mm x 25mm x 2mm at sides jali leaf frame size 43mm x 13mm x 2mm all section of 2mm thick i/c imported fine quality aluminum wire gauze jali 5mm tinted glass with rubber gasket using approved standard latches, wheel stopper, brush channel angle joint and hardware etc as per design and complete in all respect as approved by the Engineer Incharge. (all section 2 mm thick)	Per/Sft	913.50	940.00		
42	N.S	Providing and fixing wooden box type wardrobe 22" (550 mm) deep including ¼" (20 mm) thick boxing and shelves, (25 mm) with hanger rods, hard board back drawers, brass fittings, locking arrangements, handles, internal bolts, shoe rods, etc. including three coats of enamel paint:-Deodar wood boxing, and deodar wood shelves and leaves, etc.	Per/Sft	227.50	1,089.65		
43	N.S	Providing and fixing 1½" (40mm) thick solid flush door shutter (Approved Factory Manufactured) with commercial ply (5 mm thick) on both sides double pressed and deodar wood lipping 1½"x3/8" (40mm x 10mm) around shutter including chromium plated fitting, iron hinges with aluminium kick plate 22 SWG on both sides & finger plate complete in all respect.	Per/Sft	1,000.50	363.10		
44	N.S	Providing and fixing M.S. sheet hollow pressed frame of doors, windows, C. windows, etc. (chowkat only) of 20 SWG welded with M.S. flat 6"x 1¼" x 1/8" (150 mmx30mmx3mm) M.S. holdfast 9"x1"x1/8" (225mmx25mmx3mm) welded/screwed 4" (100 mm) long iron hinges, including filling chowkat with cement sand mortar 1:8 and embedding holdfast in cement concrete 1:2:4, complete in all respects: a) single rebate	Per/Sft	1,000.50	148.10		
45	N.S	Providing/fixing stainless steel non-magnetic railing consisting of main pipe 2" dia 16 SWG imported (China) & 3'-4" height balustrades @ 2' C/C consisting of 1-1/2" - to 2 " wide and 3/16" thick 2-No stainless steel strips with studs i/c 3/4" dia 16 SWG 3-NO stainless steel pipes longitudinally passing in between the strips of balustrades i/c bends, base plate etc with bottom stainless steel "tiki" & cover, fixing with rowal bolt (3" to 2½" long) i/c steel polishing etc complete in all respects as approved by the engineer incharge ( All members will be of non-magnetic)	Rft	63.00	2,096.00		
46	N.S	Providing and fixing M.S Stair Case consisting of 4" dia M.S pipe and M.s steps of 1.5" x 1.5 "x 1/8"angle iron and M.S. chequered plate 1/8" thickness, railing 25mm dia M.S. pipe hand rail and bracing at mid level 25mm dia M.S. pipebalusters 900mm high on each step including all steel members, 2 coats of anti rust red oxide primer with 2-3 min. coats of ICI Enamel paint or approved equal, including welding and connections with concrete/masonry, etc., complete in all respect as per drawings and instruction of the Engineer					



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Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
			Job	2	81,600		
47	N.S	Supply, provide and fix in position uPVC rain water down pipe lines conforming to ISO 3633:1991 and BS 3505 1968 (wall thickness 3.2mm) including proper joints complete in all respects, and system leak-free: 4" dia	Per/Rft	320.00	300.00		
48	N.S	Provide and fix uPVC plain bends with grating (as rain water inlets at roof), water tight connection leak-free: 4" dia	Each	8.00	1,500.00		
49	N.S	Provide and fix uPVC shoe bends (as rain water outlets), water tight connection leak-free: 4" dia	Each	8.00	1,000.00		
		<b>TOTAL NON-SCHEDULE ITEMS-B</b>					
		<b>G.TOTAL (A+B) COST (Rs.)</b>					

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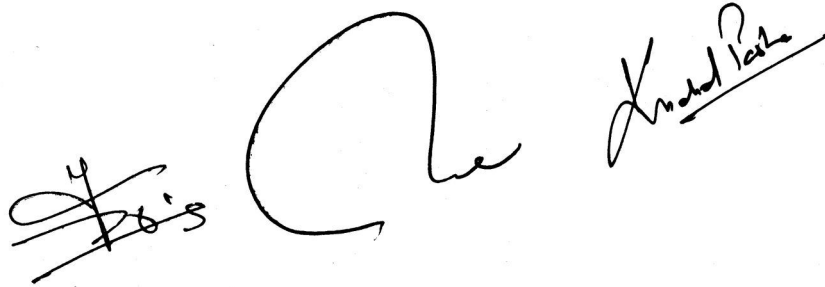
**SUMMARY OF COST**

**CONSTRUCTION OF FACULTY HOSTEL AND  
RESEARCH LABS AT NATIONAL TEXTILE UNIVERSITY,  
KARACHI CAMPUS**

**BILL OF QUANTITIES**

**PUBLIC HEALTH WORKS FACULTY BLOCK**

SR. NO.	DESCRIPTION	AMOUNT (Rs)
1	Schedule	
2	Non Schedule	
	Total	





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AT NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**BILL OF QUANTITIES**

**PUBLIC HEALTH WORKS FACULTY BLOCK**

Sr #	SCH ITEMS	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
	<b>Schedule Items (A)</b>						
1	Volumn III, PART-V-B, 5	<b>Part-1:PLUMBING FIXTURES</b> Providing and fixing European type white glazed earthen ware wash down wc pan with including with white/black plastic seat (best quality )and lid with cp brass hinges & buffers, white glazed earthen ware low level flushing cistern with siphon fitting 1½" dia white porcelain enamelled flush bend ¾" dia and making requisite number of holes in walls,plinth and floor for pipe connection & making good in cement concrete 1:2:4 (Foreign Quality )	Each	16	11,477.40		
2	Volumn III, PART-V-B, 10	Providing and fixing 24"x18" Lavatory basin in hite glazed earthen ware complete with & i/c the cost of W.I or C.I cantilever brackets 6' Built into Walls,painted white in two coats after a primary coat of red lead paint a pair of ½" dia rubber plug & Charome plated brass chain 1-1/4",Malloable irons or brass unions and making requisite number of holes in walls,plinth & floor for pipe connections and making good in cement concrete 1:2:4 (Foreign Equivalant)	Each	16	4,928.00		
3	Volumn III, PART-V-B, 11	Add Extra for labour for providing & fixing of earthen ware pedestal white or colour glazed( Foreign or equivalent)	Each	16	2,533.27		
4	Volumn III, PART-V-B, 19-c	Providing and fixing steel sinks stainless local make complete with cast iron or wrought iron brackets 6inches built in walls ,1½ c.p bubber plug chrome plated brass chain,1½" c.p brass waste , with 1½" P.V.C waste pipe & making requisite number of holes in wall & plinth & floor for pipe connection & making good in cement concrete 1:2:4 C) Steel Sink Stainless sized 33"x18" Local make Standard	Each	5	5,712.30		
5	Volumn III, Part-V-B, Chap 2/2/b	Providing and fixing, c.p brass toilet paper holder of standard size with chrome plated brass brackets complete b) Superior Quality	Each	16	1,071.40		
6	Volumn III, Part-V-B, Chap 2/5	Supplying & fixing soap tray earthen ware with c.p Screws etc.complete	Each	16	497.20		
7	Volumn III, Part-V-B, Chap 2/1/III	Towel rail 24" long , ¾" dia round or square (Superior Quality)	Each	16	1,082.95		
8	Volumn III, Part-V-B, Chap 2/3/b	Providing and fixing 24"x18" Bavelled edge mirror of belgium glass complete with 1/8" thick hard board and c.p screws fixed to wooden pleat b) Superior Quality	Each	16	2,376.00		
9	Volumn III, Part-V-B, Chap 6/14/a	Supply & fixing wash basin mixture of superior Quality with cp head ½" dia	Each	16	2,882.00		
10	Volumn III, Part-V-B, Chap 6/17	Supply & fixing sink mixture Cock of superior Quality with cp head ½" dia with cp head etc complete	Each	5	2,745.60		



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS  
AT NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**BILL OF QUANTITIES**

**PUBLIC HEALTH WORKS FACULTY BLOCK**

Sr #	SCH ITEMS	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
11	Volumn III, Part-V-B, Chap 6/18	Supply & fixing C.P muslim shower with double bibcock & ring pipe etc complete	Each	16	3,432.00		
12	Volumn III, Part-V-B, Chap 6/18	Providing & fixing 6"x4" CC Gully trap with 4" outlet complete with 4" thick 1:2:4 C.C for bed & ½ " thick cement plaster (1:3) to the karb , C.I grating 6"x6" & C.I cover & frame 12"X12" (Inside) etc Complete	Each	4	3,432.00		
13	Volumn IV, Part-VI-, Chap II/P	Constructing manhole or inspection chamber for the required diameter of circular sewer and 3'-6" depth with walls of B.B in cement sand mortar 1:3, Cement plastered 1:3, ½" thick inside of walls and 1' thick over benching and channel fixing cast iron manhole cover with frame of clear opening 1-½'x1-½' of 1.75 cwt.(88.9 kg) embaded in plain C.C 1:2:4 & fixing 1" dia MS Steps 6" wide projecting 4"(102mm) from the face of walls at 12"(305mm) C/C duly painted etc Complete as per standard specification & drawing	Each	4	14,748.00		
14	Volumn III, Part-V-B-, Chap 4/1	a) 4" to 12" dia 2'x2'x3'-6" <b>G.I Piping</b> Providing G.I Pipes , Special and clamps etc, including fixing cutting & fitting complete with i/c the cost of breaking through walls and roof ,Making good etc,painted two coats after cleaning the pipe etc ,with zink paint with pigment to match the colour of the building and testing with water to a pressure head of 200 feet and handling -	Rft	440	95.79		
		b) 1" i/d dia G.I Pipe	Rft	0	128.55		
		c) 1½" i/d dia G.I Pipe	Rft	0	188.97		
15	Volumn III, Part-V-B-, Chap 10/II	<b>SEWERAGE</b> Providing R.C.C Pipe with collars class "B" and Digging the trenches to require depth & fixing in position including cutting,fitting & jointing with maxphalt composition & cement mortar 1:1 and testing with water pressure to a head of 4 feet above the top of the highest pipe & refilling the excavated staff	Rft	170	199.25		
		6" dia R.C.C Pipe Class "B"	Rft	20	250.60		
16	Volumn (iv) Part (vi) i/I	Providind CI Manhole Cover & Frame i/c Cost of Material etc	Cwt	4	6,985.00		
<b>TOTAL-SCHEDULE ITEMS -A</b>							
1	NS	<b>Non Schedule Items</b> <b>Part-1: WATER SUPPLY</b> Providing, fixing, jointing and testing Polypropylene Random (PPR) pipes, DADEX or approved equivalent, pressure pipe for cold/hot water as per DIN 8077-8078, PN-20 for pipes and DIN 16962, PN-25 for fittings (polyfusion welded joints) inside building including fittings and specials (sockets, tees, elbows, bends, crosses, reducers, adaptor, plugs and union etc.) supported on walls or suspended from roof slab or run in chases including pipe hangers, supports, cutting and making good the chases and holes, complete in all respects.					
		25mm dia	Rft	355	137		
		32mm dia	Rft	250	223		





**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS  
AT NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**BILL OF QUANTITIES**

**PUBLIC HEALTH WORKS FACULTY BLOCK**

Sr #	SCH ITEMS	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
2	NS	40mm dia	Rft	150	341		
		50mm dia	Rft	236	539		
2	NS	63mm dia	Rft	260	848		
		Providing and installing ball valves of following nominal dia, Kitz make or approved Equivalent, including jointing, fitting, painting, testing complete in all respects to match with PPR and PE pipes of following diameters.					
3	NS	25 mm	Nos.	0	4,622		
		32 mm	Nos.	7	5,106		
3	NS	40 mm	Nos.	15	6,970		
		50 mm	Nos.	2	8,500		
3	NS	63 mm	Nos.	1	22,000		
		Providing and installing Gas Geyser including All types of Valves & fitting accessories, complete in all respect as per specifications and drawings.					
4	NS	55 Gallon Geyser	Nos.	2	45,000		
		Making main sewer connection to the main WASA sewerage complete in all respect as per specifications and drawings.	Job	1	10,000		
5	NS	<b>Part-3: SEWERAGE &amp; DRAINAGE</b> Providing, laying, fixing and testing uPVC soil, waste, vent and rain water as per ISO 3633:1991 or equivalent BS specifications including uPVC fittings with solvent cement jointing or rubber ring joints, DADEX Or Approved Equivalent make as approved by the Engineer complete in all respects, including clamps, bends, tees, Y-tees, cowls, reducers, sleeves, clean out, waterproof sleeves, roof drain, etc., embedded in floors and walls, clamped to walls, suspended from slab (common hanger shall be used for pipe hanging and fiber glass tray under pipes), painted MS horizontal and vertical pipe hangers of approved design making requisite no. of holes and making good the same complete in all respect as per specifications and drawings.					
6	NS	2" i.d	Rft	205	227		
		3" i.d	Rft	670	347		
6	NS	4" i.d	Rft	266	549		
		Providing, fixing, cutting, jointing and testing uPVC Vent Cowl on Vent Pipes with solvent cement jointing, DADEX or approved equivalent, rates include cost of cutting & pipe fittings of the following diameter:					
7	NS	2" i.d	Nos	12	100		
		3" i.d	Nos	0	120		
7	NS	Providing, laying, fixing and testing floor drain (multifloor trap) uPVC including extension grating and stainless steel cover grating best quality local make Porta or Approved Equivalent as approved Engineer, complete in all respect as per specifications and drawings.					
			Nos.	57	4,500		

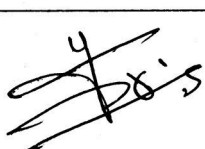
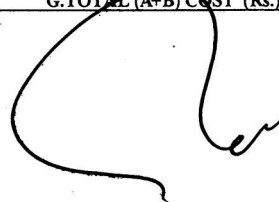
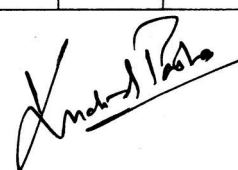


**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS  
AT NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**BILL OF QUANTITIES**

**PUBLIC HEALTH WORKS FACULTY BLOCK**

Sr #	SCH ITEMS	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
8	NS	Providing and fixing clean out with threads ferule fixed in pipe with the help of solvent, as shown on drawing, complete in all respects as per specifications and drawings.					
		3" i.d	Nos.	17	4,450		
9	NS	Providing, installing, fixing, testing and Commissioning of shower mixer with shower head and interconnecting pipe. All accessories/consumables to be provided by contractor.	Nos.	3	5,450		
10	NS	Providing and making top khurra/R.W.C.B using 3" thick plain cement concrete 1:2:4 matching with roof tiles with steel trowel finishing at desired level including curing, finishing, complete in all respect as per specifications and drawings.	Nos.	15	15,000		
		i) 2'x2'	Nos.	2	1,500		
11	NS	<b>Part-5 TANKS</b> Providing and constructing of Reinforced cement concrete with minimum cube strength of 3750 psi at 28 days using 3/4" maximum nominal size graded margalla crushed stone aggregate and Lawrence pur sand, including the cost of reinforcing steel, water stop, under ground water tanks of following capacities with manhole covers, cowed vent, inlet and outlet pipework. Water tank shall be provided with terrazzo finish from inside on walls and base slab. Location and size of Tanks shown on drawings, complete in all respect.					
		a) O.H.W.T	P/gal	4900	140		
		a) SEPTIC TANK	P/gal	1061	140		
<b>TOTAL NON-SCHEDULE ITEMS-B</b>							
<b>G.TOTAL (A+B) COST (Rs.)</b>							



CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS.

ELECTRICAL WORKS FOR FACULTY HOSTEL

BILL OF QUANTITIES

Sr. No.	Description	Amount (Rs.)
1	Schedule Items	
2	Non-Schedule Items	
	TOTAL (Rs.) =	

*[Handwritten signatures and initials]*



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS.**

**BILL OF QUANTITIES**

**ELECTRICAL WORKS FOR FACULTY HOSTEL**

Sr No.	Item. No.	Description	REF. Nos CH/ITEM	Unit	QTY	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
<b>A:- Schedule Items</b>								
1	1.1	<b>Light Circuits.</b>						
		Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.029 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	440	294.00		
	1.2	<b>1-Light Point Controlled By One Switch</b>						
	a)	Wiring for light or fan point with 3/029 PVC insulated wire in 20 mm(3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	91	1130.00		
	b)	Providing and fixing one way S.P 5 amps switch flush type	[Ref: Item A-219/ page # 33]	Per No.	133	54.00		
	c)	Providing and fixing two pin 5amp plug & socket	[Ref: Item A-222/ page # 33]	Per No.	25	80.00		
	d)	Providing and fixing two way S.P 5 amps switch flush type	[Ref: Item A-219/ page # 33]	Per No.	4	55.00		
	1.3	<b>Point to Points Wiring</b>						
	a)	Wiring for light or fan point with 3/029 PVC insulated wire in 20 mm(3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	108	1130.00		
	1.5	<b>Wiring of 1-3 Pin 5 Amps Switch Socket</b>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	400	338.00		
	c)	Providing and fixing three pin 5amp plug & socket	[Ref: Item A-223/ page # 33]	Per No.	20	91.00		
	1.5	<b>Point to Point 1-3 Pin 5 Amps Switch Socket</b>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	532	338.00		
	c)	Providing and fixing three pin 5amp plug & socket	[Ref: Item A-223/ page # 33]	Per No.	72	91.00		
	1.6	<b>1 x 3 Pin 15 Amps Switch Socket</b>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	68	338.00		
	b)	Providing and fixing three pin 10/15 amp plug and socket flush type.	[Ref: Item A-227/ page # 33]	Each	4	162.00		
	1.7	<b>1 x 3 Pin 15 Amps Switch Socket For AC</b>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	440	338.00		
	b)	Providing and fixing three pin 10/15 amp plug and socket flush type.	[Ref: Item A-227/ page # 33]	Each	22	162.00		
	1.7	<b>Fan Points</b> Wiring for light or fan point with 3/029 PVC insulated wire in 20 mm(3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	26	1130.00		



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS.**

**BILL OF QUANTITIES**

**ELECTRICAL WORKS FOR FACULTY HOSTEL**

Sr No.	Item No.	Description	REF. Nos CH/ITEM	Unit	QTY	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
	1.9	<u>Exhaust Fans Points</u> Wiring for light or fan point with 3/029 PVC insulated wire in 20 mm (3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	16	1130.00		
3		<u>Light Fittings And Fixtures</u>						
	3.1	<u>Fluorescent Fittings/ Metal Halide</u>						
	i	Providing and fixing of Bakelite ceiling rose with two terminals.	[Ref: Item B-228/ page # 33]	Each	184	72		
	ii	Providing and fixing of Brass bracket lamp holder suitable for 12mm (1/2") dia bracket ceiling rose with two terminals.	[Ref: Item B-230/ page # 33]	Each	15	72		
	iii	Providing and fixing Brass Batten holder.	[Ref: Item B-232/ page # 33]	Each	199	70		
	3.3	<u>Ceiling Fans</u>						
		Providing and fixing of Brass ceiling fan 56" (good quality)	[Ref: Item C-235/ page # 34]	Each	26	3185		
4		<u>Power, Wiring Cables, Conduit And Trunking</u>						
	4.1	<u>4 Core Cable PVC/PVC</u>						
	a)	Providing and laying (Main or Sub main) PVC insulated & PVC sheathed with 4 core copper conductor 600/1000 volts size 35mm <sup>2</sup> .	[Ref: Item O-104/ page # 12]	Mtr	40	2529.00		
	b)	Providing and laying (Main or Sub main) PVC insulated & PVC sheathed with 4 core copper conductor 600/1000 volts size 120mm <sup>2</sup> .	[Ref: Item O-108/ page # 13]	Mtr	50	8175.00		
<b>TOTAL Schedule Items=</b>								
<b>B:- Non-Schedule Items</b>								
1		<u>L.T. Switchgear</u>						
		<u>Distribution Board Concealed</u>						
		Supply, installation, connection of wires cables, and commissioning of distribution boards concealed type or to be installed on wall, made of 16 SWG M.S. sheet with hinged door, handle, catcher, earthing bar and neutral link with necessary holes, nuts, bolts, washers, earthing of DB door with braided copper internal wiring, PVC cable glands for incoming and out going wires/cables, 2 earthing terminals designation label engraved on plastic sheet of appropriate size to be pasted on the front side of DB, 3						
	1.1	<u>DBLP-1G,DBLP-1F,DBLP-1S,DBLP-1T</u> 01 No. Incoming 100 Amp MCCB TP, RC=16 kA 24 No. Outgoing 10/15/20 Amp MCB SP, RC=6 kA a) 3 No Digital ammeter b) 3 No Digital voltmeter c) 3 No indication lights 220 Volt d) Current Transformer e) Internal wiring & Line - up terminal etc f) Panel steel grid painted along with locking arrangement	Appendix 'c' Page No-1	Each	3	53877		
	1.2	<u>MPB</u> 02 No. Incoming 300 Amp MCCB TP, RC=16 kA having Elect. & Mech. interlocking System. 06 No. Outgoing 75/100 Amp MCCB TP, RC=16 kA a) 3 No Digital ammeter b) 3 No Digital voltmeter c) 3 No indication lights 220 Volt d) Current Transformer e) Power Cabling f) Panel steel grid painted along with locking arrangement	Appendix 'c' Page No-2	Each	1	144504		

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS.**

**BILL OF QUANTITIES**

**ELECTRICAL WORKS FOR FACULTY HOSTEL**

Sr No.	Item No.	Description	REF. Nos CH/ITEM	Unit	QTY	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
2		<b>Light Fittings And Fixtures</b>						
	i	Providing and fixing of 24 Watt Energy saver philips make, complete in all respect as approved by the engineer incharge.	Appendix 'c' Page No-3	Each	199	354		
3		<b>Ceiling Fan Regulator</b> Providing and fixing of ceiling fan regulator as approved by the engineer incharge.	Appendix 'c' Page No-4	Each	26	413.57		
4		<b>Fan hook:</b> Providing and fixing mild steel bar fan hook suitable for R.C.C roof.	Appendix 'c' Page No-5	Each	26	413.57		
5		<b>Exhaust Fans</b>						
		Supply, installation and commissioning of Exhaust Fans of following sizes plastic body, louvers, all necessary fixing accessories, make Asia, Climax, PAK National complete in all respects.						
		i) 12" dia (Plastic Body).	Appendix 'c' Page No-6	Each	16	3319		
6		<b>Power, Wiring Cables, Conduit And Trunking</b>						
	6.1	<b>Circuit Protective Conductor (CPC)</b>						
	a)	1 core 16mm sq.	Appendix 'c' Page No-7	Mtr	40	316.21		
	b)	1 core 50mm sq.	Appendix 'c' Page No-8	Mtr	50	877.92		
7		<b>Earthing System</b>						
		Supply, installation, commissioning and testing of the earthing system including cost of the following 3/4" 3 meter long copper rod as earth electrode up-to water level including cost of boring and lowering complete with clamp and 2 X 50mm <sup>2</sup> stranded copper conductor from copper rod to ground surface in 1-1/2" uPVC Pipe class D with watering cap manhole with cover as per detail	Appendix 'c' Page No-9	Job	2	65264		
9		<b>Telephone System</b>						
	9.1	Supply and install recessed type telephone distribution box suitable for 30 pair including appropriate size 16 SWG sheet steel box with hinged, latched and lockable cover.	Appendix 'c' Page No-10	Job	1	9,278.40		
	9.2	<b>Telephone Outlet</b>						
		Supply / Erection of Bush made data single socket (RJ-45) including 16 SWG back box of 3"x3" size complete in all respect.	Appendix 'c' Page No-11	Each	22	1320		
	9.3	<b>Telephone Cables</b>						
	a	Providing & laying multi pairs (Twisted) PVC insulated / underground cable of best quality (siemens, Germany, or Best imported as per approved sample) in pre-laid PVC recessed conduit or fixed cable duct/ Tray including cost of 1" dia PVC Pipe as per satisfaction of the Electrical <b>4-5 Pair Cable CAT-6/UG/PVC (0.6 mm sq) in 1" Dia PVC Pipe, (From DP to each Room)</b>	Appendix 'c' Page No-12	Rft	1980	57		
10		<b>TV System</b>						
	10.1	<b>TV Outlet</b>						
		Supply / Erection of Bush made TV Outlet including 16 SWG back box of 3"x3" size complete in all respect.	Appendix 'c' Page No-11	Each	22	780		
	10.2	<b>Coxial Cables</b>						
		Wiring for each TV point included cost of 1 no. RJ-7 Coxial Cable tinned copper conductor PVC insulated PVC sheathed manufactured by Pakistan Cables, Newage Cables, 3M, Clipsal with connections at both ends, designation labels, including cost of 1" dia PVC Pipe, as approved by Engineer Incharge.						


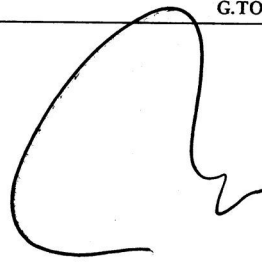



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS.**

**BILL OF QUANTITIES**

**ELECTRICAL WORKS FOR FACULTY HOSTEL**

Sr No.	Item. No.	Description	REF. Nos CH/ITEM	Unit	QTY	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
	a	1 no. RJ-7 Coaxial Cable in 1" Dia PVC Pipe	Appendix 'c' Page No-12	Rft	1980	51		
5		<u>Drain &amp; Copper Pipe for HVAC System</u>						
		Supply, installation, of 2 Nos. copper pipe of appropriate size covered with plastic tape and proper rubber insulation 3" dia pvc conduit heavy duty controlled wire from condenser to indoor unit. G.I pipe 3/4" dia for condensation drain from fan coil unit to nearest toilet or anyother proper place as per the direction of Architect/Site Engineer and all necessary accessories meterial whether mentioned in this item or not but are necessary for completion of job shall be deemed to be included in the cost of above said item, complete in all respect without any other extra claim (Electrical wiring from DB to fan coil/ condenser unit is excluded from this item)	Appendix 'c' Page No-5	Each	22	3739		
		<b>TOTAL Non-Schedule Items=</b>						
		<b>G.TOTAL (A+B) COST (Rs.)</b>						

*Handwritten signatures and initials:*  
  
  






**NATIONAL TEXTILE UNIVERSITY FAISALABAD**  
**GOVERNMENT OF PAKISTAN**  
**MINISTRY OF TEXTILE INDUSTRY**

**Construction of Faculty Hostel and Research Labs at National  
Textile University Karachi Campus**

**BILL OF QUANTITIES**  
**RESEARCH LABS**

**June, 2019**



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**SUMMARY OF COST**

**CONSTRUCTION OF FACULTY HOSTEL AND  
RESEARCH LABS AT NATIONAL TEXTILE UNIVERSITY,  
KARACHI CAMPUS**

**RESEARCH LABS**

**BILL OF QUANTITIES**

S/N	DESCRIPTION	AMOUNT (Rs.)
<b>A</b>	<b>SCHEDULED ITEMS</b>	
1	• CIVIL WORK	
2	• PUBLIC HEALTH WORK	
3	• ELECTRICAL WORK	
	Sub Total (A) :	
<b>B</b>	<b>NON-SCHEDULED ITEMS</b>	
1	• CIVIL WORK	
2	• PUBLIC HEALTH WORK	
3	• ELECTRICAL WORK	
	Sub Total ( B ) :	
	GRAND TOTAL (A+B):	
	IN MILLION	



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
TEXTILE UNIVERSITY, KARACHI CAMPUS**

**RESEARCH LABS  
BILL OF QUANTITIES  
CIVIL WORKS**


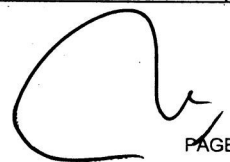

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
<b>SCHEDULE OF RATES 2012 (GOVERNMENT OF SINDH)</b>							
<b>A-SCHEDULE ITEMS</b>							
<b>Earth Work</b>							
1	CH:1/18(b)	Excavation in foundation of building ,bridges and other structures including dagbelling dressing, refilling around structure with excavated earth watering and ramming lead upto 5 ft. (b) in ordinary soil	1000 Cft	26,970.27	3,176.25		
2	CH:1/21	Filling watering and ramming earth in floors with surplus earth from foundation lead upto one chain and lift upto 5 ft.( Back Filling)	1000 Cft	17,980.18	1,512.50		
3	CH:1/22	Filling watering and ramming earth under floors with new earth (Excavated from outside ) lead upto one chain and lift upto 5 ft. (Under Floor & Plinth)	1000 Cft	1,276.57	3,630.00		
<b>Anti-Termmite</b>							
4	CH:18/92	Providing Anti-termite treatment by spraying / sprinkling / spreading Neptachlar 0.5% Emulsion as an overall pre-construction teatment in slab type construction under the slab and along attached perches or entrances etc, complete as per directions of Engineer Incharge.	Per/Sft	7,215.07	9.74		
<b>Plain and Reinforement Concrete</b>							
5	CH4/5(i)	Cement concrete plain including placing compacting, finishing and curing, complete (including screeninig and washing at stone aggregate without shuttering. ( 1:4:8)	100 Cft	1,615.35	11,288.75		
6	CH:4/6	Reinforced cement concrete work including all labour and material except the cost of steet reinforcement and its labour for bending and binding which will be paid separately.this rate also includes all kinds of forms moulds: lifting shuttering curing rendering and finishing the exposed surface ( including screening and washing of shingle.)					
6.1	(a)(i)	(a) R.C Work in roof slab, beams coloumnns rafts, lintels and other structural members laid in sity or precast laid in position complete in all respects.					
<b>1-GROUND FLOOR</b>							
		Ratio 1: 1½: 3 (Footing)	Per/ Cft	6,642.06	349.00		
		Ratio 1: 1½: 3 (Column)	Per/ Cft	1,046.25	349.00		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	784.69	349.00		
		Ratio 1: 2: 4 (Plinth Beam)	Per/ Cft	623.25	337.00		
		Ratio 1:2:4 (Beams)	Per/ Cft	1,338.23	337.00		



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
TEXTILE UNIVERSITY, KARACHI CAMPUS**

**RESEARCH LABS  
BILL OF QUANTITIES  
CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
		Ratio 1:2:4 (Slabs)	Per/ Cft	2,176.67	337.00		
		Ratio 1:2:4 (Lintel)	Per/ Cft	107.43	337.00		
		Ratio 1:2:4 (Stair)	Per/ Cft	306.00	337.00		
		<b>2-FIRST FLOOR</b>					
		Ratio 1: 1½: 3 (Column)	Per/ Cft	697.50	350.10		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	360.00	350.10		
		Ratio 1:2:4 (Beams)	Per/ Cft	1,292.48	349.10		
		Ratio 1:2:4 (Slabs)	Per/ Cft	2,120.42	349.10		
		Ratio 1:2:4 (Lintel)	Per/ Cft	101.30	349.10		
		Ratio 1:2:4 (Stair)	Per/ Cft	105.75	349.10		
		<b>3-SECOND FLOOR</b>					
		Ratio 1: 1½: 3 (Column)	Per/ Cft	697.50	362.20		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	360.00	362.20		
		Ratio 1:2:4 (Beams)	Per/ Cft	1,292.48	361.20		
		Ratio 1:2:4 (Slabs)	Per/ Cft	1,906.25	361.20		
		Ratio 1:2:4 (Lintel)	Per/ Cft	101.80	361.20		
		Ratio 1:2:4 (Stair)	Per/ Cft	105.75	361.20		
		<b>4-THIRD FLOOR</b>					
		Ratio 1: 1½: 3 (Column)	Per/ Cft	697.50	374.30		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	360.00	374.30		
		Ratio 1:2:4 (Beams)	Per/ Cft	1,292.48	373.30		
		Ratio 1:2:4 (Slabs)	Per/ Cft	1,906.25	373.30		
		Ratio 1:2:4 (Lintel)	Per/ Cft	100.55	373.30		
		Ratio 1:2:4 (Stair)	Per/ Cft	105.75	373.30		
		<b>5-MUMTY FLOOR</b>					
		Ratio 1: 1½: 3 (Column)	Per/ Cft	35.63	386.40		
		Ratio 1: 1½: 3 (Lift Walls)	Per/ Cft	225.00	386.40		
		Ratio 1:2:4 (Beams)	Per/ Cft	80.38	385.40		
		Ratio 1:2:4 (Slabs / Parapit Wall)	Per/ Cft	554.25	385.40		
		Ratio 1:2:4 (Lintel)	Per/ Cft	10.76	385.40		
		<b>Steel Reinforcement</b>					



**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
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**RESEARCH LABS  
BILL OF QUANTITIES  
CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
7	CH:4/8	Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints and fastenings including cost of binding wire ( also includes removal of b) Using Tor Bar.	Per/Cwt	1,836.45	5,001.70		
		<b>Damp Proof Course</b>					
8	CH:4/28	Damp proof course with (cement sand and shingle concrete 1:2:4 ) including 2 coats of asphaltic micture. ii) 2" thick (50 mm)	100 Sft	425.04	3,912.85		
9	CH:18/70	Vertical Damp proof course of 3/4" thick cement plaster Ratio (1:2) bitumen at 20 Lbs. per % sft	100 Sft	531.00	2,760.99		
		<b>Block Work</b>					
10	CH:4/-22	Providing and laying 1:3:6 Cement concrete solid block masonry set in 1:6 cement sand mortar in plinth and foundation including raking out joints & curing etc.	100 Cft	992.17	14,268.53		
11	CH:4/-23	Providing and laying 1:3:6 Cement concrete solid block masonry wall above 6" in thickness set in 1:6 cement sand mortar in Super Structure including raking out joints & curing etc.(8" THICK)					
		Ground Floor	100 Cft	2,083.24	14,621.44		
		First Floor	100 Cft	2,124.79	14,950.41		
		Second Floor	100 Cft	2,124.79	15,381.47		
		Third Floor	100 Cft	2,110.47	15,812.53		
		Mumty Floor	100 Cft	557.89	16,561.22		
12	CH:4/-24	Providing and laying 1:3:6 Cement concrete solid block masonry wall 6" and below in thickness set in 1:6 cement sand mortar in Super Structure including raking out joints & curing etc.(6" THICK)					
		Ground Floor	100 Cft	985.12	15,771.01		
		First Floor	100 Cft	1,070.89	16,099.98		
		Second Floor	100 Cft	1,070.89	16,531.04		
		Third Floor	100 Cft	938.14	16,962.10		
		<b>Flooring</b>					
13	CH:5/29	Supplying and filling sand under floor; or plugging in wells	100 Cft	1,189.81	1,141.25		
14	CH:4/2	Dry rammed brick or stone ballast 1 1/2" to 2" gauge.	100 Cft	4,615.46	3,327.50		



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**RESEARCH LABS  
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Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
15	CH:4/5(f)	Cement concrete plain including placing compacting, finishing and curing, complete (including screening and washing at stone aggregate without shuttering. (1:2:4) (1½" Thick Under Floor)	100 Cft	1,774.34	14,429.25		
		<b>Surface Rendering</b>					
16	CH:9/11(a)	Cement plaster 1:4 upto 12' height. 3/8" thick (Ceiling plaster )	100 Sft	14,017.00	2,197.52		
17	CH:9/11(d)	Cement plaster 1:4 upto 12' height. 3/4" thick ( Internal plaster )	100 Sft	24,755.50	3,191.76		
18	CH:9/11(d)	Cement plaster 1:4 upto 12' height. 3/4" thick (External plaster )	100 Sft	12,839.50	3,191.76		
19	CH:9/40.a	Preparing surface and painting with plastic emulsion paint of approved make i/c rubbing the surface with sand paper, filling the voids with chalk/plaster of paris and then painting etc complete. Internal, external, ceiling. 3 Coats					
		a) First coat	100 Sft	38,772.50	1,080.80		
		b) Second and each subsequent coat	100 Sft	38,772.50	1,157.20		
20	CH:9/38.a	Preparing the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand paper, filling the voids with chalk / plaster of paris and then painting with weather coat approved make. 3 Coats					
		a) First coat	100 Sft	10,290.00	1,328.25		
		b) Second and each subsequent coat	100 Sft	10,290.00	1,239.70		
		<b>Flooring</b>					
21	CH:8/22	1½"(40 mm) thick mosaic flooring, consisting of ½ "(13 mm) mosaic topping of one part of grey cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :-	100 Sft	1,559.50	9,258.67		
22	CH:8/39	Mosaic dado or skirting with one part of grey cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing: ii) ½"(13 mm) thick	101 Sft	231.13	10,580.93		
		<b>Wood Work</b>					

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
TEXTILE UNIVERSITY, KARACHI CAMPUS**

**RESEARCH LABS  
BILL OF QUANTITIES  
CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
23	CH:10/7(a)	First class deodar wood wrought joinery in doors and windows, etc, fixed in position, including chowkat, holdfast, hinges, tower bolts, chocks, cleats, handles and chord with hooks, etc. panelled, or panelled or glazed, or fully glazed a) 2" thick (50 mm)	Per/Sft	448.00	1,336.59		
24	CH:10/21	Providing and fixing, approved quality mortice lock complete in all respect	Each	24.00	1,786.13		
25	CH:10-19-A(ii)	Providing and fixing sliding bolt to doors. li) iron sliding boly 12" long	Each	24.00	222.23		
		<b>Painting and Warnishing</b>					
26	CH:11/7	French polishing new surface	100 Sft	1,814.00	7,746.75		
		<b>Iron Work</b>					
27	CH:17/24	Making & fixing steel grated door with 1/16" thick sheeting including angle iron frame 2"x2"x3/8" and 3/4" squre bars 4" centere to centre with locking arrangement.	Per/Sft	56.00	726.72		
28	CH:17/30	Providing and fixing iron steel grill using solid square bars size 1/2" x 1/2" placed at 4" I/c and frame of flat iron patti of 3/4" x 3/4" I/c circle shape at 1-0 apart equivalent fitted with screwa are pins I/c painting 3 coats with 1st coat red oxide paint etc.	Per/Sft	674.50	194.16		
29	CH:18/84(b)	Supplying & fixing inposition Aluminium channels framing for hinged doors or Alcop made with 5 mm thick tinted glass glazing (Belgium) and Alpha (Japan) locks I/c handles stoppers etc. (b) Deluxe model (Bronze)	Per/Sft	84.00	1,507.66		
		<b>ROOF WATER PROFFING</b>					
30	CH:7/5	Single layer of tiles 9" x 1/2" x 2" laid over 4" earth 1" mud plaster without bhoosa grouted with cement sand 1:3 on top of R.C.C slab provide with 34 Lbs, Bitument coating sand blinded.	100Sft	4,105.00	5,310.35		
31	CH:7/18	Khuras on roof (2' x 2' x 6" )	Each	8.00	358.68		
32	CH:7/19	Bottom Khuras of brick masonry in cement mortar 1:6 4"x2"x4 1/2" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8	Each	8.00	649.80		
33	CH:7/43	Providing and fixing False Ceiling of thermopile in panels of required design and size including frame work of Aluminum T-section hanged with nail wire to ceiling etc. completed	P.Sft	2,362.50	91.50		



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**RESEARCH LABS  
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CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
		<b>TOTAL-SCHEDULE ITEMS -A</b>					
		<b>B- NON-SCHEDULE ITEMS</b>					
		<b>Flooring</b>					
33	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x16"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. Granite with dry/wet/venied application,DWV series Polished (Light color)class SB	Per/Sft	9,964.25	216.00		
34	N.S	Providing and laying Glazed Ceramic Tiles size 12"x12"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge.STILE TILES (Shabbir Tiles)	Per/Sft	201.00	158.00		
		<b>Skirting / Dado</b>					
35	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x4"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. Granite with dry/wet/venied application,DWV series Polished (Light color)class SB Dado/ Skirting	Per/Sft	1,279.68	229.00		
36	N.S	Providing and laying Glazed Ceramic Tiles size 12"x18"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge. STILE TILES (Shabbir Tiles) Dado/ Skirting	Per/Sft	1,046.50	171.00		
		<b>Face Tiles</b>					
37	N.S	Providing and laying Face Tiles size 12"x18" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge.	Per/Sft	2,549.50	194.00		
		<b>Stair Traed &amp; Riser</b>					
38	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Lasbella uniform texture full width area above 2 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c beveling charges on exposed edges complete in all respect as approved / directed by the Engineer Incharge. (FOR STAIRS STEPS)	Per/Sft	151.25	298.00		
		<b>Miscellaneous</b>					

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
TEXTILE UNIVERSITY, KARACHI CAMPUS**

**RESEARCH LABS  
BILL OF QUANTITIES  
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Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
39	N.S	Providing and fixing all types of glazed aluminium windows of anodized champagne color partly fixed and partly sliding using deluxe section of M.S Al-cop of Pakistan cables having frame size 100mm x 30mm x 2mm using frame at bottom at top and side leaf frame size 60mmx23mmx2mm at top and bottom and size 45mmx25mmx 2mm at centre and size 45mm x 25mm x 2mm at sides jali leaf frame size 43mm x 13mm x 2mm all section of 2mm thick i/c imported fine quality aluminum wire gauze jali 5mm tinted glass with rubber gasket using approved standard latches, wheel stopper, brush channel angle joint and hardware etc as per design and complete in all respect as approved by the Engineer Incharge. (all section 2 mm thick)	Per/Sft	3,422.25	940.00		
40	N.S	Providing and fixing 1½" (40mm) thick solid flush door shutter (Approved Factory Manufactured) with commercial ply (5 mm thick) on both sides double pressed and deodar wood lipping 1½"x3/8" (40mm x 10mm) around shutter including chromium plated fitting, iron hinges with aluminium kick plate 22 SWG on both sides & finger plate complete in all respect.	Per/Sft	459.00	363.10		
41	N.S	Providing and fixing M.S. sheet hollow pressed frame of doors, windows, C. windows, etc. (chowkat only) of 20 SWG welded with M.S. flat 6"x 1¼" x 1/8" (150 mmx30mmx3mm) M.S. holdfast 9"x1"x1/8" (225mmx25mmx3mm) welded/screwed 4" (100 mm) long iron hinges, including filling chowkat with cement sand mortar 1:8 and embedding holdfast in cement concrete 1:2:4, complete in all respects: a) single rebate	Per/Sft	459.00	148.10		
42	N.S	Providing/fixing stainless steel non-magnetic railing consisting of main pipe 2" dia 16 SWG imported (China) & 3'-4" height balustrades @ 2' C/C consisting of 1-1/2" to 2" wide and 3/16" thick 2-No stainless steel strips with studs i/c 3/4" dia 16 SWG 3-NO stainless steel pipes longitudinally passing in between the strips of balustrades i/c bends, base plate etc with bottom stainless steel "tiki" & cover, fixing with rowal bolt (3" to 2½" long) i/c steel polishing etc complete in all respects as approved by the engineer incharge ( All members will be of non-magnetic)	Rft	30.00	2,096.00		
43	N.S	Providing and fixing M.S Stair Case consisting of 4" dia M.S pipe and M.s steps of 1.5" x 1.5 "x 1/8" angle iron and M.S. chequerred plate 1/8" thickness, railing 25mm dia M.S. pipe hand rail and bracing at mid level 25mm dia M.S. pipe balusters 900mm high on each step including all steel members, 2 coats of anti rust red oxide primer with 2-3 min. coats of ICI Enamel paint or approved equal, including welding and connections with concrete/masonry, etc., complete in all respect as per drawings and instruction of the Engineer.					
			Job	6	81,600		

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT NATIONAL  
TEXTILE UNIVERSITY, KARACHI CAMPUS**

**RESEARCH LABS  
BILL OF QUANTITIES  
CIVIL WORKS**

Item No.	SCH ITEMS	Description of Items	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
44	N.S	Providing and render 2mm thick food grade / seamless, self leveling High Build Moisture Insensitive Epoxy Coating corrolfloor 2000-4000 confirming with ASTM C-881 as manufactured by CORROTECH or approved equivalent with following.	Sft	2,362.50	168		
45	N.S	Supply, provide and fix in position uPVC rain water down pipe lines conforming to ISO 3633:1991 and BS 3505 1968 (wall thickness 3.2mm) including proper joints complete in all respects, and system leak-free: 4" dia	Per/Rft	160.00	300.00		
46	N.S	Provide and fix uPVC plain bends with grating (as rain water inlets at roof), water tight connection leak-free: 4" dia	Each	4.00	1,500.00		
47	N.S	Provide and fix uPVC shoe bends (as rain water outlets), water tight connection leak-free: 4" dia	Each	4.00	1,000.00		
48	N.S	Provide and fix partition wall comprising frame of Aluminium partition channel with 5mm thick float glass using sections of Pakistan Cables (Pvt) Ltd., or Chawla Aluminium or approved equivalent, in approved colour and all hardware as shown on drawings, including door locks, complete in all respects as per sample approved by the Engineer Incharge.	Per/Sft	2,674.28	350.00		
<b>TOTAL NON-SCHEDULE ITEMS-B</b>							
<b>G.TOTAL (A+B) COST (Rs.)</b>							

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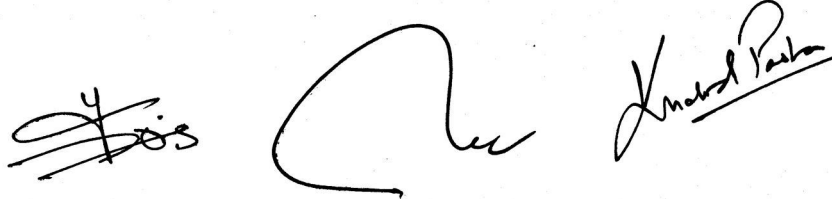
**SUMMARY OF COST**

**CONSTRUCTION OF FACULTY HOSTEL AND  
RESEARCH LABS AT NATIONAL TEXTILE UNIVERSITY,  
KARACHI CAMPUS**

**PUBLIC HEALTH WORKS RESEARCH LABS**

**BILL OF QUANTITIES**

SR. NO.	DESCRIPTION	AMOUNT (Rs)
1	Schedule	
2	Non Schedule	
	Total	





**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**PUBLIC HEALTH WORKS RESEARCH LABS**

**BILL OF QUANTITIES**

Sr #	Ref #	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
<b>Schedule Items (A)</b>							
1	Volumn III, PART-V-B, 5	<b>Part-1:PLUMBING FIXTURES</b> Providing and fixing European type white glazed earthen ware wash down wc pan with including with white/black plastic seat (best quality )and lid with cp brass hinges & buffers, white glazed earthen ware low level flushing cistern with siphon fitting 1½" dia white porcelain enamelled flush bend ¾" dia and making requisite number of holes in walls,plinth and floor for pipe connection & making good in cement concrete 1:2:4 (Foreign Quality )	Each	4	11,477.40		
2	Volumn III, PART-V-B, 10	Providing and fixing 24"x18" Lavatory basin in hite glazed earthen ware complete with & i/c the cost of W.I or C.I cantilever brackets 6' Built into Walls,painted white in two coats after a primary coat of red lead paint a pair of ½" dia rubber plug & Charome plated brass chain 1-1/4",Malloable irons or brass unions and making requisite number of holes in walls,plinth & floor for pipe connections and making good in cement concrete 1:2:4 (Foreign Equivalent)	Each	2	4,928.00		
3	Volumn III, PART-V-B, 11	Add Extra for labour for providing & fixing of earthen ware pedestal white or colour glazed( Foreign or equivalent)	Each	0	2,533.27		
4	Volumn III, PART-V-B, 19-c	Providing and fixing steel sinks stainless local make complete with cast iron or wrought iron brackets 6inches built in walls ,1½ c.p bubber plug chrome plated brass chain,1½" c.p brass waste , with 1½" P.V.C waste pipe & making requisite number of holes in wall & plinth & floor for pipe connection & making good in cement concrete 1:2:4 C) Steel Sink Stainless sized 33"x18" Local make Standard	Each	18	5,712.30		
5	Volumn III, Part-V-B, Chap 2/2/b	Providing and fixing, c.p brass toilet paper holder of standard size with chrome plated brass brackets complete b) Superior Quality	Each	4	1,071.40		
6	Volumn III, Part-V-B, Chap 2/5	Supplying & fixing soap tray earthen ware with c.p Screws etc.complete	Each	2	497.20		
7	Volumn III, Part-V-B, Chap 2/1/III	Towel rail 24" long , ¾" dia round or square (Superior Quality)	Each	2	1,082.95		
8	Volumn III, Part-V-B, Chap 2/3/b	Providing and fixing 24"x18" Bavelled edge mirror of belgium glass complete with 1/8" thick hard board and c.p screws fixed to wooden pleat b) Superior Quality	Each	2	2,376.00		
9	Volumn III, Part-V-B, Chap 6/14/a	Supply & fixing wash basin mixture of superior Quality with cp head ½" dia	Each	2	2,882.00		
10	Volumn III, Part-V-B, Chap 6/17	Supply & fixing sink mixture Cock of superior Quality with cp head ½" dia with cp head etc complete	Each	18	2,745.60		
11	Volumn III, Part-V-B, Chap 6/18	Supply & fixing C.P muslim shower with double bibcock & ring pipe etc complete	Each	4	3,432.00		

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**PUBLIC HEALTH WORKS RESEARCH LABS**

**BILL OF QUANTITIES**

Sr #	Ref #	Description	Unit	Qty	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
12	Volumn III, Part-V-B, Chap 6/18	Providing & fixing 6"x4" CC Gully trap with 4" outlet complete with 4" thick 1:2:4 C.C for bed & ½ " thick cement plaster (1:3) to the karb , C.I grating 6"x6" & C.I cover & frame 12'X12" (Inside) etc Complete	Each	2	3,432.00		
13	Volumn IV, Part-VI-, Chap II/P	Constructing manhole or inspection chamber for the required diameter of circular sewer and 3'-6" depth with walls of B.B in cement sand mortar 1:3, Cement plastered 1:3, ½ " thick inside of walls and 1" thick over benching and channel fixing cast iron manhole cover with frame of clear opening 1-½'x1-½' of 1.75 cwt.(88.9 kg) embaded in plain C.C 1:2:4 & fixing 1" dia MS Steps 6" wide projecting 4"(102mm) from the face of walls at 12"(305mm) C/C duly painted etc Complete as per standard specification & drawing a) 4" to 12" dia 2'x2'x3'-6" G.I Piping	Each	3	14,748.00		
14	Volumn III, Part-V-B-, Chap 4/1	Providing G.I Pipes , Special and clamps etc, including fixing cutting & fitting complete with i/c the cost of breaking through walls and roof ,Making good etc,painted two coats after cleaning the pipe etc ,with zink paint with pigment to match the colour of the building and testing with water to a pressure head of 200 feet and handling -  a) ¾" i/d dia G.I Pipe b) 1" i/d dia G.I Pipe c) 1½" i/d dia G.I Pipe	Rft Rft Rft	380 0 0	95.79 128.55 188.97		
15	Volumn III, Part-V-B-, Chap 10/II	<b>SEWERAGE</b> Providing R.C.C Pipe with collars class "B" and Digging the trenches to require depth & fixing in position including cutting, fitting & jointing with maxphalt composition & cement mortar 1:1 and testing with water pressure to a head of 4 feet above the top of the highest pipe & refilling the excavated staff  6" dia R.C.C Pipe Class "B" 9" dia R.C.C Pipe Class "B"	Rft Rft	155 0	199.25 250.60		
16	Volumn (iv) Part (vi) j/1	Providind CI Manhole Cover & Frame i/c Cost of Material etc	Cwt	3	6,985.00		
<b>TOTAL-SCHEDULE ITEMS -A</b>							

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**PUBLIC HEALTH WORKS RESEARCH LABS**

**BILL OF QUANTITIES**

Sr #	Ref #	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
		<b>Non Schedule Items</b>					
1	NS	<b>Part-1: WATER SUPPLY</b> Providing, fixing, jointing and testing Polypropylene Random (PPR) pipes, DADEX or approved equivalent, pressure pipe for cold/hot water as per DIN 8077-8078, PN-20 for pipes and DIN 16962, PN-25 for fittings (polyfusion welded joints) inside building including fittings and specials (sockets, tees, elbows, bends, crosses, reducers, adaptor, plugs and union etc.) supported on walls or suspended from roof slab or run in chases including pipe hangers, supports, cutting and making good the chases and holes, complete in all respects.					
		25mm dia	Rft	462	137		
		32mm dia	Rft	150	223		
		40mm dia	Rft	136	341		
		50mm dia	Rft	124	539		
		63mm dia	Rft	166	971		
2	NS	Providing and installing ball valves of following nominal dia, Kitz make or approved Equivalent, including jointing, fitting, painting, testing, complete in all respects to match with PPR and PE pipes of following diameters.					
		25 mm	Nos.	11	4,622		
		32 mm	Nos.	1	5,106		
		40 mm	Nos.	3	6,970		
		63 mm	Nos.	2	22,000		
3	NS	Providing and installing Gas Geyser including All types of Valves & fitting accessories, complete in all respect as per specifications and drawings.					
		6 Liter Instant Geyser	Nos.	1	15,000		
4	NS	Making main sewer connection to the main WASA sewerage complete in all respect as per specifications and drawings.					
			Job	1	10,000		

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
NATIONAL TEXTILE UNIVERSITY, KARACHI CAMPUS**

**PUBLIC HEALTH WORKS RESEARCH LABS**

**BILL OF QUANTITIES**

Sr #	Ref #	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
5	NS	<b>Part-3: SEWERAGE &amp; DRAINAGE</b> Providing, laying, fixing and testing uPVC soil, waste, vent and rain water as per ISO 3633:1991 or equivalent BS specifications including uPVC fittings with solvent cement jointing or rubber ring joints, DADEX Or Approved Equivalent make as approved by the Engineer complete in all respects, including clamps, bends, tees, Y-tees, cowls, reducers, sleeves, clean out, waterproof sleeves, roof drain, etc., embedded in floors and walls, clamped to walls, suspended from slab (common hanger shall be used for pipe hanging and fiber glass tray under pipes), painted MS horizontal and vertical pipe hangers of approved design making requisite no. of holes and making good the same complete in all respect as per specifications and drawings.					
		2" i.d	Rft	193	227		
		3" i.d	Rft	701	347		
		4" i.d	Rft	78	549		
6	NS	Providing, fixing, cutting, jointing and testing uPVC Vent Cowel on Vent Pipes with solvent cement jointing, DADEX or approved equivalent, rates include cost of cutting & pipe fittings of the following diameter:					
		2" i.d	Nos	4	100		
		3" i.d	Nos	0	120		
7	NS	Providing, laying, fixing and testing floor drain (multifloor trap) uPVC including extension grating and stainless steel cover grating best quality local make Porta or Approved Equivalent as approved Engineer, complete in all respect as per specifications and drawings.					
			Nos.	24	4,500		
	NS	Providing, laying, fixing and testing bottle trap uPVC including extension grating and stainless steel cover grating best quality local make Porta or Approved Equivalent as approved Engineer, complete in all respect as per specifications and drawings.					
			Nos.	16	4,500		
8	NS	Providing and fixing clean out with threads ferule fixed in pipe with the help of solvent, as shown on drawing, complete in all respects as per specifications and drawings.					
		3" i.d	Nos.	10	4,450		
		4" i.d	Nos.	2	5,450		
9	NS	Providing, Installing, fixing, testing and Commissioning of shower mixer with shower head and interconnecting pipe. All accessories/consumables to be Provided by contractor.					
			Nos.	0	15,000		
10	NS	Providing and making top khurra/R.W.C.B using 3" thick plain cement concrete 1:2:4 matching with roof tiles with steel trowel finishing at desired level including curing, finishing, complete in all respect as per specifications and drawings.					
		i) 1'x1'	Nos.	3	1,500		
		ii) 1'-6"x1'-6"	Nos.	2	1,500		
11	NS	<b>Part-5 TANKS</b>					

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**PUBLIC HEALTH WORKS RESEARCH LABS**

**BILL OF QUANTITIES**

Sr #	Ref #	Description	Unit	Qty.	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
		Providing and constructing of Reinforced cement concrete with minimum cube strength of 3750 psi at 28 days using 3/4" maximum nominal size graded margalla crushed stone aggregate and Lawrence pur sand , including the cost of reinforcing steel , water stop, under ground water tanks of following capacities with manhole covers, cowed vent, inlet and outlet pipework. Water tank shall be provided with terrazzo finish from inside on walls and base slab. Location and size of Tanks shown on drawings, complete in all respect.					
		a) O.H.W.T	P/gal	2457	140		
<b>TOTAL NON-SCHEDULE ITEMS-B</b>							
<b>G.TOTAL (A+B) COST (Rs.)</b>							

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
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**ELECTRICAL WORKS FOR RESEARCH LABS**

**BILL OF QUANTITIES**

Sr. No.	Description	Amount (Rs.)
1	Schedule Items	
2	Non-Schedule Items	
	TOTAL (Rs.) =	

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**CONSTRUCTION OF FACULTY HOSTEL AND RESEARCH LABS AT  
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**BILL OF QUANTITIES**

**ELECTRICAL WORKS FOR RESEARCH LABS**

Sr I No.	tem. No.	Description	REF. Nos CH/ITEM	Unit	Quantity	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
A:-	Schedule Items							
1	1.1	<u>Light Circuits.</u>						
		Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.029 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	320	294.00		
	1.2	<u>1-Light Point Controlled By One Switch</u>						
	a)	Wiring for light or fan point with 3/0.029 PVC insulated wire in 20 mm(3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	94	1130.00		
	b)	Providing and fixing one way S.P 5 amps switch flush type	[Ref: Item A-219/ page # 33]	Per No.	188	54.00		
	c)	Providing and fixing two pin 5amp plug & socket	[Ref: Item A-222/ page # 33]	Per No.	37	80.00		
	d)	Providing and fixing two way S.P 5 amps switch flush type	[Ref: Item A-219/ page # 33]	Per No.	10	55.00		
	1.3	<u>Point to Points Wiring</u>						
	a)	Wiring for light or fan point with 3/0.029 PVC insulated wire in 20 mm(3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	272	1130.00		
	1.5	<u>Wiring of 1-3 Pin 5 Amps Switch Socket</u>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	700	338.00		
	c)	Providing and fixing three pin 5amp plug & socket	[Ref: Item A-223/ page # 33]	Per No.	35	91.00		
	1.5	<u>Point to Point 1-3 Pin 5 Amps Switch Socket</u>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	532	338.00		
	c)	Providing and fixing three pin 5amp plug & socket	[Ref: Item A-223/ page # 33]	Per No.	76	91.00		
	1.6	<u>1 x 3 Pin 15 Amps Switch Socket</u>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	306	338.00		
	b)	Providing and fixing three pin 10/15 amp plug and socket flush type.	[Ref: Item A-227/ page # 33]	Each	17	162.00		
	1.7	<u>1 x 3 Pin 15 Amps Switch Socket For AC</u>						
	a)	Providing and laying (Main or Sub main) PVC insulated with size 3-7/0.036 copper conductor in 3/4" dia PVC conduit recessed in wall or column as required.	[Ref: Item D-24/ page # 4]	Per Mtr.	288	338.00		
	b)	Providing and fixing three pin 10/15 amp plug and socket flush type.	[Ref: Item A-227/ page # 33]	Each	16	162.00		



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**BILL OF QUANTITIES**

**ELECTRICAL WORKS FOR RESEARCH LABS**

Sr I No.	tem. No.	Description	REF. Nos CH/ITEM	Unit	Quantity	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
	1.7	<b>Fan Points</b> Wiring for light or fan point with 3/029 PVC insulated wire in 20 mm(3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	90	1130.00		
	1.9	<b>Exhaust Fans Points</b> Wiring for light or fan point with 3/029 PVC insulated wire in 20 mm(3/4") PVC conduit Recessed in the wall or column as required.	[Ref: Item 124/ page # 15]	Per point	4	1130.00		
3		<b>Light Fittings And Fixtures</b>						
	3.1	<b>Fluorescent Fittings/ Metal Halide</b>						
	i	Providing and fixing of Bakelite ceiling rose with two terminals.	[Ref: Item B-228/ page # 33]	Each	352	72		
	ii	Providing and fixing of Brass bracket lamp holder suitable foe 12mm (1/2") dia bracket.ceiling rose with two terminals.	[Ref: Item B-230/ page # 33]	Each	14	72		
	iii	Providing and fixing Brass Batten holder.	[Ref: Item B-232/ page # 33]	Each	366	70		
	3.3	<b>Ceiling Fans</b>						
		Providing and fixing of Brass ceiling fan 56" (good quality)	[Ref: Item C-235/ page # 34]	Each	90	3185		
4		<b>Power , Wiring Cables ,Conduit And Trunking</b>						
	4.1	<b>4 Core Cable PVC/PVC</b>						
	a)	Providing and laying (Main or Sub main) PVC insulated & PVC sheeted with 4 core copper conductor 600/1000 volts size 35mm2.	[Ref: Item O-104/ page # 12]	Mtr	65	2529.00		
	b)	Providing and laying (Main or Sub main) PVC insulated & PVC sheeted with 4 core copper conductor 600/1000 volts size 120mm2.	[Ref: Item O-108/ page # 13]	Mtr	50	8175.00		
<b>TOTAL Schedule Items=</b>								
B:-	<b>Non-Schedule Items</b>							
1		<b>L.T. Switchgear</b>						
		<b>Distribution Board Concealed</b>						
		Supply, installation, connection of wires cables, and commissioning of distribution boards concealed type or to be installed on wall, made of 16 SWG M.S. sheet with hinged door, handle, catcher, earthing bar and neutral link with necessary holes, nuts, bolts, washers, earthing of DB door with braided copper internal wiring , PVC cable glands for incoming and out going wires/cables, 2 earthing terminals designation label engraved on plastic sheet of appropriate size to be pasted on the front side of DB, 3 phase indication lamps of colour red, yellow, blue, make Hager, Legrand ( France) SV122 SV128 SV126 moulded case circuit breaker with overload and short circuit protection (MCCB) to be installed on the incoming side, Icu not less than 10 KA , and for miniature circuit breakers Icu 6 KA make G.E (Europe & USA), M.G., Legrand (France), ABB (Italy) Terasaki (Japan) having overload and short circuit protection, including cost of all						

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**BILL OF QUANTITIES**

**ELECTRICAL WORKS FOR RESEARCH LABS**

Sr I No.	tem. No.	Description	REF. Nos CH/ITEM	Unit	Quantity	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
	1.1	<b><u>DBLP-1G,DBLP-1F,DBLP-1S,DBLP-1T</u></b> 01 No. Incoming 75 Amp MCCB TP, RC=16 kA 18 No. Outgoing 10/15/20 Amp MCB SP, RC=6 kA a) 3 No Digital ammeter b) 3 No Digital voltmeter c) 3 No indication lights 220 Volt d) Current Transformer e) Internal wiring & Line - up terminal etc f) Panel steel grid painted along with locking	Appendix ' c' Page No-1	Each	4	48381		
	1.2	<b><u>MPB</u></b> 02 No. Incoming 300 Amp MCCB TP, RC=16 kA having Elect. & Mech. interlocking System. 06 No. Outgoing 75/100 Amp MCCB TP, RC=16 kA a) 3 No Digital ammeter b) 3 No Digital voltmeter c) 3 No indication lights 220 Volt d) Current Transformer e) Power Cabling f) Panel steel grid painted along with locking	Appendix ' c' Page No-2	Each	1	153765		
2		<b><u>Light Fittings And Fixtures</u></b>						
	i	Providing and fixing of 24 Watt Energy saver philips make, complete in all respect as approved by the engineer incharge.	Appendix ' c' Page No-3	Each	366	354		
3		<b><u>Ceiling Fan Regulator</u></b> Providing and fixing of ceiling fan regulator as approved by the engineer incharge.	Appendix ' c' Page No-4	Each	90	413.57		
4		<b><u>Fan hook:</u></b> Providing and fixing mild steel bar fan hook suitable for R.C.C roof.	Appendix ' c' Page No-5	Each	90	413.57		
5		<b><u>Exhaust Fans</u></b> Supply, installation and commissioning of Exhaust Fans of following sizes plastic body, louvers, all necessary fixing accessories, make Asia, Climax, PAK National complete in all respects.						
		i) 12" dia (Plastic Body).	Appendix ' c' Page No-6	Each	4	3319		
6		<b><u>Power , Wiring Cables ,Conduit And Trunking</u></b>						
	6.1	<b><u>Circuit Protective Conductor (CPC)</u></b>						
	a)	1 core 16mm sq.	Appendix ' c' Page No-7	Mtr	65	316.21		
	b)	1 core 50mm sq.	Appendix ' c' Page No-8	Mtr	50	877.92		
7		<b><u>Earthing System</u></b> Supply, installation, commissioning and testing of the earthing system including cost of the following 3/4" 3 meter long copper rod as earth electrode up-to water level including cost of boring and lowering complete with clamp and 2 X 50mm2 stranded copper conductor from copper rod to ground surface in 1-1/2" uPVC Pipe class D with watering cap manhole with cover as per	Appendix ' c' Page No-9	Job	2	65264		
8		<b><u>Fire Alarm System</u></b>						
	8.1	Fire resistance insulated 2-core, 1.5mm2 cable in PVC Conduits in 25 mm2 conduit	Appendix ' c' Page No-10	R.M	1250	265.85		
	8.2	Addressable break glass manual call stations (Copper Menvier UK, Honey well,Gent or approved equivalent).	Appendix ' c' Page No-11	No.	4	4,483.20		
	8.3	Addressable sounder and accessories (Copper Menvier UK, Honey well,Gent or approved equivalent).	Appendix ' c' Page No-12	No.	4	7,423.20		
	8.4	Addressable Photo electric Smoke Detectors as approved by the engineer (Copper Menvier UK, Honey well, Gent or approved equivalent).	Appendix ' c' Page No-13	No.	25	5,239.20		



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Sr I No.	tem. No.	Description	REF. Nos CH/ITEM	Unit	Quantity	Rate (Rs.)	Rate (Rs.) Quoted by The Contractor	Amount (Rs.)
	8.5	Addressable Fire Alarm Control Panel as per project specified requirements (1 Loop) including backup battery, complete with all installation accessories, testing and commissioning (Copper Menvier UK, Honey well, Gent or approved equivalent).	Appendix 'c' Page No-14	No.	1	105,050.40		
9		<u>Telephone System</u>						
	9.1	Supply and install recessed type telephone distribution box suitable for 30 pair including appropriate size 16 SWG sheet steel box with hinged, latched and lockable cover.	Appendix 'c' Page No-15	Job	1	9,278.40		
	9.2	<u>Telephone Outlet</u>						
		Supply / Erection of Bush made data single socket ( RJ-45) including 16 SWG back box of 3"x3" size complete in all respect.	Appendix 'c' Page No-16	Each	14	1320		
	9.3	<u>Telephone Cables</u>						
		Providing & laying multi pairs (Twisted) PVC insulated / underground cable of best quality (siemens, Germany, or Best imported as per approved sample) in pre-laid PVC recessed conduit or fixed cable duct/ Tray as per satisfaction of the Electrical Engineer.						
	a	4-5 Pair Cable CAT-6/UG/PVC (0.6 mm sq) (From DP to each Room)	Appendix 'c' Page No-17	Rft	1260	30		
10		<u>Computer System</u>						
	10.1	<u>Computer Outlet</u>						
		Supply / Erection of Bush made data single socket ( RJ-45) including 16 SWG back box of 3"x3" size complete in all respect.	Appendix 'c' Page No-16	Each	14	1320		
	10.2	<u>Computer Cables</u>						
		Wiring for each data/computer point included cost of 1 no. 4 pair CAT- 6 (UTP) cable tinned copper conductor PVC insulated PVC sheathed manufactured by Krone, 3M, Clipsal to support data rates upto 1GBits/s. or more than 1 GBits/s with connections						
	a	1 no. 4 pair CAT- 6 (UTP) cable tinned copper conductor PVC insulated PVC sheathed.	Appendix 'c' Page No-17	Rft	1260	30		
5		<u>Drain &amp; Copper Pipe for HVAC System</u>						
		Supply, installation, of 2 Nos. copper pipe of appropriate size covered with plastic tape and proper rubber insulation 3" dia pvc conduit heavy duty controlled wire from condenser to indoor unit. G.I pipe 3/4" dia for condensation drain from fan coil unit to nearest toilet or anyother proper place as per the direction of Architect/Site Engineer and all necessary accessories material whether mentioned in this item or not but are necessary for completion of job shall be deemed to be included in the cost of above said item, complete in all respect without any other extra claim (Electrical wiring from DB to fan coil/ condenser unit is excluded from this item)	Appendix 'c' Page No-5	Each	16	3739		
		TOTAL Non-Schedule Items=						
		G.TOTAL (A+B) COST (Rs.)						

*[Handwritten signatures and initials]*

