



THE SHAIKH AYAZ UNIVERSITY,
SHIKARPUR



**CONSTRUCTION OF ADMINISTRATION BLOCK,
BOOK SHOP AND TUCK SHOPS FOR THE
PROJECT TITLED “PROVISION OF MISSING
FACILITIES FOR THE SHAIKH AYAZ
UNIVERSITY SHIKARPUR”**

**VOLUME-II
BILL OF QUANTITIES
December, 2022**

Issued to: _____

Dated: _____ **Signed:** _____

**CONSTRUCTION OF ADMINISTRATION BLOCK, BOOK SHOP AND TUCK SHOPS
FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR**

Bill of Quantities

Sr. No.	DESCRIPTION	AMOUNT
A	ADMINISTRATION BLOCK	
B	BOOK SHOP AND TUCK SHOPS	
	Grand Total (A+B)	

Amount in Words:

Contractor

Client

**CONSTRUCTION OF ADMINISTRATION BLOCK FOR THE SHAIKH AYAZ
UNIVERSITY SHIKARPUR**

Bill of Quantities

SUMMARY OF COST

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	DESCRIPTION	AMOUNT
1.	CIVIL WORKS	
a	Cost of Schedule Items	64,590,260
b	Add/ Deduct _____ % above/ below on Scheduled Items	
c	Cost of Non-Schedule Items	
d	Difference of Cost of Material	19,222,224
	TOTAL OF CIVIL WORKS - A	
2.	PUBLIC HEALTH WORKS	
a	Cost of Schedule Items	2,236,340
b	Add/ Deduct _____ % above/ below on Scheduled Items	
c	Cost of Non-Schedule Items	
	TOTAL OF PHE WORKS - B	
3.	ELECTRIC WORKS	
a	Cost of Schedule Items	9,017,735
b	Add/ Deduct _____ % above/ below on Scheduled Items	
c	Cost of Non-Schedule Items	
	TOTAL OF ELECTRICAL WORKS - C	
	TOTAL (A+B+C)	
	5% SST	
	GRAND TOTAL WITH SST	

Amount in Words:

Contractor

Client

CONSTRUCTION OF ADMINISTRATION BLOCK FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

Bill of Quantities

CIVIL WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
1	C-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 in Ordinary Soil.	%0Cft	93206.12	3176.25	296,045.94
2	C/1-16	Earth for slush or Daldal including dewatering.	%0Cft	93206.12	2420.00	225,558.81
3	C-18/92	Providing Anti -termite treatment by spraying /sprinkling /spreading Neptachlar 0.5% Emulsion as an overall pre - construction treatment in slab type construction under the slab and along attached perches or entrances etc, complete as per directions of Engineer Incharge.	P.Sft	61119.35	9.74	595,302.50
4	C-4/5(i)	Cement concrete plain including placing compacting, finishing and curing, complete (including screening and washing at stone aggregate without for all shuttering.(Mix 1:4:8)	%Cft	4815.78	11288.75	543,641.61
5	C-4/6 a-i	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2: 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Foundation)	P.Cft	18307.31	337.00	6,169,564.59
6	C-4/6 a-i	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2: 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Ground Floor)	P.Cft	10116.14	337.00	3,409,138.24
7	C-4/6 a-i +6 (d)	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2: 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (First Floor)	P.Cft	9802.65	349.10	3,422,105.84
8	C-4/6 a-i +6 (d)	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2: 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Second Floor)	P.Cft	10535.19	361.20	3,805,309.36
9	C-4/6 a-i +6 (d)	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2: 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Third Floor)	P.Cft	4119.53	373.30	1,537,820.11
10	C-4/6 a-i +6 (d)	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2: 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Fourth Floor)	P.Cft	736.95	385.40	284,019.82
11	C-4/6 b-i + c	Precast reinforced cement concrete in columns, beams lintels stair cases, shelves, etc. (I) Ratio 1 : 2: 4 including erecting and fixing in position precast cement concrete or stone slab in roofs or Lintels, etc, lift upto 20 feet including all charges. (Terrace Railing)	P.Cft	1047.73	351.55	368,328.67
12	C-4/6 a-ii	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) UPL	P.Cft	1717.80	349.00	599,513.71
13	C-4/6 a-ii	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) G.F	P.Cft	1797.70	349.00	627,398.06
14	C-4/6 a-ii +6 (d)	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) F.F	P.Cft	1817.86	361.10	656,428.07

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
15	C-4/6 a-ii +6 (d)	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) Second Floor	P.Cft	1817.86	373.20	678,424.14
16	C-4/6 a-ii +6 (d)	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) Third Floor	P.Cft	158.36	385.30	61,014.18
17	C-5/4-l(e)	Pacca brick work in foundation and plinth in cement sand mortar 1:6.	%Cft	27766.38	11948.36	3,317,627.58
18	C-1/21	Filling, watering and ramming earth in floors with surplus earth from foundation lead upto one chain and lift upto 5 feet.	%0Cft	31068.71	1512.50	46,991.42
19	C-1/22	Filling, watering and ramming earth under floor with new earth (Excavated from outside) lead upto one chain and lift upto 5 feet.	%0Cft	172458.16	3630.00	626,023.12
20	C-5/5-l(d)	Pacca brick work in Ground Floor cement, sand mortar Ratio 1:5	%Cft	11798.10	12902.08	1,522,200.65
21	C-5/5-l(c)	Pacca brick work in Ground Floor cement, sand mortar Ratio 1:4	%Cft	476.14	13227.41	62,981.09
22	C-5/5-l(d) + 6	Pacca brick work in First Floor cement, sand mortar Ratio 1:5	%Cft	13467.82	13340.71	1,796,702.61
23	C-5/5-l-c + 6	Pacca brick work in First Floor cement, sand mortar Ratio 1:4	%Cft	433.34	13666.04	59,220.94
24	C-5/5-l(d) + 6	Pacca brick work in Second Floor cement, sand mortar Ratio 1:5	%Cft	13821.17	13915.46	1,923,278.94
25	C-5/5-l-c + 6	Pacca brick work in Second Floor cement, sand mortar Ratio 1:4	%Cft	332.73	14240.79	47,382.98
26	C-5/5-l(d) + 6	Pacca brick work in Third Floor cement, sand mortar Ratio 1:5	%Cft	1040.40	14490.18	150,755.83
27	C-5/5-l(d) + 6	Pacca brick work in Fourth Floor cement, sand mortar Ratio 1:5	%Cft	380.36	15064.98	57,300.86
28	C-9/12(b)	Cement plaster 1:5 upto 12' height:- b) ½" (13 mm) thick. (Internal) Ground Floor	%Sft	24344.57	2241.80	545,756.53
29	C-9/12(b)+29	Cement plaster 1:5 upto 12' height:- b) ½" (13 mm) thick. (Internal) First Floor	%Sft	25163.95	2382.77	599,598.97
30	C-9/12(b)+29	Cement plaster 1:5 upto 12' height:- b) ½" (13 mm) thick. (Internal) Second Floor	%Sft	24318.58	2523.74	613,737.66
31	C-9/12(b)+29	Cement plaster 1:5 upto 12' height:- b) ½" (13 mm) thick. (Internal) Third Floor	%Sft	2064.48	2664.71	55,012.41
32	C-9/12(c)	Cement plaster 1:5 upto 12' height:- b) ¾" (20 mm) thick. (Internal) Ground Floor	%Sft	15302.83	2678.50	409,886.25
33	C-9/12(c)+29	Cement plaster 1:5 upto 12' height:- b) ¾" (20 mm) thick. (Internal) First Floor	%Sft	15517.12	2819.47	437,500.49
34	C-9/12(c)+29	Cement plaster 1:5 upto 12' height:- b) ¾" (20 mm) thick. (Internal) Second Floor	%Sft	10979.23	2960.44	325,033.56
35	C-9/12(c)+29	Cement plaster 1:5 upto 12' height:- b) ¾" (20 mm) thick. (Internal) Third Floor	%Sft	1950.24	3101.41	60,484.94
36	C-9/11(c)	Cement plaster 1:4 Ground Floor upto 12' height:- c) ¾" (20 mm) thick. (External)	%Sft	19297.42	3015.76	581,964.02
37	C-9/11(c)+29	Cement plaster 1:4 First Floor upto 12' height:- c) ¾" (20 mm) thick. (External)	%Sft	14243.11	3156.73	449,616.48
38	C-9/11(c)+29	Cement plaster 1:4 Second Floor upto 12' height:- c) ¾" (20 mm) thick. (External)	%Sft	14270.15	3297.70	470,586.63
39	C-9/11(c)+29	Cement plaster 1:4 Third Floor upto 12' height:- c) ¾" (20 mm) thick. (External)	%Sft	7336.86	3438.67	252,290.40
40	C-9/11(c)+29	Cement plaster 1:4 Fourth Floor upto 12' height:- c) ¾" (20 mm) thick. (External)	%Sft	1324.98	3579.64	47,429.51
41	C-9/10(a)	Cement plaster 3/8" thick under soffit or R.C.C. roof slab only upto 12' height ratio 1:3. Ground Floor	%Sft	11272.88	2225.12	250,835.04

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
42	C-9/10(a)+29	Cement plaster 3/8" thick under soffit or R.C.C. roof slab only upto 12' height ratio 1:3. First Floor	%Sft	9759.13	2366.09	230,909.69
43	C-9/10(a)+29	Cement plaster 3/8" thick under soffit or R.C.C. roof slab only upto 12' height ratio 1:3. Second Floor	%Sft	13111.30	2507.06	328,708.27
44	C-9/10(a)+30	Cement plaster 3/8" thick under soffit or R.C.C. roof slab only upto 12' height ratio 1:3. Third Floor	%Sft	1391.63	2648.03	36,850.70
45	C-7/43	Providing & 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	5920.28	91.50	541,705.99
46	C-9/24(c)	Distemping:- New surface:- three coats	%Sft	155137.68	1079.65	1,674,944.00
47	C-9/(38.A+38.B)	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make.- three coats	%Sft	40443.50	2567.95	1,038,568.88
48	C-5/29	Supplying and filling sand under floor and plugging in walls.	%Cft	6894.64	1141.25	78,685.06
49	C-4/2	Dry rammed brick or stone ballast 1 1/2" to 2" gauge.	%Cft	6894.64	3327.50	229,419.10
50	C-4/5(f)	Cement concrete plain including placing compacting, finishing and curing, complete (including screening and washing at stone aggregate without for all shuttering.(Mix 1:2:4)	%Cft	7906.92	14429.25	1,140,909.34
51	C-8/16-c	Providing and laying 2" thick topping cement concrete (1:2:4) including Surface finishing and dividiing into panels:	%Sft	3743.12	3275.50	122,606.01
52	C-8/75	Providing & fixing glass strips 4 mm for flooring upto 1" depth l/c fixing in flooring with cement in specified pattern & design.	P.Sft	3743.12	11.16	41,773.26
53	C-7/5	Single layer of tiles 9" x4 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. Bitumen coating sand blinded.	%Sft	13617.00	5310.35	723,110.36
54	C-7/18	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	30.00	358.68	10,760.40
55	C-10/59	First class Sheesham wood wrought framed and fixed in place including chowkhats hold fasts, tower bolts, chocks, cleats, handles card with hooks and cost of nails and screws, etc. panelled or panelled and glazed or fully glazed 1-1/2" thick.	P.Sft	2241.96	662.24	1,484,715.59
56	C-10/19-(A)-ii	Providing and fixing sliding bolt to doors.Iron sliding bolt 12" long.(a) Panelled or panelled and glazed or fully glazed 2" thick.	Each	97.00	222.23	21,556.31
57	C-10/21	Providing and fixing, approved quality mortice lock.	Each	97.00	1786.13	173,254.61
58	C-11/5-(c)	Preparing surface and painting of doors and windows any type, (including edges).Three Coats.	%Sft	4712.40	2116.41	99,733.70
59	C-17/24	Making & fixing steel grated door with 1/16" thick sheeting including angle iron frame 2" x 2" 3/8"and 3/4" square bars 4" centre to centre with locking arrangement.	P.Sft	114.24	726.72	83,020.49
60	C-18/83(a)	Supplying & fixing in position Aluminium channels framing for hinged doors or Alcop made with 5 mm thick tinted glass glazing (Belgium) and Alpha (Japan) locks l/c handles, stoppers etc. (a) Deluxe model (White)	P.Sft	122.40	1450.76	177,573.02
61	C-18/84(a)	Supplying & fixing in position Aluminium channels framing for slidding windows & ventilators of Alcop made with 5 mm thick tinted glass glazing (Belgium) & Aluminium fly screen l/c handles stoppers & locking arrangement etc. complete. (a) Deluxe model (White).	P.Sft	8437.73	1592.69	13,438,681.19
62	C-18/69(a)	Damp Proof course with cement sand Ratio (1: 2) mixed with dampo b) 1-1/2" thick	%Sft	174.57	1934.82	3,377.67
63	C-11/ 9	Bitumen coating to plastered or cement concrete surface.	%Sft	24489.80	778.09	190,552.68
64	C-7/38	Providing and laying single per layer of polythene sheet 0.13 mm thick for water proffing as per specification and instructions of Engineer incharge.	P.Sft	51723.80	10.70	553,444.66

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
65	C-4/7(ii)	Extra cost due to use of Hi Bond Pre-packaged Polymer Modified mortar (DHPMM) as an admixture in concrete mix for increasing durability, to be used in concreting, flooring, block/ brick/ stone masonry or plastering as % by weight of cement.	P.Kg	4018.19	459.80	1,847,564.81
66	C-4/11	Providing and fixing ornamental cement jalli 2" thick (1 : 2 : 4) without steel.	P.Sft	141.07	226.02	31,883.74
67	C-17/2 + 3	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, including erection in position. (Emergency Steel Stairs)	P.Cwt	367.96	5199.53	1,913,210.34
68	C-11/5-d (i+ ii)	Painting new surface:- (d) Preparing surface and painting guard bars, gates of iron bars, gratings, railings (including standards braces, etc). And similar open work. - 3 coats (Emergency Steel Stairs)	%Sft	6308.94	1270.83	80,175.86
O.H.W.T						
1	C-4/6 a-i +6 (d)	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2 : 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Third Floor)	P.Cft	743.08	373.30	277,391.43
2	C-4/6 a-ii +6 (d)	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) T.F	P.Cft	49.47	385.30	19,060.00
3	C-Public Health Part B/J/Page-35	Providing C.I Manhole Cover & Frame i/c cost of Material etc.	P.Kg	45.00	140.00	6,300.00
Total of SOR Items						64,590,260

CONSTRUCTION OF ADMINISTRATION BLOCK FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

Bill of Quantities

CIVIL WORKS

Non-Scheduled Items

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
1	NSI	Providing and laying hard grade ribbed deformed (minimum yeild point 60,000 psi) reinforcement bars of all sizes with & including the cost of straightening, cutting, bending, binding, wastage, overlaps other than those shown on drawings, steel chairs, precast chairs, removal of rust, placing in position on cement concrete complete in all respect Amreli Steel, Agha Steel, Razaque Steel or equivalent approved by engineer incharge.	P.Kg	276787.37		
2	NSI	Providing and laying Stone filling of size upto 1 feet for foundation made of selected granular fill material (Mixture of 70% Stone and 30% River sand of approved quality and grade) including placing, mixing, spreading and compaction of sub-base material to required depth in layers not more then 6" thick, grade to achieve 95% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as approved by the Engineer incharge.	P.Cft	11113.39		
3	NSI	Providing and laying granular filling for foundation made of selected granular fill material (Mixture of 70% gravel/ hard core and 30% River sand of approved quality and grade) including placing, mixing, spreading and compaction of sub-base material to required depth in layers not more then 6" thick, grade to achieve 95% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as approved by the Engineer incharge.	P.Cft	22226.78		
4	NSI	Providing and applying wall putty (Kansai or equivalent) two coats on plastered surface to prepare the surface even and smooth complete in all respect as approved and directed by the Engineer Incharge.	P.Sft	310275.37		
5	NSI	Providing and laying Porcelain tiles flooring 24"x24"x3/8" light polished SB laid in cement over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement or matching pigment complete in all respect. (MASTER or Equivalent)	P.Sft	32741.79		
6	NSI	Providing and laying Porcelain tiles skirting/ dado 24"x4"x3/8" light polished SB laid in cement over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement or matching pigment complete in all respect. (MASTER or Equivalent)	P.Sft	2719.17		
7	NSI	Providing and fixing UPVC Doors 38mm thickness i/c deluex matching color UPVC frame matt or glossy finish having color (white-Gray-Marble Gray-Oak Wood- Dard Oak Wood, Coffee Wood Honey Pine Wood-Mahagony-Marry Gold-Chocolate Brown-Honey Dew) i/c all accessories i/c mortice locks complete in all respect as approval by the Engineer Incharge.	P.Sft	785.40		
8	NSI	Providing & laying face work by using gutka 9" x 2-1/4"x2-1/4" of approved quality in cement sand surkhi mortar (1:1:3) i/c back filling 3/8" thick with 1:4 cement sand mortar making trapezoidal groove / set back of 1/4" depth during fresh masonry work laid with M.S flat for wall ties, one side embedded in the masonry work and other side in gutka at 12" center to center vertically and 36" center to center horizontally, racking out joints, curing and its removal, including carriage complete (contractor shall prepare samples at site) as approved by the engineer incharge.	P.Sft	16029.02		
9	NSI	Providing and fixing SS railing 2'-6" height, 2" dia SS pole 16 SWG at 4 ft c/c, 2" dia SS 16 SWG pipe on top, 3 no. 3/4" dia SS 16 SWG horizontal pipe from pole to pole, buffing and polishing complete in all respect including the cost of base plate, base plate cap, rawl bolt etc. as per approval of Engineer/ Incharge.	P.Rft	460.02		

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
10	NSI	Providing and fixing Stainless Steel (24 SWG) Letters with CNC laser cutting i/c all hardware required complete in all respect as per drawings and direction of Engineer In-charge.	Each	23.00		
11	NSI	Providing and laying Ceramic Matt Tiles Texture Light color for flooring size 12"x26"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 respect as approved & directed by the Engineer/ Incharge. (Premium Quality Tile, Equivalent)	P.Sft	2586.25		
12	NSI	Providing and laying Ceramic Matt Tiles Texture Light color for skirting / dado size 12"x26"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 respect as approved & directed by the Engineer/ Incharge. (Premium Quality Tile, Equivalent)	P.Sft	9674.70		
13	NSI	Providing and fixing 3/4" thick Boticina Marble full width area above 2 Sft laid in white cement matching pigment 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment, including Polished and making gola on exposed edges complete in all respect as approved by the Engineer/ Incharge. (Stairs, Podium, Vanity)	P.Sft	6259.39		
14	NSI	Providing and fixing steel Fire Rated Emergency Exit Door, Door manufactured as per NFPA 252 & UL 10C standards Steel Door (MS) Size: 60" x 98" Double Leaf door, Filled with fire-rated material With Inner Steel Stiffeners for reinforcement. Door Leaf 1.2-1.5mm, Door Frame 1.5- 2.0mm, Accessories: Hinges, Panic Bar On single Leaf, SS Handle, Glass 12x24 ft, and Door closer including carriage complete in all respect as approved & directed by the Engineer/ Incharge. (MULLA EBRAHIMJI KARIMBHOY (PVT) LTD or Equivalent)	Each	6.00		
15	NSI	Providing and fixing 12mm thick tempered glass partition with frameless door ghani or equivalent with aluminium U/channel of approved texture/ shade, thickness 2 mm with silicone i/c the cost of holding the partitions, door closer machine, S.S handle 18" & all hardware complete in all respect as per specifications/standard as per instruction of Engineer Incharge.	P.Sft	1884.96		
16	NSI	Providing and fixing aluminium Channel louvers of Wooden texture / shade, with size of Aluminium Channel 3" x 1.5" of main Frame and Aluminium Channel 2" x 2" Partition Louver in Vertical Direction at C/C distance 2 inch of Alcop made (thickness 1.6 mm thickness will be used of both channels Main Frame and Partition in Vertical Direction) including all hardware, Scaffolding, Carriage of any Type complete in all respect as per specifications/standard as per instruction of Engineer Incharge.	P.Sft	1093.95		
17	NSI	Providing and fixing metal (chicken mesh) mesh of 16 gauge fixed with nails for concrete and bricks joint complete in all respect and as approved and directed by the Engineer Incharge.	P.Sft	7680.60		
18	NSI	Providing and fixing Stainless Steel Logo with colour print including the cost of fitting accessories complete in all respect as per drawings and approval of Engineer Incharge.	Each	1.00		
19	NSI	Providing and fixing Analogue Watch of 6 feet dia including the cost of fitting accessories complete in all respect as per drawings and approval of Engineer Incharge.	Each	1.00		
O.H.W.T						
1	NSI	Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars of all sizes with & including the cost of straightening, cutting, bending, binding, wastage, overlaps other than those shown on drawings, steel chairs, precast chairs, removal of rust, placing in position on cement concrete complete in all respect Amreli Steel, Agha Steel, Razaque Steel or equivalent approved by engineer incharge.	P.Kg	2732.96		

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
2	NSI	Providing embedding 10" (250 mm) wide ¼" (6 mm) thick rubber water stopper in expansion joints of R.C.C. roof slab, tanks complete in all respects.	P.Rft	123.25		
Total of Non SOR Items						

CONSTRUCTION OF ADMINISTRATION BLOCK FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR**Bill of Quantities****CIVIL WORKS****Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh****Note:** Difference in cost of material is allowed as per Govt. Notification dated: 28-10-2022 issued by standing rates of committee Govt. Sindh vide NO.SO(Admn-I)P&D/12(165)/2018

The rate of difference in Cost of materials as approved by standing rates of committee Govt. Sindh will be paid only.

Sr. No.	Item	Quantity	Unit	Rate taken from SoR notification dated 28-10-2022	Amount (Rs.)
1	Cement (Bags)	17907.96	P.Bags	650.00	11,640,175
2	Bricks (No.)	938471.97	%0No.	6000.00	5,630,832
3	Hill Sand (Cft)	68093.34	%Cft	736.00	501,167
4	Stone Ballast (Cft)	73982.13	%Cft	1960.00	1,450,050
Total of Difference of Material Cost					19,222,224

Contractor Sign & Stamp

CONSTRUCTION OF ADMINISTRATION BLOCK FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

Bill of Quantities

PUBLIC HEALTH WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

SR. NO.	ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (RS)	AMOUNT (RS)
		SANITARY FIXTURES AND FITTINGS				
1	SOR(Water supply & Sewerage (Ch 1/5)	Providing and fixing European type white glazed earthen ware wash down W.C. pan complete with and l/c the cost of white/black plastic seat (Best quality) and lid with C.P.brass hinges and buffers, 3 gallons white glazed earthen ware low level foushing cistern with siphon fitting 1-1/2" dia white porcelain enamelled fluish bend 3/4" dia and making requiste number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4. (ICL or Equivalent)	Each	32.00	11,477.40	367,276.80
2	SOR(Water supply & Sewerage (Ch 1/2-A ii)	Providing and Fixing squatting type white glazed earthen ware w.c pan with front fresh inlet & complete with including the cost of flushing cistern with internal fitting and flush pipe with bend and making requisite number of holes in walls plinth & floor for pipe connection and making good in cement concrete 1:2:4. (A) W.C pan 23" & low level earthen ware flush tank 3 gallons. (ii) with 4" dia white glazed earthen ware trap and plastic thumble. (Foriegn Quality)	Each	18.00	5,772.80	103,910.40
3	SOR(Water supply & Sewerage (Ch 6/19 (a)	Providing and fixing CP Muslim shower with double bib cock & ring pipe etc complete.	Each	50.00	3,432.00	171,600.00
4	SOR(Water supply & Sewerage (Ch 2/5)	Providing and fixing soap tray earthen ware with c.p screws etc.complete.	Each	29.00	497.20	14,418.80
5	SOR(Water supply & Sewerage (Ch 2/1 (iii-b)	Providing and fixing chrome plated brass towel rail complete with brackets fixing with 1" long c.p brass screws. (iii) Towel Rail 24" long (b) 3/4" dia round or square (Superior Quality)	Each	27.00	1,082.95	29,239.65
6	SOR(Water supply & Sewerage (Ch 2/2 (b)	Providing and fixing c,p brass toilet paper holder of standard size with chrome plated brass brackets complete (Similar to twyforde design No 1108) (b) Superior Quality	Each	50.00	1,071.40	53,570.00
7	SOR(Water supply & Sewerage (Ch 1/22)	Providing and fixing (1/2") dia, lead connection complete with a (1/2") dia brass stop cock, two brass nuts & lining jointed to lead pipe with plumber wiped solder joints (1/2" lead pipe to be of not less than 4lbs per lineal yard.	Each	110.00	689.70	75,867.00
8	SOR(Water supply & Sewerage (Ch 10/1 (i)	Providing and fixing 6" x 4" C.C gully trap with 4" outlet complete with 4" thick 1:2:4 C.C for bed & 1/2" thick cement plaster (1:3) to the karb. C.I grating 6" x 6" C.I cover and frame 12" x 12" (inside) etc complete. Earthan ware glazed Gully trap 6" x 6" x 4" with C.I cover & Frame.	Each	11.00	1,220.67	13,427.37
9	SOR (PHE works) Part-B (II) A-2	Providing and laying R.C.C. pipe & collors of class "B" and fixing in trench i/c cutting,fitting and jointing with maxphalt composition and cement mortar (1:1) i/e. testing with water to a head of 22.5 meter or 76 ft. (e) 300mm (12") i/d	P.Rft	350.00	543.75	190,312.50
10	SOR (PHE works) Part-B (III) A-1	Excavation for pipeline in trechches, and pits in soft soils i/c trimming and dressing sides to true alignment and shape levelling of beds of trenches to correct level and grade, cutting joint and holes and disposal of surplus earth within a one chain as directed by engineer incharge.Providing fence guards, lights, flags and temperory crossings for non-vehicular traffic where ever required lift upto 5ft. (1.52 m) and lead upto one chain (30.5 m).	1000 Cft	3,150.00	3,600.00	11,340.00
11	Ch/1/13 (d)	Earth work compaction (Soft, ordinary or hard soil). (d) Ramming earth work (All types of soil).	1000 Cft	3,150.00	453.75	1,429.31

SR. NO.	ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (RS)	AMOUNT (RS)
12	Ch/1/9 (a)	Rehandling of earth work. (a) Lead upto a single throw of Kassi, Phawrah or a = Shovel.	1000 Cft	3,150.00	756.25	2,382.19
13	SOR(Water supply & Sewerage (Ch 6/4 (iv)	Providing and fixing full way gun metal peet/gate valve with wheels, threaded or flabged ends with rubber washing.(iv) 1-1/4" (Light pattern)	Each	4.00	337.92	1,351.68
14	SOR(Water supply & Sewerage (Ch 6/4 (v)	Providing and fixing full way gun metal peet/gate valve with wheels, threaded or flabged ends with rubber washing.(v) 1-1/2" (Light pattern)	Each	4.00	695.42	2,781.68
15		MANHOLE				
	SOR (PHE works) P-1	Constructing manhole or inspection chamber for the required diameter of circular sewer and 3'-6" (1067 mm) depth waith walls of BB in cement sand mortar 1:3 cement plastered 1:3, 1/2" thick. Inside of walls and 1" (25 mm) thick over benching and channel i/c fixing C.I manhole cover with frame of clear opening 1-1/2' x 1-1/2' (457 x 457mm) of 1.75 cwt. (88.9 Kg) embaded in plain C.C 1:2:4 and fixing 1"(25mm) dia MS steps 6" (150 mm) wide projecting 4" (102mm) from the face of wall at 12" (305mm) C/C duly painted etc. Complete as per Standard specification and drawing.	Job	12.00	14,748.00	176,976.00
16	SOR (Water supply & Sanitary works) Ch 1-13	Providing & fixing 22"x 16" lavatory basin in white glazed earthen ware complete with & i/c the cost of W.I or C.I cantilever brackets 6 inches built into walls, painted white in 2 coats after a primary coat of red lead paint, a pair of 1/2" rubber plug & chrome brass waste of approved pattern 1-1/4" dia malleable iron or CP brass trap, malleable iron or brass unions and making requisite number of holes in walls plinth and floor for pipe connection &making good in cement concrete 1:2:4 (Foreign or Equivalent)	Each	29.00	6,237.00	180,873.00
17	SOR (Water supply & Sanitary works) Ch 1-20	Providing and fixing 6" x 2" or 6" x 3" C.I floor trap of the approved self cleaning design with a C.I screwed down grating without a vent arm complete with & i/c making requisite number of holes in walls, plinth & floor for pipe connections & makinggood cement concrete 1:2:4.	Each	81.00	2,042.43	165,436.83
18	SOR (Water supply & Sanitary works) Ch 1-26 (b)	Providing and fixing 24"x 18" bavelled edge mirror of belgium glass complete with 1/8" thick hard board and c.p screws fixed to wooden pleat. (Standard Pattern)	Sft	174.00	2,376.00	413,424.00
		VALVES				
19	SOR (Water supply & Sanitary works) Ch 6-5	Providing and fixing handle valves (China) 16bars or equivalent complete in all respects as approved by the engineer incharge.				
	ii	3/4 inch	Each	10.00	271.92	2,719.20
	i	1/2 inch	Each	8.00	200.42	1,603.36
20	SOR (Water supply & Sanitary works) Ch 6-6 (iv)	Providing, fixing and testing PPRC ball valve 32mm , (with unsoldered copper ball) made to B.B.S 1212.	Each	4.00	510.84	2,043.36
21	SOR (Water supply & Sanitary works) Ch 6-6 (v)	Providing, fixing and testing PPRC ball valve 40mm , (with unsoldered copper ball) made to B.B.S 1212.	Each	4.00	573.70	2,294.80

SR. NO.	ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (RS)	AMOUNT (RS)
22	SOR (Water supply & Sanitary works) Ch 4-1	Providing G.I Pipes, specials, and clamps etc. including fixing cutting & fitting complete with and l/c the cost of breaking through walls and roof, making good etc. Painting two coats after cleaning the pipe etc. with white zink paint with pigment to match the color of the building and testing with water to a pressure head of 200 feet and handling.				
	v	1-1/2" dia G.I pipe	Rft	120.00	188.97	22,676.40
	vi	2" dia G.I pipe	Rft	80.00	233.00	18,640.00
		1 no. Bore				
23	SOR (PHE works) Part-B (II) (O-1 (a))	Boring for tubewell in all water bearing soils from ground level upto 100 ft. (30.5 m) depth, including sinking and with drawing of casing pipe:- 3" (80 mm)	Rft	150.00	834.00	125,100.00
24	SOR (PHE works) Part-B (II) (O-9 (a))	Providing and installing P.V.C. strainers 'B' class of approved design quality and make including necessary sockets and solvent, etc. complete: 3" (80 mm)	Rft	80.00	430.00	34,400.00
25	SOR (PHE works) Part-B (II) (O-8 (b))	Supplying & fixing M.S bail plug.	Each	4.00	12,811.50	51,246.00
Total of SOR ITEMS						2,236,340.33

CONSTRUCTION OF ADMINISTRATION BLOCK FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

Bill of Quantities

PUBLIC HEALTH WORKS

Non-Scheduled Items

SR. NO.	ITEM NO.	DESCRIPTION	UNIT	QTY	RATE (RS)	AMOUNT (RS)
1	NSI	UPVC Multi Floor Trap (110x75mm) including strainer; making required number of connections; breaking concrete or masonry work & then making it good; etc. of approved make.	Each	14.00		
2	NSI	Providing, Fixing Dadex Class D or equivalent UPVC clean out with cover making requisite number of holes in walls, plinth or floor for pipe connection and making good the same as necessary to the structure complete including, rubber gasket and clamp.	Each	6.00		
3	NSI	Providing and fitting "P" trap:ii) 10 cm (4") glazed.	Each	50.00		
4		WATER SUPPLY PIPES AND FITTINGS				
		P/F Polypropylene Random copolymer (PPRC) PN-20 pipe with fusion / threaded joints including the cost of all specials/ accessories i.e elbow, bend, sockets etc. (Popular /Beta or equivalent) complete in all respect.				
	i	1 1/2" (40 mm) dia.	Rft	210.00		
	ii	1" (25 mm) dia.	Rft	300.00		
	iii	2" (50 mm) dia.	Rft	230.00		
	iv	3/4" (20 mm) dia.	Rft	660.00		
5		SOIL, WASTE, VENTILATING PIPES & FITTINGS				
		Providing , fixing and testing UPVC Nikasi type "B" with solution of same quality make including the cost of all specials/ accessories i.e elbow, bend, sockets etc. (Popular/Beta or equivalent) complete in all respect.				
	i	100 mm (4") dia.	Rft	580.00		
	ii	80 mm (3") dia.	Rft	510.00		
		GAS GESYER				
6	NSI	Providing and Fixing Sui Gas Geyser 50 gallon capacity comprising of internal tank of G.I sheet 14-SWG and External M.S sheet 22-SWG covering with proper foot rests dully enamel painted, 4" thick heigh density glass wool insulation with proper warranty with thermostat temperature gauge including fixing and making connection at site etc. complete in all respects as approved by the Engineer Incharge. (Ambassador/Firex/Exquire)	No	2.00		
7	NSI	Providing and fixing Gate valve 1 bars, RUV(itly) or equivalent complete in all respects as approved by the Engineer incharge.	Each	2.00		
8	NSI	Providing and fixing Gate valve 2 bars, RUV(itly) or equivalent complete in all respects as approved by the Engineer incharge.	Each	2.00		
9	NSI	Providing and fixing of 5.5 HP Centrifugal motor pump having 32mm suction and 100ft head (non-automatic) from approved manufacturer complete in all respect as per approval of Engineer Incharge.	Each	2.00		
		1 no. Bore				
10	NSI	Supplying and installing PVC blind pipe 'B' Class of approved design quality and make i/c necessary sockets etc. complete.				
	a	1¼" i/d (30 mm) 1 x 70	Rft	150.00		
	b	1½" i/d (40 mm) 1 x 40	Rft	150.00		
	c	2" i/d (50 mm) 1 x 50	Rft	150.00		
Total of Non SOR ITEMS						

CONSTRUCTION OF ADMINISTRATION BLOCK FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

Bill of Quantities

ELECTRICAL WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
1		DISTRIBUTION BOARDS				
		(General Description) Supply at site, fabrication, installation, testing and commissioning of Distribution Board (DB) , made of sheet steel 16 SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats of powder coated paint of approved colour, protection classification IP-44, totally enclosed indoor floor mounting cubicle type in free standing design, with hinged door, handle including cost of all auxiliaries, internal wiring, designation lables on MCCBS, grounding bar suitable for system Voltage 440 V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks wiring from breakers, brass cable glands, all accessories complete in all respects metion in BOQ or not required for performing completely. All incoming and outgoing breakers shall be accessible only by opening the front door having further M.S. sheet cover gaskets shall also be provided where necessary. Panel should be compeltely made in certified factory. ie PEL, Green T & D, Mazcorp engineering or equivalent as per instructions by engineer incharge				
		(General Description) All MCCBs shall be suitable to operate without any derating at 40°C ambient temperature and shall be of one make only. The sides of MDB shall also have louvers at bottom and top on sides of panel for hot air exhaust, wire mesh etc. The back of the panel shall be lockable door instead of bolted and shall conform to single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge				
i)		Main Distribution Board				
		INCOMMING				
a	ELECT SH-X(212)	Providing and fixing circuit breaker 800amp TP setting 500-800amp (XS-800NJ) on prepared board as required.	Per No.	1	90956	90,956
b	ELECT SH-XV(273)	Providing and fixing of current transformer of ration 300/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1686	5,058
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
e	ELECT SH-(208)	Providing and fixing circuit breaker.125,150,200,&225amp TP(XS-225NS) on prepared board as required	Per No.	1	25541	25,541
f	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	20	9261	185,220
ii)		DB-LIGHTING-GF-FF LS				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	2	9261	18,522
b	ELECT SH-XV(269)	Providing and fixing of current transformer of ration 60/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	6	1191	7,146
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	6	999	5,994
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	24	916	21,984
iii)		DB-LIGHTING-2FF LS				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	9	916	8,244
iv)		DB-LIGHTING-GF-FF-2FF RS				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	3	9261	27,783

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	9	1191	10,719
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	9	999	8,991
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	33	916	30,228
v)		DB-LIGHTING-GF-FF-2FF US				
		INCOMMING				
a	ELECT SH-X(206)	Providing and fixing circuit breaker 15,20,30,40,50, & 60 amps TP(XE-100CS(CB)) on prepared board as required.	Per No.	3	5521	16,563
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	9	1191	10,719
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	9	999	8,991
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	30	916	27,480
vi)		DB-POWER-GF LS				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	40	916	36,640
vii)		DB-POWER-GF RS				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	22	916	20,152
viii)		DB-POWER-GF US				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	19	916	17,404
ix)		DB-POWER-FF LS-RS				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	2	9261	18,522
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	6	1191	7,146
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	6	999	5,994
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	46	916	42,136
x)		DB-POWER-FF US				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	6	916	5,496
xi)		DB-POWER-2FF LS				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	15	916	13,740
xii)		DB-POWER-2FF US				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	14	916	12,824
xiii)		DB-POWER-2FF RS				
		INCOMMING				
a	ELECT SH-X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
b	ELECT SH-XV(270)	Providing and fixing of current transformer of ration 100/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
c	ELECT SH-XVI(285)	Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
d	ELECT SH-X(203)	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	27	916	24,732
2		WIRING IN CONCEALED CONDUITS				
i)		Distribution board to Switch				
		(General Description) Wiring of light circuit from Distribution Board to switch,with Three nos. single core 2.5 Sqmm PVC insulated 450/750 volts grade stranded copper conductor cables in concealed PVC conduits (conduits partly shared) including PVC conduit, and conduit accessories etc. Cable should be of Newage, Fast cable, Universal cables or equivalent and conduit should be of Dadex, Turkplast, Easyfit or equivalent as per instructions by engineer incharge				
a	ELECT SH-I(24)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	4252	294.00	1,250,088
ii)		Switch to light point				
		(General Description) Wiring from switch to light or fan point with 3 nos. single core 1.5 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories,etc.(conduit partly shared).				
a	ELECT SH-II(124)	Wiring of Light and fan point with 3.29 Pvc insulated wire in 20mm (3/4") dia PVC conduit recessed in the wall or column as required.	Per/Point	939	1,130.00	1,061,070
		Point to point wiring				
b	ELECT SH-I(22)	Providing and laying (main or Sub Main Pvc insulated with 3-3.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	5724	220.00	1,259,280
iii)		Switch to Switch				
		(General Description) Wiring from switch to switch with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories,etc.(conduit partly shared).				
a	ELECT SH-I(24)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	1355	294.00	398,370
iv)		Distribution board to General Purpose (5A/13A) socket				
		(General Description) Wiring of circuit from Distribution Board to 5A/13A ,230Volts with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts graded , 2&3 pin switched socket, stranded copper conductor cables in concealed PVC conduit, including conduit accessories, etc(conduit partly shared)				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
a	ELECT SH-I(24)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	4252	294.00	1,250,088
v)		Socket to Socket				
		(General Description) Wiring from 5 Amps, 2&3 pin socket to socket with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts grade solid or stanerd copper conductor cables in concealed PVC conduit including PVC conduit,Conduit accessories, etc complete. (conduit partly shared)				
a	ELECT SH-I(24)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	4663	294.00	1,370,922
vi)		Distribution board to 20Amps socket				
		(General Description) Wiring of circuit from distribution board to 20A, 230Volts, DP switch with 3 or 5 nos. single core 6 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories, etc (conduit partly shared for A/Cs)				
a	ELECT SH-I(26)	Providing and laying (main or Sub Main Pvc insulated with 3-7.44 copper conductor in 1" dia PVC conduit recessed in the wall or column as required.	Rmtr	3154	468.00	1,476,072
b	ELECT SH-I(40)	Providing and laying (main or Sub Main Pvc insulated with 4-7.44 copper conductor in 1-1/2" dia PVC conduit recessed in the wall or column as required.	Rmtr	175	613.00	107,275
Total of SOR Items						9,017,735

CONSTRUCTION OF ADMIN BLOCK FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

Bill of Quantities

ELECTRICAL WORKS

Non-Scheduled Items

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
1		DISTRIBUTION BOARDS				
		(General Description) Supply at site, fabrication, installation, testing and commissioning of Distribution Board (DB) , made of sheet steel 16 SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats of powder coated paint of approved colour, protection classification IP-44, totally enclosed indoor floor mounting cubicle type in free standing design, with hinged door, handle including cost of all auxiliaries, internal wiring, designation lables on MCCBS, grounding bar suitable for system Voltage 440V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks wiring from breakers, brass cable glands, all accessories complete in all respects metion in BOQ or not required for performing completely. All incoming and outgoing breakers shall be accessible only by opening the front door having further M.S. sheet cover gaskets shall also be provided where necessary. Panel should be compeltely made in certified factory. ie PEL, Green T & D, Mazcorp engineeering or equivalent as per instructions by engineer inchar				
		(General Description) All MCCBs shall be suitable to operate without any derating at 40°C ambient temperature and shall be of one make only. The sides of MDB shall also have louvers at bottom and top on sides of panel for hot air exhaust, wire mesh etc. The back of the panel shall be lockable door instead of bolted and shall conform to single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge				
1)		Main Distribution Board				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
		05 Nos.copper bus bars 800 Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX				
		02 Nos Phase Rotation/failure, (adjustable under/over voltage threshold),50/60Hz, 0.1~10 Sec Delay, 380~500V				
	NSI	02 No Thermostatically controlled 230 Volts robust exhaust fans 6"/8" dia. to be installed on front of MDB for hot air exhaust including cost of thermostat ON-OFF switches wire mesh and all necessary accessories / wiring, complete in all respects.	Job	1		
2)		DB-LIGHTING GF-FF- 2FF US				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 40Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	3		
3)		DB-LIGHTING 2FF LS				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 40Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
4)		DB-LIGHTING GF-FF LS				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
	NSI	05 Nos.copper bus bars 50Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	2		
5)		<u>DB-LIGHTING GF-FF-2FF RS</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 50Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	3		
6)		<u>DB-POWER FF-US</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 60Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
7)		<u>DB-POWER 2FF-LS</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 60Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
8)		<u>DB-POWER 2FF-US</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 60Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
9)		<u>DB-POWER GF-RS</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 100 Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
10)		<u>DB-POWER FF-LS-RS</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 100 Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	2		
11)		<u>DB-POWER 2FF-RS</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 100 Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
12)		<u>DB-POWER GF-LS</u>				
		INCOMING				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 125 Ampere,three phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
		Each Bus bar is 300*12*2 mm.				
2		LIGHT FIXTURES				
		(General Description) Supply, installation, testing and commissioning of following light fittings, ceiling, recessed,wall mounted as per specified fixture. Complete with internal wiring, Grounding terminal , driver complete in all respects. Lights should be of Phillips, ledvance or equivalent				
i)	NSI	2*2 Panel Light	No			

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
ii)	NSI	20 Watt LED Light Fixture surface/recessed mounted, IP-22 rated	No.	475		
iii)	NSI	15 Watt (White) LED Light Fixture surface/recessed mounted, IP-22 rated	No.	205		
iv)	NSI	10 Watt LED Light Fixture surface/recessed mounted, IP-22 rated	No.	124		
v)	NSI	Emergency Exit Light	No.	6		
3		MISCELLANEOUS FITTINGS				
		(General Description) Supply, installation, testing & commissioning of Ceiling/ Exhaust fan. The ceiling/exhaust fan shall comprise circular fan metallic/ plastic body, metallic fan blades, down rod (if necessary) of suitable dia & length, AC capacitor, internal wiring, terminals all installation & operational accessories as per tender specifications, as per site requirements and as per instructions by the Engineer. make GFC, Pak Fan, Royal Fan or approved equivalent.				
i)	NSI	12 " outer dia exhaust fan with plastic body,fan blades and louvers	No.	53		
ii)	NSI	Providing and Fixing of brass ceiling fan 56" (good quality)	No.	117		
4		WIRING ACCESSORIES				
		(General Description) Supply at site, installation, testing and commissioning of the following wiring accessories, complete in all respects. Made of TJ, Legrand or approved equivalent.				
i)	NSI	10 Amps, 250Volts one way, One gang light control switches including appropriate size concealed Plastic back box.	No.	3		
ii)	NSI	10 Amps, 250Volts one way, Two gang light control switches including appropriate size concealed Plastic back box.	No.	58		
iii)	NSI	10 Amps, 250Volts one way, Three gang light control switches including appropriate size concealed Plastic back box.	No.	42		
iv)	NSI	10 Amps, 250Volts one way, Four gang light control switches including appropriate size concealed Plastic back box.	No.	25		
iv)	NSI	10 Amps, 250Volts one way, Five gang light control switches including appropriate size concealed Plastic back box.	No.	29		
v)	NSI	10 Amps, 250Volts one way, Six gang light control switches including appropriate size concealed Plastic back box.	No.	14		
vi)	NSI	15 Amps, 250Volts, universal 5 in 1 switched socket unit including appropriate size Plastic back box.	No.	765		
vii)	NSI	20 Amps Double Pole(DP) switch with neon indication lamp complete including appropriate size Plastic back box.	No.	69		
xi)	NSI	Fan Dimmer 250 watt with switch including appropriate size Plastic back box. with all associated accessories.	No.	117		
x)	NSI	Appropriate size of plastic body fan box and ceiling fan rod 24" in length	Nos	117		
xi)	NSI	MS BAR for hanging Ceiling fan	Nos	117		
5		LT CABLES				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
		(General Description) Supply at site, installation, testing and commissioning of PVC insulated armoured copper conductor cable 600 / 1000 Volt grade (or otherwise mentioned in cable description) in prelaid conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the Engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed. Cable should be of Newage, Fast cable, Universal cables or equivalent and conduit should be of Dadex, Turkplast, Easyfit or equivalent as per instructions by engineer incharge				
i)	NSI	Providing and laying (main or Sub Main) Pvc insulated, Pvc sheathed with 4 core copper conductor 600/1000 volts size 6mm ²	Rmtr	210		
ii)	NSI	Providing and laying (Main or Sub Main) Pvc insulated, Pvc sheathed with 4 core copper conductor 600/1000 volts size 10mm ²	Rmtr	80		
iii)	NSI	Providing and laying (main or Sub Main) Pvc insulated, Pvc sheathed with 4 core copper conductor 600/1000 volts size 16mm ²	Rmtr	1200		
iv)	NSI	Providing and laying (main or Sub Main) Pvc insulated, Pvc sheathed with 4 core copper conductor 600/1000 volts size 25mm ²	Rmtr	420		
v)	NSI	Providing and laying (main or Sub Main) Pvc insulated, Pvc sheathed with 4 core copper conductor 600/1000 volts size 35mm ²	Rmtr	150		
vi)	NSI	Providing and laying (main or Sub Main) Pvc insulated, Pvc sheathed with 4 core copper conductor 600/1000 volts size 240mm ²	Rmtr	122		
6		GROUNDING SYSTEM				
i)		GROUNDING cable				
a	NSI	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):- 25 mm sq (19/0.052")	rmtr	50		
b	NSI	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):- 6 mm sq (7/0.044")	rmtr	565		
c	NSI	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):- 16 mm sq (7/0.064")	rmtr	550		
d	NSI	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):- 120 mm sq (7/0.064")	rmtr	95		
ii)		Plate type earthing				
	NSI	Providing & fixing of Plate type Earthing commpressed with execveted hole 6"up 63 feet,GI pipe 2"(50mm)with Tees , Sockets , Endcap of 60 (RFT) Copper Plate of 1/2"x 2"x 48", 2x 70mmsq S/Core copper bare conductor 125 (Rft) Earth Connection Point of 1200 x 50 x 50mm (L x W x T) Inspection Pit of 300 x 300 x 450 mm (L x W x D) completed with all respect	No.	1		
iii)		Grounding Connection Point				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
	NSI	Supply of Grounding connecting points consisting of copper plate 300mm long x50mm wide x 6mm thick to be installed, complete with fixing arrangement, brass nuts bolts, washers, lugs, 12.5mm dia. holes to facilitate connections of Incoming copper strips / copper conductors.	Nos.	1		
iv)		Testing and commissioning				
	NSI	Testing and commissioning of the earthing system in the presence of site engineer with electronic devices such as megger etc, making so report with after approximating 3 time testing and the grounding ohm must be less than or upto 3 ohms	Nos.	1		
7		CIVIL WORKS				
i)		Trench (for LT Cable)				
	NSI	Labour for excavation and refilling of trench 12" wide, 24" deep 9" sand compaction below and above in preinstalled PVC pipes, ramming watering all necessary material, labour etc, complete in all respect. Actual length of the trench shall be as per site condition and paid accordingly however approximate length of trench is given.	R.Mtr	100		
ii)		Manhole For LT Cable Pulling (If Required)				
	NSI	Construction of manholes to facilitate pulling of cables in trench or conduit as shown on drawing, manholes shall be of the size 24" x 24" x 30" deep with 9" thick wall with cement mortar, internal plaster 1:4, 100mm thick RCC cover for manhole, including cost of all accessories / materials, complete in all respects. (Tentative number of manholes have been provided, however payment shall be made as per actual and as per quantity requirement)	Nos.	1		
8		CCTV System				
i		Camera Cable				
	NSI	Supply, installation, Testing and commissioning of CAT 6a UTP CABLE IN PVC PIPE Ø 1"; MEASUREMENT IN METERS complete in all respects.including cost of conduit and its accesories installing arrangement, making juries in wall and repairment of wall. Made of D-Link or equivalent approved by engineer incharge	R.Mtr	600		
9		Air Conditioning				
		(General Description) Providing, shifting, fixing, testing, commissioning, adjusting and balancing of standard (Cool only) DC inverter technology air conditioning units, including indoor evaporating and out door condensing unit, the indoor units wall mounted of capacities as specified below, complete with factory charged refrigerant, piping insulation including condensate copper piping connection, between indoor/outdoor units conduiting and any additional charge of refrigerant accessories, and Drain piping upto nearest drain water line included in these rates making the job complete in all respect. AC should be of Haier,dawlance, gree or equivalent, copper piping should be of muller, trox and insulation of Durkflex or equivalent, Drain pipe should be 3/4" dia pvc pipeof master, turkplast or equivalent as approved by engineer incharge				
		(General Description) 1/4 and 1/2 copper piping shouls be used till 1.5 ton AC and 5/8 and 3/8 piping should be used for 2 ton AC and 3/8 and 1/2 for 4 ton AC between indoor and outdoor unit.				
		(General Description) The AC Unit should maintain approx 11 BTU per cubic feet plus addition of 3000BTU in the total amount for persons and devices				
ii)		Copper pipe and control cable				
a	NSI	Supply ,installation testing and commissioning of Copper piping 1/2 & 1/4 insulation and control wire including making jharies and repairing of surface with all neccessary item job must be complete in all respect	RFT	1500		
b	NSI	Supply ,installation testing and commissioning of Copper piping 5/8 & 3/8 with insulation and control wire including making jharies and repairing of surface with all neccessary item job must be complete in all respect	RFT	1500		

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
10		<u>Fire Alarm System</u>				
		(General Description) Supply, installation, testing and commissioning of following items as per drawings, specifications, & instructions of the Engineer, complete in all respect, all item should be of Gent by honeywell, ETON uk or approved equivalent as per instructions by the Engineer as required.				
	i)	<u>Manual Call Point</u>				
	NSI	Supply, install testing and commsiong of manual call point RESET type with allied components with full functionality as per specification of manufacturer / drawing with proper staff and tools and plants etc.Input Source Zone signal Address Coding dip switch Operating Voltage 26V DC Alarm Current 6mA Quiescent Current 850µA Ambient Temperature 0°C ~ +50°C Material Fire-proof plastic	Each	6		
	ii)	<u>Smoke Detector</u>				
	NSI	Supply, install testing and commsiong of Addressable Optical Smoke Detectors incorporating a with in the housing of the detector. Sensing of the detector shall be adjustable via software between 0-90 seconds.Address Coding Binary Alarm Current DC26V 6mA Standby Current DC26V 850µA Sensitivity Setting Comply to EN54 Ambient Temperature 0°C ~ +50°C Material Fire-proof plastic	Each	163		
	iii)	<u>Sounder</u>				
	NSI	Supply, install testing and commsiong of Intelligent analogue addressable Loop powered sounder with flasher and red body and wall mounting base.Input Source Zone signal Address Coding Binary dip switch Operating Voltage 26.5V DC Standby Current Under 850µA Alarm Current Under 8mA Sound Output 90 ±4dB at 1 meter Sounder Output 2.3~3.4KHz Ingress Protection IP65 Ambient Temperature -20°C ~ +50°C Ambient Humidity 10% ~ 95% Material Fire-proof plastic	Each	6		
	iv)	<u>FACP</u>				
	NSI	Supply, install, testing and commsiong of Addressable FACP. Each loop can connect up to 250 addressable devices. Maximum networking are 32 loops and total addressable points are 8000. Large LCD screen (40 x 15 lines) allows more events to be displayed on the same screen. Power 220V AC 50/60Hz *Others also available Battery Capacity 24V DC 4Ah Charging Voltage, Current 26V DC 100~400mA *With auto adjustment function Zone Voltage, Current 26.5V DC 340mA System Capacity 250 devices/1 loop *Expandable for site requirement Exterior Resistance Round-trip under 40Ω Transmitting Method Digital series transmitting Accumulation Time 0~40 seconds Main Sound 85dB @1M Material 1.6mm steel plate	Each	1		
	v)	<u>Cable</u>				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
	NSI	Supply, install testing and commissioning of 2 x 2.5 mmsq shielded drain wire, 30 minutes fire resistance, red, LPCB approved, BS 7629-1/2008, BS 5839-1 standard in 25 mm dia pvc conduit complete in all respects including cost of conduit and its accessories installing arrangement, making juries in wall and repairment of wall. (Newage, Pakistan Cable, Fast or approved equivalent). Conduit should be of Dadex, Turkplast, Easyfit or equivalent as per instructions by engineer incharge.	Rmtr	800		
vi)		<u>Programming, Testing and Commissioning</u>				
	NSI	Programming, Testing and Commissioning of Complete system by authorized certified company complete in all respects as per instructions of the Engineer.	Job	1		
vii)		<u>Fire Extinguishers</u>				
	NSI	Supply & installation of 1 x 6kg DCP CO2 Fire Extinguishers installed as per instructions of Client, complete with wall hanging and mounting arrangement complete in all respects. Complete in all respect as per instructions by site engineer	Nos.	6		
Total of Non-SOR Items						

**CONSTRUCTION OF BOOK SHOP AND TUCK SHOPS FOR THE SHAIKH AYAZ
UNIVERSITY SHIKARPUR**

BILL OF QUANTITIES

SUMMARY OF COST

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	DESCRIPTION	AMOUNT
1.	CIVIL WORKS	
a	Cost of Schedule Items	2,825,038
b	Add/ Deduct _____ % above/ below on Scheduled Items	
c	Cost of Non-Schedule Items	
d	Difference of Cost of Material	984,218
	TOTAL OF CIVIL WORKS - A	
2.	ELECTRIC WORKS	
a	Cost of Schedule Items	142,872
b	Add/ Deduct _____ % above/ below on Scheduled Items	
c	Cost of Non-Schedule Items	
	TOTAL OF ELECTRICAL WORKS - B	
	TOTAL (A+B)	
	5% SST	
	GRAND TOTAL WITH SST	

Amount in Words:

Contractor

Client

CONSTRUCTION OF BOOK SHOP AND TUCK SHOPS FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

BILL OF QUANTITIES

CIVIL WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
1	C-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 in Ordinary Soil.	%0Cft	6909.20	3176.25	21,945.36
2	C/1-16	Earth for slush or Daldal including dewatering.	%0Cft	6909.20	2420.00	16,720.27
3	C-18/92	Providing Anti -termmite treatment by spraying /sprinkling /spreading Neptachlar 0.5% Emulsion as an overall pre - construction treatment in slab type construction under the slab and along attached perches or entrances etc, complete as per directions of Engineer Incharge.	P.Sft	5379.79	9.74	52,399.13
4	C-4/5(i)	Cement concrete plain including placing compacting, finishing and curing, complete (including screening and washing at stone aggregate without for all shuttering.(Mix 1:4:8)	%Cft	415.54	11288.75	46,908.85
5	C-4/6 a-i	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2 : 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Foundation)	P.Cft	960.84	337.00	323,804.34
6	C-4/6 a-i	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2 : 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (Ground Floor)	P.Cft	1244.90	337.00	419,532.17
7	C-4/6 a-i +6 (d)	R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2 : 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge. (First Floor)	P.Cft	234.28	349.10	81,787.58
8	C-4/6 a-ii	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) UPL	P.Cft	260.16	349.00	90,794.53
9	C-4/6 a-ii	Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) G.F	P.Cft	315.00	349.00	109,935.00
10	C-5/4-I(e)	Pacca brick work in foundation and plinth in cement sand mortar 1:6.	%Cft	2400.65	11948.36	286,837.80
11	C-1/21	Filling, watering and ramming earth in floors with surplus earth from foundation lead upto one chain and lift upto 5 feet.	%0Cft	1972.71	1512.50	2,983.73
12	C-1/22	Filling, watering and ramming earth under floor with new earth (Excavated from outside) lead upto one chain and lift upto 5 feet.	%0Cft	12162.19	3630.00	44,148.77
13	C-5/5-I(d)	Pacca brick work in Ground Floor cement, sand mortar Ratio 1:5	%Cft	1283.91	12902.08	165,650.61
14	C-9/12(b)	Cement plaster 1:5 upto 12' height:- b) ½" (13 mm) thick. (Internal) Ground Floor	%Sft	2211.00	2241.80	49,566.20
15	C-9/12(c)	Cement plaster 1:5 upto 12' height:- b) ¾" (20 mm) thick. (Internal) Ground Floor	%Sft	886.50	2678.50	23,744.90
16	C-9/11(c)	Cement plaster 1:4 Ground Floor upto 12' height:- c) ¾" (20 mm) thick. (External)	%Sft	1491.06	3015.76	44,966.87
17	C-9/11(c)+29	Cement plaster 1:4 First Floor upto 12' height:- c) ¾" (20 mm) thick. (External)	%Sft	1428.00	3156.73	45,078.10
18	C-9/10(a)	Cement plaster 1:3 upto 12' height (a) 3/8" thick (Slab Soffit)	%Sft	1476.43	2225.12	32,852.34
19	C-9/24(c)	Distempering:- New surface:- three coats	%Sft	4573.93	1079.65	49,382.44
20	C-9/(38.A+38 .B)	Preparing the surface and painting with weather coat l/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make.:- three coats	%Sft	2365.75	2567.95	60,751.29

21	C-5/29	Supplying and filling sand under floor and plugging in walls.	%Cft	530.02	1141.25	6,048.84
22	C-4/2	Dry rammed brick or stone ballast 1 1/2" to 2" gauge.	%Cft	530.02	3327.50	17,636.38
23	C-4/5(f)	Cement concrete plain including placing compacting, finishing and curing, complete (including screening and washing at stone aggregate without for all shuttering.(Mix 1:2:4)	%Cft	268.22	14429.25	38,702.38
24	C-8/16-c	Providing and laying 2" thick topping cement concrete (1:2:4) including Surface finishing and dividing into panels:	%Sft	320.75	3275.50	10,506.10
25	C-7/5	Single layer of tiles 9" x4 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. Bitumen coating sand blinded.	%Sft	1345.44	5628.97	75,734.43
26	C-7/18	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	5.00	358.68	1,793.40
27	C-8/16-a	Providing and laying 1" thick topping cement concrete (1:2:4) including Surface finishing and dividing into panels:(a) 1" thick Ground Floor.	%Sft	834.28	1915.13	15,977.57
28	C-8/55	Laying mosaic topping 1/2" thick in pannels of approved any pattern of one part of white cement to two parts of marble chips of required shade and size and of approved pigment in the ratio of 1: 12 of cement used in topping including rubbing and polishing etc. complete. Ground Floor	%Sft	834.28	12316.49	102,754.17
29	C-8/41	Mosaic dado or skirting one apart of white cement and two parts of marble chips laid over 1/2" thick plaster 1:3 complete with finishing 1/2"thick.. Ground Floor	%Sft	75.16	11174.93	8,398.80
30	C-8/75	Providing & fixing glass strips 4 mm for flooring upto 1" depth l/c fixing in flooring with cement in specified pattern & design.	P.Sft	237.54	11.16	2,651
31	C-10/59	First class Sheesham wood wrought framed and fixed in place including chowkhats hold fasts, tower bolts, chocks, cleats, handles card with hooks and cost of nails and screws, etc. panelled or panelled and glazed or fully glazed 1-1/2" thick.	P.Sft	91.00	662.24	60,263.84
32	C-10/19-(A)-ii	Providing and fixing sliding bolt to doors.Iron sliding bolt 12" long.(a) Panelled or panelled and glazed or fully glazed 2" thick.	Each	4.00	222.23	888.92
33	C-10/21	Providing and fixing, approved quality mortice lock.	Each	4.00	1786.13	7,144.52
34	C-11/5-(c)	Preparing surface and painting of doors and windows any type, (including edges).Three Coats.	%Sft	182.00	2116.41	3,851.87
35	C-18/84(a)	Supplying & fixing in position Aluminium channels framing for slidding windows & ventilators of Alcop made with 5 mm thick tinted glass glazing (Belgium) & Aluminium fly screen l/c handles stoppers & locking arrangement etc. complete. (a) Deluxe model (White).	P.Sft	162.00	1592.69	258,015.78
36	C-11/ 9	Bitumen coating to plastered or cement concrete surface.	%Sft	234.31	778.09	1,823.16
37	C-7/38	Providing and laying single per layer of polythene sheet 0.13 mm thick for water proffing as per specification and instructions of Engineer incharge.	P.Sft	2925.19	10.70	31,299.56
38	C-9/34	Extra labour rate for making grooves of 1" x 1/4" or 3/4" x 1/2" plastered surface with true edges both vertically and horizontally with uniform depth and, with groove base smoothly finished etc. complete as per instruction of Engineer Incharge.	P.Rft	420.00	7.71	3,238
39	C-4/7(ii)	Extra cost due to use of Hi Bond Pre-packaged Polymer Modified mortar (DHPMM) as an admixture in concrete mix for increasing durability, to be used in concreting, flooring, block/ brick/ stone masonry or plastering as % by weight of cement.	P.Kg	380.00	459.80	174,724.00
40	C-8/61	Providing and laying HALA or pattern tiles glazed 6" x 6" x 1/4" on floor or wall facing in required colour and pattern of STILE specification jointed in white cement and pigment over a base of 1:2 grey cement mortar 3/4" thick including washing and filling of joints with slurry of white cement and pigment in desired shape with finishing, cleaning and cost of wax polish etc. complete including cutting tiles to proper profile.	%Sft	11.00	47651.56	5,242
41	C-4/11	Providing and fixing ornamental cement jalli 2" thick (1 : 2 : 4) without steel.	P.Sft	126.33	226.02	28,553.56
Total of SOR Items						2,825,038.41

CONSTRUCTION OF BOOK SHOP AND TUCK SHOPS FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

BILL OF QUANTITIES

CIVIL WORKS

Non-Scheduled Items

Sr. No.	Item No.	Description of Item	Unit	Qty	Rate	Amount
1	NSI	Providing and laying hard grade ribbed deformed (minimum yeild point 60,000 psi) reinforcement bars of all sizes with & including the cost of straightening, cutting, bending, binding, wastage, overlaps other than those shown on drawings, steel chairs, precast chairs, removal of rust, placing in position on cement concrete complete in all respect Amreli Steel, Agha Steel, Razaque Steel or equivalent approved by engineer incharge.	P.Kg	7844.45		
2	NSI	Providing and laying Stone filling of size upto 1 feet for foundation made of selected granular fill material (Mixture of 70% Stone and 30% River sand of approved quality and grade) including placing, mixing, spreading and compaction of sub-base material to required depth in layers not more then 6" thick, grade to achieve 95% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as approved by the Engineer incharge.	P.Cft	991.06		
3	NSI	Providing and laying granular filling for foundation made of selected granular fill material (Mixture of 70% gravel/ hard core and 30% River sand of approved quality and grade) including placing, mixing, spreading and compaction of sub-base material to required depth in layers not more then 6" thick, grade to achieve 95% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as approved by the Engineer incharge.	P.Cft	991.06		
4	NSI	Providing and applying wall putty (Kansai or equivalent) two coats on plastered surface to prepare the surface even and smooth complete in all respect as approved and directed by the Engineer Incharge.	P.Sft	6195.00		
5	NSI	Providing and fixing 3/4" thick Boticina Marble full width area above 2 Sft laid in white cement matching pigment 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment,including Polished and making gola on exposed edges complete in all respect as approved by the Engineer/ Incharge.(Stairs, Podium, Vanity)	P.Sft	1304.26		
6	NSI	Providing & laying face work by using gutka 9" x 2-1/4"x2-1/4" of approved quality in cement sand surkhi mortar (1:1:3) i/c back filling 3/8" thick with 1:4 cement sand mortar making trapezoidal groove / set back of 1/4" depth during fresh masonry work laid with M.S flat for wall ties, one side embedded in the masonry work and other side in gutka at 12" center to center vertically and 36" center to center horizontally, racking out joints, curing and its removal, including carriage complete (contractor shall prepare samples at site) as approved by the engineer incharge.	P.Sft	553.31		
7	NSI	Providing and fixing SS railing 2'-6" height, 2" dia SS pole 16 SWG at 4 ft c/c, 2" dia SS 16 SWG pipe on top, 3 no. 3/4" dia SS 16 SWG horizontal pipe from pole to pole, buffing and polishing complete in all respect including the cost of base plate, base plate cap, rawl bolt etc. as per approval of Engineer/ Incharge.	P.Rft	34.92		
8	NSI	Providing and fixing metal (chicken mesh) mesh of 16 guage fixed with nails for concrete and bricks joint complete in all respect and as approved and directed by the Engineer Incharge.	P.Sft	453.00		
9	NSI	Providing and fixing Stainless Steel (24 SWG) Letters with CNC laser cutting i/c all hardware required complete in all respect as per drawings and direction of Engineer In-charge.	Each	24.00		
Total of Non SOR Items						

CONSTRUCTION OF BOOK SHOP AND TUCK SHOPS FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR					
BILL OF QUANTITIES					
CIVIL WORKS					
Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh					
Note: Difference in cost of material is allowed as per Govt. Notification dated: 28-10-2022 issued by standing rates of committee Govt. Sindh vide NO.SO(Admn-I)P&D/12(165)/2018 The rate of difference in Cost of materials as approved by standing rates of committee Govt. Sindh will be paid only.					
Sr. No.	Item	Quantity	Unit	Rate taken from SoR notification dated 28-10-2022	Amount (Rs.)
1	Cement (Bags)	896.18	P.Bags	650.00	582,517
2	Bricks (No.)	49741.45	%0No.	6000.00	298,449
3	Hill Sand (Cft)	3585.21	%Cft	736.00	26,387
4	Stone Ballast (Cft)	3921.73	%Cft	1960.00	76,866
Total of Difference of Material Cost					984,218

Contractor Sign & Stamp

CONSTRUCTION OF BOOK SHOP AND TUCK SHOPS FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

BILL OF QUANTITIES

ELECTRICAL WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
1		DISTRIBUTION BOARDS				
		(General Description) Supply at site, fabrication, installation, testing and commissioning of Distribution Board (DB) , made of sheet steel 16 SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats of powder coated paint of approved colour, protection classification IP-44, totally enclosed indoor floor mounting cubicle type in free standing design, with hinged door, handle including cost of all auxiliaries, internal wiring, designation lables on MCCBS, grounding bar suitable for system Voltage 440 V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks wiring from breakers, brass cable glands, all accessories complete in all respects metion in BOQ or not required for performing completely. All incoming and outgoing breakers shall be accessible only by opening the front door having further M.S. sheet cover gaskets shall also be provided where necessary. Panel should be competely made in certified factory. ie PEL, Green T & D, Mazcorp enginring or equivalent as per instructions by engineer inchargege				
		(General Description) All MCCBs shall be suitable to operate without any derating at 40°C ambient temperature and shall be of one make only. The sides of MDB shall also have louvers at bottom and top on sides of panel for hot air exhaust, wire mesh etc. The back of the panel shall be lockable door instead of bolted and shall conform to single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge				
	j)	DISTRIBUTION BOARD DB-FS LIBRARY				
		INCOMING				
	a	ELECT SH-X(204) Providing and fixing circuit breaker 6,10,15,20,30,40,50, & 63 amps DP(TB-5S) on prepared board as required.	Per No.	1	2456	2,456
	b	ELECT SH-XV(269) Providing and fixing of current transformer of ration 60/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
	c	ELECT SH-XVI(285) Providing and fixing voltmeter size 96/96mm 500 volt as required and as instruction of EI.	Per No.	3	999	2,997
		OUTGOING				
	d	ELECT SH-X(203) Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps SP(TB-5S) on prepared board as required.	Per No.	8	916	7,328
2		WIRING IN CONCEALED CONDUITS				
	i)	Distribution board to Switch				
		(General Description) Wiring of light circuit from Distribution Board to switch,with Three nos. single core 2.5 Sqmm PVC insulated 450/750 volts grade stranded copper conductor cables in concealed PVC conduits (conduits partly shared) including PVC conduit, and conduit accessories etc. Cable should be of Newage, Fast cable, Universal cables or equivalent and conduit should be of Dadex, Turkplast, Easyfit or equivalent as per instructions by engineer incharge				
	a	ELECT SH-I(24) Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	60	294.00	17,640
	ii)	Switch to light point				
		(General Description) Wiring from switch to light or fan point with 3 nos. single core 1.5 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories,etc.(conduit partly shared).				
	a	ELECT SH-II(124) Wiring of Light and fan point with 3.29 Pvc insulated wire in 20mm (3/4") dia PVC conduit recessed in the wall or column as required.	Per/Point	19	1,130.00	21,470
		Point to point wiring				
	b	ELECT SH-I(22) Providing and laying (main or Sub Main Pvc insulated with 3-3.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	114	220.00	25,080
	iii)	Switch to Switch				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
		(General Description) Wiring from switch to switch with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories, etc. (conduit partly shared).				
a	ELECT SH-I(24)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	60	294.00	17,640
iv)		Distribution board to General Purpose (5A/13A) socket				
		(General Description) Wiring of circuit from Distribution Board to 5A/13A ,230Volts with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts graded , 2&3 pin switched socket, stranded copper conductor cables in concealed PVC conduit, including conduit accessories, etc (conduit partly shared)				
a	ELECT SH-I(24)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	120	294.00	35,280
v)		Socket to Socket				
		(General Description) Wiring from 5 Amps, 2&3 pin socket to socket with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts grade solid or stanerd copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories, etc complete. (conduit partly shared)				
a	ELECT SH-I(24)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	Rmtr	32	294.00	9,408
Total of SOR Items						142,872

CONSTRUCTION OF BOOK SHOP AND TUCK SHOPS FOR THE SHAIKH AYAZ UNIVERSITY SHIKARPUR

BILL OF QUANTITIES

ELECTRICAL WORKS

Non-Scheduled Items

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
1		<u>DISTRIBUTION BOARDS</u>				
		(General Description) Supply at site, fabrication, installation, testing and commissioning of Distribution Board (DB) , made of sheet steel 16 SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats of powder coated paint of approved colour, protection classification IP-44, totally enclosed indoor floor mounting cubicle type in free standing design, with hinged door, handle including cost of all auxiliaries, internal wiring, designation lables on MCCBS, grounding bar suitable for system Voltage 440V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks wiring from breakers, brass cable glands, all accessories complete in all respects metion in BOQ or not required for performing completely. All incoming and outgoing breakers shall be accessible only by opening the front door having further M.S. sheet cover gaskets shall also be provided where necessary. Panel should be compeltely made in certified factory. ie PEL, Green T & D, Mazcorp engineering or equivalent as per instructions by engineer incharge				
		(General Description) All MCCBs shall be suitable to operate without any derating at 40°C ambient temperature and shall be of one make only. The sides of MDB shall also have louvers at bottom and top on sides of panel for hot air exhaust, wire mesh etc. The back of the panel shall be lockable door instead of bolted and shall conform to single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge				
	i)	<u>DISTRIBUTION BOARD DB-AC DIGITAL LIBRARY AND BS INCOMING</u>				
		03 No Digital Ammeter scaled 0-500 Amps of appropriate sizes.				
		03 Nos. R-Y-B indication lamps.				
	NSI	05 Nos.copper bus bars 32 Ampere,two phase,Earth and Netural for distrubitions with appropriate size DB BOX	Job	1		
2		<u>LIGHT FIXTURES</u>				
		(General Description) Supply, installation, testing and commissioning of following light fittings, ceiling, recessed,wall mounted as per specified fixture. Complete with internal wiring, Grounding terminal , driver complete in all respects. Lights should be of Phillips, ledvance or equivalent				
	i)	20 Watt LED Light Fixture surface/recessed mounted, IP-22 rated	No.	18		
	ii)	15 Watt (White) LED Light Fixture surface/recessed mounted, IP-22 rated	No.	5		
3		<u>MISCELLANEOUS FITTINGS</u>				
		(General Description) Supply, installation, testing & commissioning of Ceiling/ Exhaust fan. The ceiling/exhaust fan shall comprise circular fan metallic/ plastic body, metallic fan blades, down rod (if necessary) of suitable dia & length, AC capacitor, internal wiring, terminals all installation & operational accessories as per tender specifications, as per site requirements and as per instructions by the Engineer. make GFC, Pak Fan, Royal Fan or approved equivalent.				
	i)	Providing and Fixing of brass ceiling fan 56" (good quality)	No.	5		
4		<u>WIRING ACCESSORIES</u>				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
		(General Description) Supply at site, installation, testing and commissioning of the following wiring accessories, complete in all respects. Made of TJ, Legrand or approved equivalent.				
i)	NSI	10 Amps, 250Volts one way, Three gang light control switches including appropriate size concealed Plastic back box.	No.	4		
ii)	NSI	10 Amps, 250Volts one way, Four gang light control switches including appropriate size concealed Plastic back box.	No.	1		
iii)	NSI	15 Amps, 250Volts, universal 5 in 1 switched socket unit including appropriate size Plastic back box.	No.	10		
iv)	NSI	Fan Dimmer 250 watt with switch including appropriate size Plastic back box. with all associated accessories.	No.	5		
v)	NSI	Appropriate size of plastic body fan box and ceiling fan rod 24" in length	Nos	5		
vi)	NSI	MS BAR for hanging Ceiling fan	Nos	5		
5		LT CABLES				
		(General Description) Supply at site, installation, testing and commissioning of PVC insulated armoured copper conductor cable 600 / 1000 Volt grade (or otherwise mentioned in cable description) in prelaid conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the Engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed. Cable should be of Newage, Fast cable, Universal cables or equivalent and conduit should be of Dadex, Turkplast, Easyfit or equivalent as per instructions by engineer incharge				
i)	NSI	Providing and laying (main or Sub Main) Pvc insulated, Pvc sheathed with 4 core copper conductor 600/1000 volts size 6mm ²	Rmtr	80		
6		GROUNDING SYSTEM				
i)		GROUNDING cable				
b	NSI	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):- 6 mm sq (7/0.044")	rmtr	50		
ii)		Plate type earthing				
	NSI	Providing & fixing of Plate type Earthing compressed with execveted hole 6"up 63 feet,GI pipe 2"(50mm)with Tees , Sockets , Endcap of 60 (RFT) Copper Plate of 1/2"x 2"x 48", 2x 70mmsq S/Core copper bare conductor 125 (Rft) Earth Connection Point of 1200 x 50 x 50mm (L x W x T) Inspection Pit of 300 x 300 x 450 mm (L x W x D) completed with all respect	No.	1		
iii)		Grounding Connection Point				
	NSI	Supply of Grounding connecting points consisting of copper plate 300mm long x50mm wide x 6mm thick to be installed, complete with fixing arrangement, brass nuts bolts, washers, lugs, 12.5mm dia. holes to facilitate connections of Incoming copper strips / copper conductors.	Nos.	1		
iv)		Testing and commissiong				
	NSI	Testing and commissioning of the earthing system in the presence of site engineer with electronic devices such as megger etc, making so report with after approximating 3 time testing and the grounding ohm must be less than or upto 3 ohms	Nos.	1		
9		Conduit				

Sr. No.	Item No.	Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
		Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials				
	i)	50 mm i/d	R.Mtr	80		
7		CIVIL WORKS				
i)		Trench (for LT Cable)				
	NSI	Labour for excavation and refilling of trench 12" wide, 24" deep 9" sand compaction below and above in preinstalled PVC pipes, ramming watering all necessary material, labour etc, complete in all respect. Actual length of the trench shall be as per site condition and paid accordingly however approximate length of trench is given.	R.Mtr	80		
ii)		Manhole For LT Cable Pulling (If Required)				
	NSI	Construction of manholes to facilitate pulling of cables in trench or conduit as shown on drawing, manholes shall be of the size 24" x 24" x 30" deep with 9" thick wall with cement mortar, internal plaster 1:4, 100mm thick RCC cover for manhole, including cost of all accessories / materials, complete in all respects. (Tentative number of manholes have been provided, however payment shall be made as per actual and as per quantity requirement)	Nos.	2		
Total of Non-SOR Items						

Name of Work: Construction of Administration Block, Book Shop and Tuck Shops For The Project Titled " Provision of Missing Facilities For The Shaikh Ayaz University Shikarpur".

Terms & conditions

- I. Approved quality or equivalent Cement will be used with the approval of Engineer In-charge With ASTM C - 150 standard For Cement Quality.
- II. Only approved quality Sand will be used with the approval of Engineer In-charge. Refer ASTM C-33 Standard For Sand Quality.
- III. Only approved quality Crush stone will be used with the approval of Engineer In-charge. Refer ASTM C-33 Standard For Crush stone Quality.
- IV. Only approved quality Burnt Bricks will be used with the approval of Engineer In-charge. Refer ASTM C62 Standard For Sand Quality.
- V. Only approved quality Steel will be used with the approval of Engineer In-charge. Refer ASTM A-615 Standard For Steel Quality.
- VI. No cartage of any material arranged by the contractor himself /themselves will be paid in any shape.
- VII. Only clean water from the city supply, tube well installed at the site or from other sources approved by the Engineer In-charge shall be used in mixing concrete, Curing, Cleaning plant and tools. The water shall be tested according to B.S. 314. Contractors shall have to make their own arrangement of palatable water for use in work at his / their own cost.
- VIII. Concrete shall be mixed with mechanically operated Concrete Mixer with due concentration to aggregate and water ratio.
- IX. If any wherever nomenclature or any item is elaborated or not clear or any typographical error occurs in the schedule for the tender it should be read strictly as per composite schedule of rates issued by standing rates committee Govt. of Sindh.
- X. All material shall confirm the standard specifications.
- XI. No premium shall be allowed on non-scheduled items / offered rates.
- XII. All the debris and surplus stuff shall be removed from the site / disposed-off by the contractor for which no extra cost of cartage etc. shall be paid.
- XIII. All RCC / PCC cost in Situ shall be mechanically vibrated by the contractor for which no extra cost will be paid.
- XIV. All materials / mixes used in structure shall be tested from recognized laboratory and test report shall be submitted without any delay for which no extra cost etc. shall be paid.
- XV. Electricity used shall be the responsibility of contractor for which no extra cost etc. shall be paid. Camp office / material stock/Go down constructed at site shall be the responsibility of contractor for which no extra cost etc. shall be paid.
- XVI. All workers within the execution area should wear protection helmets and full boots and ensure all safety & security measures for lives of labors / inhabitants shall be the responsibility of contractor for which no extra cost etc. shall be paid.
- XVII. Deployment of full-time engineer at site shall be the responsibility of contractor for which no extra cost etc. shall be paid.
- XVIII. Inspection request shall be submitted before 24 hrs. of execution of any new trade/activity.
- XIX. Pour slip to be submitted for approval of any CC and RCC work well before execution of pouring.
- XX. The contractor shall have to visit the site before filling the bidding documents.

Contractor's Signature

Contractor's Name

Stamp