

**NAME OF WORK:- CONSTRUCTION OF 1ST & 2ND FLOOR, DOW INTERNATIONAL
DENTAL COLLEGE, DUHS, (DEFENCE CAMPUS) KARACHI**

ENGINEER'S ESTIMATE					
SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
PART 'A' FIRST FLOOR					
(i) Civil Work					
1	Dismantling of Existing flooring / skirting i/c C.C layer and disposal of rubbish materials by mean of Tractor Trolley (Refer R.A # 83 on Page no 162)	1,785		P.Cft	
2	Dismantling of Existing Block Masonary and disposal of rubbish materials by mean of Tractor Trolley or Dumper (Refer R.A # 84 on Page no 163)	2,207		P.Cft	
3	Dismantling cement concrete reinforced seperating reinforcement and disposal of rubbish materials by mean of Tractor Trolley or Dumper (Refer R.A # 97 on Page no 178)	3,240		P.Cft	
4	Providing and laying R.C.C Class 'B'(Ratio 1:1-1/2:3 having a minimum crushing strength of 4000 P S I at 28 days), using 6mm to 18mm sizes graded crushed aggregate and fine aggregate including approved quality form work and its removal, all operations of vibrating, leveling, consolidating , curing and cube / cylinder lab tests of pouring material at 07 days & 28 days etc.complete in all respects as per specifications and drawings and approval of Engineer Incharge .This rate does not includes the cost of steel bars and its erection which will be paid separately (Refer R.A # 11-c on Page no 27)				
	(a) Column in Super Structure (F.Floor)	1,850		P.Cft	
5	Providing and laying R.C.C Class 'C'(1:2:4 having a minimum crushing strength of 3000 PS I at 28 days), using 6mm to 18mm sizes graded crushed aggregate and fine aggregate including approved quality form work and its removal, all operations of vibrating, leveling, consolidating , curing and cube / cylinder lab tests of pouring material at 07 days & 28 days etc.complete in all respects as per specifications and drawings and approval of Engineer Incharge .This rate does not includes the cost of steel bars and its erection which will be paid separately (Refer R.A # 10 on Page no 11)				
(i)	Lintels (F.Floor)	65		P.Cft	
(ii)	Projections (F.Floor)	178		P.Cft	
(iii)	Stair Case & Landing (F.Floor)	210		P.Cft	
(iv)	Roof Beams (F.Floor)	5,218		P.Cft	
(v)	Roof Slabs (F.Floor)	5,735		P.Cft	
6	Fabrication of Deformed Steel Bars, reinforcement for cement concrete work i/c cutting, bending, laying in proper position, making joints & fastenings etc complete. This rate include cost of binding wire, over lapping, extra wastage, laboratory testing of steel and removing rust from bars. (Grade 60, Minimum Yield Strength 60000 Lbs / P.S.I) (Refer R.A # 13on Page no 30)				
	Ribbed Steel Bars (F.Floor)	50		P.Ton	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
7	Providing and laying Class 'D' 1:3:6 cement concrete Hollow Block Masonry wall 4" to 8" in thickness and above set in 1:6 cement sand mortar in ground floor superstructure i/c racking of joints and curing,etc, complete.(Minimum crushing strength 1300-lbs/P.S.I) (Refer R.A # 16 on Page no 40) 150 mm Thick (F.Floor)	7,460		P.Sft	
8	Providing and laying Class 'D' 1:3:6 cement concrete Solid Block Masonry wall 4" to 8" in thickness and above set in 1:6 cement sand mortar in ground floor superstructure i/c racking of joints and curing, etc, complete.(Minimum crushing strength 1300-lbs/P.S.I) (Refer R.A # 16 on Page no 40) 150 mm Thick (F.Floor) 100 mm Thick (F.Floor)	4,130 310		P.Sft P.Sft	
9	Providing and fixing G.I. sheet chowkats of 18 gauge for doors i/c pouring C.C. 1:2:4 inside chowkat & coat of red oxide paint etc complete in all respect. (Refer R.A # 29 on Page no 74) b. 2-1/4" x 7.5" c. 2-1/4" x 5.5"	550 75		P.Rft P.Rft	
10	Providing and spraying pesticide solution of approved manufacturer inside building line in Two stages i.e. on floor base & all wood work etc, using "Agenda" or equivalent of Jaffer Brothers water mixed solution as per specifications and approval of Engineer. (Refer R.A # 105 on Page no 188)	9,000		P.Sft	
11	Cement Concrete Plain including placing compacting, finishing and curing complete (including screening and washing of crush bajri) without form work etc complete in all respects as per specifications provided and instructions given by the Engineer Incharge (Refer R.A # 06 on Page no 06) Ratio 1:4:8 (CLASS 'E')	250		P.Cft	
12	Cement Plaster in Ratio 1:4 (18 mmThick) i/c floating coat of cement in proper design and profile on Roof Celings etc complete in all respects as per specifications and drawings and approval of Engineer Incharge (Refer R.A # 19 on Page no 48) (F.Floor)	8,210		P.Sft	
13	Cement Plaster in Ratio 1:6 (15 mmThick) i/c floating coat of cement in proper design & profile on walls/beams & columns .This rate also i/c providing expanded metal at the joint of R.C.C.members and block masonry where as required etc complete in all respects as per specifications and drawings and approval of Engineer Incharge (Refer R.A # 17on Page no 46) (i) 15 mm thick Internal / External (F. Floor)	19,850		P.Sft	
14	Cement Plaster in Ratio 1:4 (13 mmThick) i/c floating coat of cement in proper design and profile on walls, beams & columns etc complete in all respects as per specifications and drawings and approval of Engineer Incharge (Refer R.A # 18 on Page no 47) (i) 13 mm thick Internal / External (F.Floor)	13,650		P.Sft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
15	Providing & fixing Colour Crete to wall surface to provide, durable crust and aesthetics having thickness up to 1/2" with specified colour having water, fire ³ and termite resistance over the base of 1/2 " thick cement plaster ratio (1:4) (Refer R.A # 48 on Page no 113) (F.Floor)	4,310		P.Sft	
16	P/L C.C cement concrete 1:2:4 under floor including surface finishing etc complete.	1,450		Cft	
17	Providing & fixing Graphic Wall Decorative Plaster to provide, Durable Crust and Acrylac Finish having thickness up to 13 mm with specified colour having water, fire ³ and termite resistance over the base of 15mm thick cement plaster ratio 1:4 (Refer R.A # 75 on Page no147) (F.Floor)	1,835		P.Sft	
18	Providing and fixing Printed Granite Porcelain Tiles Flooring (24"x 24" x 1/2" or above) jointed in white cement and laid over bed of 1"to 2" thick grey cement concrete bed in ratio 1:2:4 i/c washing / filling of joints with white cement etc: complete in all respect (Imported Premium Quality costing Rs 1800 per meter or above) (Refer R.A # 20/ 21/ 22 on Page no 49-53)	6,835		P.Sft	
a	Flooring (F.Floor)	1,145		P.Sft	
b	Wall Dado (F.Floor)	2,235		P.Rft	
c	6" Wide Wall Border (F.Floor)				
19	Providing and fixing Printed Glazed Ceramic Tiles Flooring (12"x18"x1/4" or above) jointed in white cement and laid over bed of 1/2"thick grey cement sand mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect (Imported Premium Quality costing Rs 1600 per square meter or above) (Refer R.A # 24 on Page no 64) Wash Rooms Flooring (F.Floor)	865		P.Sft	
20	Providing and fixing Printed Glazed Ceramic Tile Dado/ Skirting (12"x18"x1/4" or above) i/c two layers of Printed Borders (2" to 4"Wide) jointed in white cement and laid over bed of 1/2"thick grey cement sand mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect. (Imported Premium Quality costing Rs 1600 per square meter or above) (Refer R.A # 25 on Page no 66) Wash Rooms Wall Dado (F.Floor)	1,780		P.Sft	
21	Applying 3 Coats of Plastic Bound Distemper Paint i/c primary coat of chalk and preparing base surface and filling where as required as per requirement of Architecture Drawings and specifications etc complete in all respects as per directives of Engineer In charge. (Refer R.A # 47 on Page no 112)	8,830		P.Sft	
22	Applying 3 Coats of Silk Matt Finishing with primary coat and preparing base surface and filling where as required as per requirement of Architecture Drawings and specifications etc complete in all respects as per directives of Engineer In charge. (Refer R.A # 46 on Page no 111)	13,500		P.Sft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
23	P/Applying 3 Coats of Wheather Sheild Paint of superior quality i/c preparing base surface and filling etc complete in all respects as per directives of Engineer In charge (Refer R.A # 45 on Page no 110)	235		P.Sft	
24	Providing and fixing in position Doors Shutter 1-1/2" thick Teak wood ply shutters of first class partal wood skeleton (Solid) styles and rails core of partal wood and Teak ply sheet (3 ply) on both sides including frost glass of 3 mm on top,partal wood lipping around shutter, hold fasts, hinges, iron tower bolts, handles and cleats with cord etc, complete. (Refer R.A # 33 on Page no 93)	625		P.Sft	
25	Providing and fixing with sunk iron screws Oak Wood Architrave approved design/shape having width not less than 2-1/2 inches i/c french polishing etc complete as directed by Engineer Incharge. (Refer R.A # 102 on Page no 187) 2-1/2" Thick	1,030		P.Rft	
26	Providing and Applying French polishing over wood work with liqueur base spirit polish and filling material etc complete in all respect (Refer R.A # 49 on Page no 114)	1,250		P.Sft	
27	Providing and fixing C.P Brass Mortice Lock with Round Handle (Imported) (Refer R.A #103 on Page no 186)	19		Each	
28	Providing and fixing C.P Brass Mortice Lock with Long Handle (Heavy Design Imported) (Refer R.A #104 on Page no 187)	5		Each	
29	Providing and fixing C.P Brass Tower Bolt 24" Long (Heavy Design Imported) as approved by the Engineer. (Refer R.A #104 on Page no 187) 24" Long	24		Each	
30	S/F in position Aluminum box channels framing (100 mm x 40 mm) for office chamber partitions i/c Alminium hinged doors of Alcop made (of approved make and design) with Aluminium Sheet 3 mm on bottom up to 300 mm height , 5 mm thick tinted frost glass glazed on remaining portion (Belgium) , imported Door Closer over Door and Alpha (Japan) locks including handles stoppers etc complete in all respects as per directives of Engineer Incharge. (Prime / Chawla or Equivalent) (Refer R.A # 39 on Page no 104)	185		P.Sft	
31	S/F in position Aluminum box channels framing (100 mm x 40 mm) for Aluminum Doors of Alcop made (of approved make and design) with Aluminum Sheet 3 mm on bottom up to 900 mm height , 5 mm thick tinted frost glass glazed on remaining portion (Belgium) , imported floor hinge two way pivot machine and Alpha (Japan) locks including handles stoppers etc complete in all respects as per directives of Engineer In charge. (Prime/ Chawela or Equivalent) (Refer R.A # 40 on Page no 105)	215		P.Sft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
32	S/F in position Aluminium channels framing (100mm x 40 mm) for sliding windows & ventilator with collar of Alcop made (of approved make and design) with 5 mm thick tinted glass glazing (Belgium) and aluminium fly screen channel including handles stoppers & locking arrangements etc complete in all respects as per directives of Engineer In charge (Prime/ Chawla or Equivalent) (Refer R.A # 40 on Page no 105)	1,635		P.Sft	
33	Providing and laying Pre-Polished best quality imported granite beveled edges on staircase treads having 50mm wide unpolished strip, laid over concrete base over 40 mm thick concrete base (1:4) complete in all respect as per detail/drawing and as directed by the Consultants. (Basic cost of Granite Should be Rs.800.00 per Sq ft or above) (Refer R.A # 20 on Page no 49)				
	(i) Stair case Treads (1500 x 375 mm x 25 mm)	20		Each	
	(ii) Stair case Risers (1500 x 150 mm x 15 mm)	22		Each	
	(iii) Stair case Landing Flooring (600 x 300 mm x 25 mm)	32		P.Sft	
	(iv) Reception / Vanity / Kitchen Counter 25 mm	112		P.Sft	
34	Providing and fixing Staircase/Terrace railing with 1-1/2"DIA STEEL PIPE @ 2'-0" C/C Vertically and on top railing With 4 Nos 5/8" dia pipe horizontally between main pipe posts of 2-1/2" dia as per required design, embedded properly in RCC work by means of iron lugs welded with MS rods, complete as per drawing, specification and satisfaction of the Architect upto any height in any floor (Refer R.A # 58 on Page no 112)	105		P.Sft	
35	P/Finx Stainless Steel Pipe Railing along with wall of 38 mm dia for Handicap persons etc complete in all respects as per directives of Engineer In charge (Refer R.A # 60 on Page no 114)	48		P.Rft	
36	Providing & applying smooth 3/4" thick to walls columns etc. with 1:4 cement ratio, i/c all corners, recesses, jambs & raking out joints along with (Pudlo- 2 kg per bag of approved quality) complete as per drawings, specifications & as per instructions of Consultant/ Engineer In-charge. (Refer R.A # 72 on Page no 145)	800		P.Sft	
37	Supplying and fixing False Ceiling of gypsum sheet (4'-0"X 2'-0"imported) inpanels including making frame work of imported Aluminium 'T' Channels etc complete as per drawings, specifications & as per instructions of Consultant/ Engineer In-charge. (Refer R.A # 56 on Page no 128)	230		P.Sft	
38	P/F Decorative False Ceiling of first quality MDF Lassani boards of various thicknesses (3/4" , 1/2" & 3/8") with wooden logs as per requirement of Architecture Drawings and specifications provided i/c decorative paint or French polish as required and also making excess for decorative false ceiling LED Lights etc complete in all respects as per directives of Engineer In charge.(Refer R.A # 57 on Page no 129)	180		P.Sft	
39	Supplying & fixing window printed blinds (Horizontal / Vertical) with printed design and of approved colour i/c fixing in windows with necessary accessories.etc complete in all respects as per directives of Engineer In charge.(Refer R.A # 100 on Page no 181)	680		P.Sft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
40	Architectural & structural Design charges paid to be Architect. Note:- This will be executed through contractor. The contractor will have to arrange the qualified professional consultant who will prepare all necessary architectural and structural drawings i/c R.C.C Design and the payment to such consultant may be acknowledge to Project Director DUHS as the same will also paid to contractor accordingly	1		Job	
TOTAL					
<u>(ii) INTERNAL WATER SUPPLY & SANITARY FITTINGS</u>					
1	Providing & fixing English Commode with Seat cover including flushing cistern,tee stop cock etc complete in all respects (Porta /Marachi or Equivalent) (Classic Model) (Refer R.A # 01 on Page no 01)	4		Each	
2	Providing & fixing Orisa W.C 23" Clear including flushing cistern ,tee stop cock etc complete in all respects (Porta/ Marachi or Equivalent) (Classic Model) (Refer R.A # 02 on Page no 02)	2		Each	
3	Providing & Fixing Wash Basin size 24" x18" with wash basin mixture and pedestal etc complete in all respects (Porta/Marachi or Equivalent) (Classic Model) (Refer R.A # 04 on Page no 04)	4		Each	
4	Providing & Fixing Wash Basin size 24" x18"(Vanity type with top counter and wooden box) with wash basin mixture and pedestal etc complete in all respects (Porta/Marachi or Equivalent)(Classic Model) (Refer R.A # 05 on Page no 05)	2		Each	
5	Providing & fixing Urinal including flushing cistern ,tee stop cock etc complete in all respects (Porta / Marachi or Equivalent) (Classic Model) (Refer R.A # 03 on Page no 03)	2		Each	
6	Supplying/Fixing White glazed Labortary sink bowl of approved made and design (Standard Size) as per standard requiurement i/c bolt kit brackets , c.p waste and waste pipe etc complete in all respects (Refer R.A # 17 on Page no 13)	2		Each	
7	Providing and fixing C.P Brass Double bib cock with Muslim Shower 1/2" dia (Master/ Sonex or equivalent) (Refer R.A # 07 on Page no 07)	6		Each	
8	Providing and fixing C.P Brass Fancy bib cock with crystal head 1/2" dia (Master / Sonex or equivalent). (Refer R.A # 08 on Page no 07)	6		Each	
9	Providing and fixing C.P Brass Concealed stop cock with crystal head 1/2" dia (Master / Sonex or equivalent) (Refer R.A # 13 on Page no 10)	6		Each	
10	Supplying/Fixing C.P Brass Surgical Elbow action Wash Basin Mixture of superior quality with C.P Head and long arm 1/2" dia etc complete in all respects (Refer R.A # 16 on Page no 12)	2		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
11	Providing and fixing Stainless Steel Sink Size 40" x 20" (with double Trey) i/c C.P Brass Sink Mixture , C.P waste, P.V.C Waste Pipe, Bolt kit etc complete in all respects. (Superior quality and heavy gauge) (Refer R.A # 28 on Page no 20)	2		Each	
12	Providing and fixing U.P.V.C. Floor Trap 6"x2" or 6"x3" dia i/c Steel floor Jali grade-I (AGM or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 43 on Page no 32)	14		Each	
13	Providing and fixing U.P.V.C. Pipe 4" dia grade-I (AGM or equivalent) including all fittings such bends tees etc with cutting pipe up to required length, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 37-a on Page no 27) For Single Attached Lavatory	240		P.Rft	
14	Providing and fixing U.P.V.C. pipe 4" dia grade-I (A.G.M.or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 38 on Page no 28) For General Lavatory and out side	480		P.Rft	
15	Providing and fixing U.P.V.C. Branch 4"x4" dia with Access door, grade-I (A.G.M or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 39 on Page no 29)	8		Each	
16	Providing and fixing U.P.V.C. Plain.Tee 4"x4" dia or 'Y' Tee grade-I (A.G.M. or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 40 on Page no 29)	8		Each	
17	Providing and fixing U.P.V.C. Plug Bend 4"x4" dia with Access door, grade-I (A.G.M or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 41 on Page no 30)	8		Each	
18	Providing and fixing U.P.V.C. Plain Bend 4" dia grade-I (A.G.M. or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 42 on Page no 30)	12		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
19	Providing & fixing of PPR PN-20 cold water pipes with all required molded fittings PN-20, jointing pipe with heat method, testing. This rate also i/c cutting holes in wall plinth and roof for consealed pipe fittings and making good in c.c 1:2:4 etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 46 on Page no 42)				
(i)	40 mm	300		P.Rft	
(ii)	25 mm	220		P.Rft	
(iii)	20 mm	280		P.Rft	
(iv)	13 mm	320		P.Rft	
20	Providing & fixing of PPR PN-20 Gate Valve with brass threads, jointing with already laid pipe by heat method, testing, etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 46 on Page no 42)				
(i)	40 mm	2		Each	
(ii)	25 mm	4		Each	
(iii)	20 mm	6		Each	
(iv)	13 mm	4		Each	
21	Providing G.I pipes of approved standard company with fittings such as tee, bend, socket, elbow .union & clamps where as required etc i/c threading ,fixing cutting & fitting complete with & i/c the cost of earth excavation up to rquired depth and laying pipe in to the trench and refilling the trench i/c painting two coats of bitumen with hessian cloth after cleaning the pipe etc complete and testing with water to a pressure head of 200 feet and handling. (External I.L.L M or Equivalent) (Refer R.A # 45 on Page no 36)				
(i)	3" Dia pipe	440		P.Rft	
(ii)	2" Dia pipe	380		P.Rft	
(iii)	1-1/2" Dia pipe	440		P.Rft	
22	Providing and fixing Gun Metal wheel Threaded Valve (Made in Italy) (Refer R.A # 23,24,25 on Page no 16)				
(i)	3" Dia Valve	2		Each	
(ii)	2" Dia Valve	2		Each	
(iii)	1-1/2" Dia Valve	4		Each	
21	Providing chambers 9" x 6" (inside dimensions) x 24" deep for stop cocks and valves etc. with 6" thick C.C 1:3:6 cast in situ walls, 6" thick C.C 1:4:8 in foundation 1/2" thick cement plaster 1:3 to all inside wall surface and to top 1" thick C.C 1:2:4 flooring complete with hinged cast iron cover and frame 9"x6" (inside) clear opening (wt 1/2" Qr) etc. fixed in cement concrete 1:2:4 including curing excavation back filling & disposal of earth etc. complete.(Refer R.A # 48 on Page no 64)	6		Each	
22	Supplying & fixing Bath room accessories set (9 Pieces) I/c towel rod, brush holder, Coat Holder & soap tray shelf of approved design i/c cost of screws, nuts etc Complete.(Master Brand or Equivalent). (Refer R.A # 30 on Page no 64)	2		Each	
23	Supplying & fixing Hydraulic Hand Dryer of approved Make & Design (Imported) (Refer R.A # 62 on Page no 64)	6		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
24	Providing & fixing Bavelled edge mirror of belgium glass (Above 3.00 Sft) complete with 3" thick pre polished wooden border , 1/8" thick hard board and C.P. screws fixed to wooden pleat.(Superior Quality) (Refer R.A # 33on Page no 23)	40		P.Sft	
TOTAL					
(iii) INTERNAL SUI GAS FITTINGS					
1	Providing and fixing Brass Gas Cock 1/4" dia imported (Refer R.A # 63 on Page no 64)	6		Each	
2	Providing & fixing of Gas Burner (Three Ways Table Top) of approved make and design with necessary fittings by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer Incharge. (Imported heavy duty) (Refer R.A # 55 on Page no 55)	2		Each	
3	Providing & fixing of Lab Gas Burner of approved make and Design with necessary fittings by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer Incharge (Refer R.A # 57 on Page no 58)	2		Each	
4	Providing & fixing of Gas Geyser of approved and Design (35 Litres) with imported pilot and necessary fittings by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer Incharge (Refer R.A # 54 on Page no 55)	2		Each	
5	Providing & fixing of PE-80 (Polyethylene-Flex) sui gas pipes with all required molded fittings of PE-80 , jointing pipe with approved method, testing , excavating trench in existing external soil, laying pipe, refilling the trench compaction etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 52 on Page no 51)				
(i)	20 mm	320		P.Rft	
(ii)	13 mm	320		P.Rft	
6	Providing & fixing of PE-80 (PolyethyleneT-Flex) Gate Valve with brass threads, jointing with already laid pipe by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 53 on Page no 52)				
(i)	20 mm	2		Each	
(ii)	13 mm	6		Each	
TOTAL					
PART 'iv' INTERNAL ELECTRIFICATION WORK					
1	Wiring for light, fan or plug point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required (Refer R.A # 01 on Page no 01)				
(i)	(From D. B to Switch Board)	24		P. Point.	
(ii)	(From Switch Board to Point)	148		P. Point.	
(iii)	(From Point To Point)	36		P. Point.	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
2	Wiring for call bell point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required (When push button outside premises). (Refer R.A # 02 on Page no 04)	2		P. Point.	
3	Wiring for two way light point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required (Refer R.A # 03 on Page no 05)	2		P. Point.	
4	Wiring for plug point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required . (Nearest light plug) (Refer R.A # 04 on Page no 06)	12		P. Point.	
5	Circuit Wiring for distributing circuits with 2-1/1.38(3/036) PVC insulated wire in 25mm (1") PVC conduit fitted (Maximum length of circuit from D.B To Switch Board should be 200 Rft or more) (Refer R.A # 05 on Page no 07)	6		Each	
6	Circuit Wiring for power point with 2-7/0(7/044) PVC insulated wire with 1-1/36 as ECC in 25mm (1") PVC conduit fitted. (Maximum length of power wiring from D.B to Point should be 160 Rft) (Refer R.A # 06 on Page no 08)	12		Each	
7	Providing & fixing 10Amps polycarbonate flame retardant One way switch with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (E31/2/3A Clipsal Make)(Refer R.A # 08 on Page no 10)				
(a)	One Switch Plate	6		Each	
(b)	Two Switch Plate	6		Each	
(c)	Four Switch Plate	8		Each	
(d)	Six Switch Plate	12		Each	
(e)	Eight Switch Plate	12		Each	
8	Providing & fixing 10Amps polycarbonate flame retardant bell push with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (E31/MBPR Clipsal Make) (Refer R.A # 09 on Page no 11)	2		Each	
9	Providing & fixing 10Amps polycarbonate flame retardant Two way switch with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required. (E31/2/3A Clipsal Make)(Refer R.A # 07 on Page no 09)	2		Each	
10	Providing & fixing 10Amps polycarbonate flame retardant 2-pin switch socket unit (Universal) with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required. (E-15U Clipsal Make) (Refer R.A # 10 on Page no 11)	12		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
11	Providing & fixing 10Amps polycarbonate flame retardant 3-pin switch socket unit (Universal) with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (Clipsal Make) with back & boxing (Refer R.A # 11on Page no 12)	12		Each	
12	Providing & fixing 15Amps polycarbonate flame retardant 3-pin switch socket unit (Universal) with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (Clipsal Make) with back & boxing (Refer R.A # 12 on Page no 13)	12		Each	
13	Providing & fixing A.C/D.C Door Bell (superior quality imported)on die fabricated powder coated metal board recessed in wall or column including connection as required (Refer R.A # 14 on Page no16)	2		Each	
14	Providing & fixing 3"x4"x5" size (14SWG) thick recessed type fan clamp box 5/8" dia MS bar fan clamp fixed in roof at casting time as required. (Refer R.A # 15 on Page no 17)	18		Each	
15	Making hole in the wall for 12" to 16" sweep metallic exhaust fan and fixing of hold fast, dully plaster and making good the damage as required. (Refer R.A # 16on Page no 18)	1		Each	
16	Providing and fixing 6 Amps plastic ceiling rose on PVC round block /round cover fitted on surface including connection as required. (Refer R.A # 24 on Page no 26)	48		Each	
17	Providing and installing 25 CM (12") sweep plastic body Exhaust fan complete with blades, motors, etc fixed in existing hole including connection with 14/0076" flexible wire complete as required (without regulator) Millat/Pak/Asia/Younus/Climax/Royal. (Refer R.A # 17 on Page no 18)	2		Each	
18	Providing and installing 60CM (24") Wall Bracket Fancy Fan including connection with 14.0076" flexible wire complete as required (Millat/Pak/Asia/Younus/Climax/Royal). (Refer R.A # 18 on Page no 19)	12		Each	
19	Providing and installing 140 CM (56") sweep ceiling fan with blades, canopy, standard length of down rod including connection with 14.0076" flexible wire complete as required (without regulator) Millat/Pak/Asia/Younus/Climax/Royal. (Refer R.A # 19 on Page no 20)	12		Each	
20	Providing & fixing 15 Amps poly carbonate flame retardant 400 watts fan dimmer with plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (E32V400F Clipsal Make) (Refer R.A # 13 on Page no 15)	12		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
21	Providing & Laying of following sizes of 3-1/2 core PVC insulated & PVC sheathed 600/1000 volt grade with standard copper conductor unarmoured L.T cable in existing all kind of conduit or cable duct as per Approved specification as required (Refer R.A # 20 on Page no 21)	225		P.Rft	
22	Providing and fixing Earth set with 2'x2'x1/4" copper plate buried in the ground at a depth of 12 feet or less if water comes out from the ground level (with salt and charcoal, or Earth chemical powder) etc.. Making the pit 12 feet deep by excavation of all type of soil (except soft or hard rock) i/c fixing of 8 SWG copper wire in 1/2" G.I conduit complete in all respects as required (Refer R.A # 21 on Page no 22)	1		P.Job	
23	Providing & Fixing basic batten, surface type, fitting complete with TLD 1x36W white day light lamp starter, electronic ballast as Philips Cat. (TMS015/136 L.E.D) (Refer R.A # 23 on Page no 24)	12		Each	
24	Providing & Fixing basic batten, surface type, fitting complete with TLD 2x36W white day light lamp starter, electronic ballast as Philips Cat. (TMS015/136 L.E.D) (Refer R.A # 24 on Page no 25)	18		Each	
25	P/Fixing 2'-0" x 2'-0" Fancy False Ceiling Circo Fan(imported) of approved make and design etc complete in all respects as per directives of Engineer Incharge. (Refer R.A # 26 on Page no 27) .	18		Each	
26	Providing & Fixing basic batten, surface type, fitting complete with TLD 4x36W (2'-0" LONG),ALUMINIUM CASING (L.E.D) ,white day light lamp starter, electronic ballast as Philips Cat. (TMS015/136) (Refer R.A #25 on Page no 26)	12		Each	
27	Providing and fixing L.E.D Energy Saver 12 Watts Phillips i/c wall type or ceiling fancy bracket (Refer R.A # 27 on Page no 28)	12		Each	
28	Providing and fixing L.E.D Energy Saver 20 Watts Phillips i/c wall type or ceiling fancy bracket (Refer R.A # 27 on Page no 28)	12		Each	
29	P/Fixing LED Pandent Light with 18 watts bulb in a fancy glass globe casing hanging on 4' Long hallow pipe rod of 3/4" dia pipe of approved make and design etc complete in all respects as per directives of Engineer Incharge (Refer R.A # 29 on Page no 29)	12		Each	
30	P/Fixing LED Fancy Light with 18 watts bulb and 12"x12" fancy bracket of approved make and design etc complete in all respects as per directives of Engineer Incharge (Refer R.A # 30 on Page no 30)	12		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
31	Supply & Installation of following Main / Distribution Pannel Boards of approved make and design concealed in wall/surface mounted or floor standing. 1.5/2/3 mm sheet steel fabricated powder coated , suitable for 500 volts, 3 phase ,4 wires,50 Hz, incorporate following components & configuration, complete with all mounting & connecting accessories as per Electrical Drawings attached etc complete in all respect as per specification provided and instructions given by the Engineer Incharge. (Refer R.A. Book)				
i	SMDB-MB	1		Each	
ii	EDB-EME	2		Each	
iii	EDB-MB-1	4		Each	
32	Supply, Laying, termination and commissioning of following copper conductor cable in already laid PVC conduit / cable tray / trench as required, as per drawings, specification and instructions given by Engineer Incharge (Cu /pvc/ pvc cable , 600/1000v, Pak /Pioneer/AEG Cables). (Refer R.A # 49 on Page no 58)				
a	4 Core - CU/PVC/ PVC Cable (600/1000V)				
i	4 Core - 10 Sq.mm	600		P.Rft	
iv	4 Core - 35 Sq.mm	950		P.Rft	
vii	4 Core - 95 Sq.mm	740		P.Rft	
c	1 Core - PVC Cable as ECC (600/1000V)				
i	1 core -10 Sq.mm	1,200		P.Mtr	
TOTAL					
(v) C.C.TV System					
1	Supply and Installation of colour LCD standard resolution Camera scene illumination operating on 230V AC ceiling / wall mounted with all accessories, as per drawings & specifications. (Refer R.A # 01 on Page no 01)	8		Each	
2	Supply and Installation of Colour Video Monitor LED size 23".(Refer R.A # 02 on Page no 01)	2		Each	
3	Testing and Commissioning of CCTV System by authorized local representative of the manufacturer. (Refer R.A # 03on Page no 02)	1		P.Job.	
4	CCTV 4-core shielded cable in 1" dia. PVC conduit (Refer R.A # 04 on Page no 02)	545		P.Mtr.	
5	Electric cabling.(3 x 2.5 mm Cu - PVC) to be pulled in 1"dia PVC conduit/channel. (length subject to check at site(Refer R.A # 05 on Page no 03)	8		P.Job.	
6	Supply and Installation of DVR-06 Channel (Refer R.A # 06 on Page no 03)	1		Each	
TOTAL					
(vi) Telephone Net Work & Data Collection System					
1	Supply & installation of following 0.6 mm dia. Shielded telephone cables in 25 mm dia PVC conduit. (Refer R.A # 01 on Page no 01)				
	(a) Cat - 6	345		P.Mtr.	
	(b) Telephone cable 10 pair.	185		P.Mtr.	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
2	Supply & installation of following boards as per drawings fabricated from 16 SWG sheet steel powder coated box with hinged covered door. a)Telephone Junction Box with (8 x 25 pair punch block) tag block.(Refer R.A # 02 on Page no 02)	1		Each	
3	Supply & installation of following telephone outlets (i/o + Face Plate) with back box.(Hussain make) (Refer R.A # 03 on Page no 03) a) RJ-45 for telephone system. b) RJ-45 for Data system. c) RJ-45 for Data system. (Duplex)	15 15 4		Each Each Each	
4	Supply and installation of Cat-6 giga speed cable AT & T /clipsal make for data system in 25 mm dia PVC conduit (Refer R.A # 04 on Page no 04).	320		P.Mtr.	
5	Card Access Control System (Refer R.A # 05 on Page no 04)	3		Each	
6	Wiring for Card Access(Refer R.A # 06 on Page no 05)	3		Each	
7	Supply/ Fixing of Industrial UPS 5 Kva i/c wiring with dry battery and necessary angle iron bracket for erecting UPS (Imported)(Refer R.A # 07 on Page no 05)	2		Each	
8	Following CAT-6, Patch Panels equipped with RJ-45 I/Os for Data communication system with rear cable organizer including all labeling and all mounting accessories Complete in all respects. 24-port CAT-6 patch panel for data (Refer R.A # 09 on Page no 07)	1		Each	
9	Following CAT-6, Patch Panels equipped with RJ-45 I/Os for voice communication system with rear cable organizer i/c all labelling system and all mounting accessories etc complete in all respects. 24-port CAT-6 patch panel for Voice (Refer R.A # 10 on Page no 08)	1		Each	
10	Front Cable Organizer for Voice & Data patch panels / wiring blocks with complete labeling and dressing for incoming cable management. (Refer R.A # 11 on Page no 08)	2		Each	
11	Following CAT-6 , factory certified patch cords of specified color having RJ-45 connectors at both ends for voice communication. (Refer R.A # 12 on Page no 09) a 3 meter long. b 1 meter long.	10 10		Each Each	
12	Supply, Installation, testing and commissioning of Data Switch (10G) for Cat-6 Cable. (Refer R.A # 13 on Page no 10)	1		Each	
13	Supply / Installation of 42 U Floor mounted Communication Rack. suitable for installation of servers,switches and related equipment etc. Complete with vertical cable managers with at Rack shall be equipped with power distribution units (PDUs) least 5 imported power sockets etc complete in all respects. (Refer R.A # 14 on Page no 10)	1		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
14	Testing and commissioning of all above items termination and connectivity at both ends, including submission of detailed test report from the Principals. (Refer R.A # 15 on Page no 11)	1		P.Job	
TOTAL					
(vii) Fire Extinguisher / Alarming System					
1	Supply, installation and connection of conventional type Fire Alarm control panel flush mounted complete with all particulars (Refer R.A # 1 on Page no 1)	1		Each	
2	Supply, installation and connection of photo-electric type accessories, back up battery, indication lamps, internal smoke detectors as per drawings etc (Refer R.A # 2 on Page no 1)	12		Each	
3	Same as item 2 but heat detector. (Refer R.A # 3 on Page no 2)	1		Each	
4	Supply, installation and connection of conventional manual break glass stations with LED indication as per drawing (Refer R.A # 4 on Page no 2).	2		Each	
5	Supply, installation and connection of fire alarm sounders as per specifications & drawing. (Refer R.A # 5 on Page no 3).				
6	Wiring of smoke, heat detectors, manual break glass & Fire Alarm sounders with 2C x 1.5sq.mm PVC insulated copper wires in PVC conduit for surface installation complete with all accessories,etc up to fire alarm control panel including termination.(Refer R.A # 6 on Page no 3).	1		P.Job	
7	Power supply to Fire Alarm Control Panel from DB UPS-1, wired with 3C x 2.5mm ² PVC insulated cable in PVC conduit as per Drawing.(Refer R.A # 7 on Page no 4).	1		P.Job	
8	Testing and commissioning of Fire Alarm System by authorized local representative of the manufacturer. (Refer R.A # 8 on Page no 4).	1		P.Job	
9	Supply and Installation of fire extinguisher 6 kg (Refer R.A # 9 on Page no 5).	5		Each	
TOTAL					
(viii) HVAC Works (Air-Conditioning System)					
1	Supply, Installation, Testing & Commissioning of following Air Conditioning Split Unit Complete (Inverter Type) in all respect ready to operate complete in all respect. The work should be completed with control wiring with limited copper conduiting as required (Refer R.A # 1 on Page no 1). (Acson / Mitsubishi / Gree) .				
a)	1.0 Ton Wall Mounted Split Type.	2		Each	
b)	1.5 Ton Wall Mounted Split Type.	20		Each	
c)	2.0 Ton Wall Mounted Split Type.	5		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
2	Supply / Installation and Commissioning of Refrigerant copper piping (Liquid + Gas-1/2 + 1/4 +5/8+3/8) make Muller USA with expanded rubber foam Insulation (Make Aeroflex) Gas Charging if required. Control wiring in PVC conduit between internal and external units etc complete in all respects. (Refer R.A # 2 on Page no 4).	650		P.Rft	
3	Supply & Installation of U-PVC Schedule 40 AGM Pipe with accessories, including cutting of wall with insulation for drain etc. (Refer R.A #3 on Page no 5).				
a)	3/4" dia	220		P.Rftt	
b)	1" dia.	180		P.Rftt	
4	Supply & Installation of floor mounted / wall mounted angel iron bracket for outdoor units as per drawing Complete in all respects.(Refer R.A #4 on Page no7).	27		Each	
5	Supply & installation of following sizes of G.I Powder coated cable tray. Size 6" x 2-1/2"	325		Rft	
				TOTAL	
(ix) FURNITURE WORK					
1	Providing & making Faculty Staff table Size 5'-6" x 2'-3" x 2'-6" make of 17mm thick imported MDF lasani top & side with pvc lipping on edges, tuff formica paste with glue both sides etc complete as per design & directed by the Engineer Incharge.	5		Nos.	
2	Providing & making Faculty Staff Table Side Rack size 3'-0" x 1'-4" x 2'-6" make of 17mm thick imported MDF lasani top & sides, 2/8" thick lasani laminated back, pvc lipping on edges, tuff formica paste with glue both sides i/c 3nos drawer including drawer channel 1no drawer locking arrangement, handle etc. complete as per designe & directed by the Engineer Incharge.	2		Nos.	
3	Making & Providing Cabinet with Drawer (22" depth) make of Imported MDF Lasani Lamination 17mm thick, formica (as per approved color) pasting with glue , 2/8" thick laminated lasani back, wood lipping on edges, partial wood framing, ss piano hinges, drawer chanel, s.s handle or nobs complete as per approved design by Architect & Engineer incharge.	525		Sft	
4	Making wooden partition make of 2"x1" partial wood framing, 1/2" thick MDF lasani both side & formica pasting with glue, oak wood lipping on edges i/c polish, nails, screws etc complete as per approved design by Architect & Engineer incharge.	450		Sft	
5	Providing & making Lecture Hall Computer Table Size 3'-6" x 2'-0" x 2'-8" make of 17mm thick imported MDF lasani lamination top & side with wood lipping on edges, formica paste with glue, i/c CPU box, Keyboard tray & drawer i/c drawer channel, locking arrangement & S.S Nobs etc complete as per design & directed by the Engineer Incharge..	5		Nos.	
6	Providing & Making Digital library Computer top (1.5" thick) size (3'-6" x 1'-10") make of 17mm thick MDF lasani lamination both side as per approved color, oak wood liping on edges, 2"x1" partial wood, i/c polish, nils, screws etc complete as per approved design by Architect & Engineer incharge.	20		Nos.	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
6	Providing & Making library Study table size (8'-0" x 2'-0") make of 17mm thick MDF lasani lamination as per approve color, oak wood lipping on edges, 2"x1" partal wood framing, formica pasting with glue, 8mm glass Separator i/c polish, nails, screws etc complete as per approved design by Architect & Engineer incharge.	16		Nos.	
7	Making & Providing Book Shelves Cabinet with size as per requirment 12" depth make of 17mm thick MDF lasani lamination formica (as per approved color formica) pasting with glue, wood lipping on edges, 2/8" thick laminated lasani back, partal wood, i/c polish, shalves pins, nils, screws etc complete as per approved design by Architect & Engineer incharge	840		Sft	
8	Providing & Fixing artificial white grenite i/c gola with polish, marble jelly etc complete as per approved design by Architect & Engineer incharge.	460		Sft	
9	Display units with Shutter (2' depth) & 1-1/2" sides top & bottom size (3'-0" x 7'-0") make of 17mm thick MDF lasani Lamination with formica pasting with glue, beach wood lipping on edges, beach wood door frame, 5mm clear glass, 2/8" thick laminated lasani back, S.S piano hinges, handle or nobbs i/c locking arrangement, etc complete (As per Approved design and drawing.)	400		Sft	
10	Providing visitor charis as per approved design and make.	38		Nos.	
11	Providing wooden liberary chair with foam cusion by Engineer incharge.	65		Nos.	
12	Providing lecture room student chairs with writing top i/c arms as approved design and drawing.	185		Nos.	
				TOTAL	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
PART 'B' SECOND FLOOR					
(i) Civil Work					
1	<p>Supplying & installation of framed technology roof with top 0.5mm thick G.I prepainted polyester color coated high rip corrugated sheet, bottom 0.5mm thick G.I prepainted polyester colour coated sheet density 40kg/cum, i/c light steel structure trusses, filling joints with chemical, self drilling screws including installation, transportation charges & extra charges for lifting material to 2nd floor.</p> <p>Providing & Installation (single wall) of framed technology wall panneling with single steel frame structure both side 10mm thick imported fiber cement board, Rockwool insulation, i/c installation accessories like anchor bolts, silicon tubes, filling joints with chemical, self drilling screws including installation, transportation charges & extra charges for lifting material to 2nd floor.</p> <p>Providing & Installation (Double wall) of framed technology wall panneling with double steel frame structure i/c rubber spacers both side 10mm thick imported fiber cement board, Rockwool insulation, i/c installation accessories like anchor bolts, silicon tubes, filling joints with chemical, self drilling screws including installation, transportation charges & extra charges for lifting material to 2nd floor</p>	9,250		Sft	
2	<p>Providing and laying Class 'D' 1:3:6 cement concrete Solid Block Masonary wall 4" to 8" in thickness and above set in 1:6 cement sand mortar in ground floor superstructure i/c racking of joints and curing, etc, complete.(Minimum crushing strength 1300-lbs/P.S.I) (Refer R.A # 16 on Page no 40)</p> <p>150 mm Thick (S.Floor)</p> <p>100 mm Thick (S.Floor)</p>	185 115		P.Sft P.Sft	
3	<p>Providing and fixing G.I. sheet chowkats of 18 gauge for doors i/c pouring C.C. 1:2:4 inside chowkat & coat of red oxide paint etc complete in all respect. (Refer R.A # 29 on Page no 74)</p> <p>b. 2-1/4" x 7.5"</p> <p>c. 2-1/4" x 5.5"</p>	550 75		P.Rft P.Rft	
4	<p>Providing and spraying pesticide solution of approved manufacturer inside building line in Two stages i.e. on floor base & all wood work etc, using "Agenda" or equivalent of Jaffer Brothers water mixed solution as per specifications and approval of Engineer. (Refer R.A # 105 on Page no 188)</p>	9,000		P.Sft	
5	<p>Cement Concrete Plain including placing compacting, finishing and curing complete (including screening and washing of crush bajri) without form work etc complete in all respects as per specifications provided and instructions given by the Engineer Incharge (Refer R.A # 06 on Page no 06)</p> <p>Ratio 1:4:8 (CLASS 'E')</p>	250		P.Cft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
6	Cement Plaster in Ratio 1:6 (15 mmThick) i/c floating coat of cement in proper design & profile on walls/beams & columns .This rate also i/c providing expanded metal at the joint of R.C.C.members and block masonry where as required etc complete in all respects as per specifications and drawings and approval of Engineer Incharge (Refer R.A # 17on Page no 46) (i) 15 mm thick Internal / External (S. Floor)	6,580		P.Sft	
7	Cement Plaster in Ratio 1:4 (13 mmThick) i/c floating coat of cement in proper design and profile on walls, beams & columns etc complete in all respects as per specifications and drawings and approval of Engineer Incharge (Refer R.A # 18 on Page no 47) (i) 13 mm thick Internal / External (S.Floor)	13,450		P.Sft	
8	Providing & fixing Colour Crete to wall surface to provide, durable crust and aesthetics having thickness up to 1/2" with specified colour having water, fire3 and temite resitance over the base of 1/2 " thick cement plaster ratio (1:4) (Refer R.A # 48 on Page no 113) (S.Floor)	4,310		P.Sft	
9	P/L C.C cement concrete 1:2:4 under floor including surface finishing etc complete.	1,350		Cft	
10	Providing & fixing Graphic Wall Decorative Plaster to provide, Durable Crust and Acrylac Finish having thickness up to 13 mm with specified colour having water, fire3 and termite resitance over the base of 15mm thick cement plaster ratio 1:4 (Refer R.A # 75 on Page no147) (S.Floor)	630		P.Sft	
11	Providing and fixing Printed Granite Porcelain Tiles Flooring (24"x 24" x 1/2" or above) jointed in white cement and laid over bed of 1"to 2" thick grey cement concrete bed in ratio 1:2:4 i/c washing / filling of joints with white cement etc: complete in all respect (Imported Premium Quality costing Rs 1800 per meter or above) (Refer R.A # 20/ 21/ 22 on Page no 49-53) a Flooring (S.Floor) b Wall Dado (S.Floor) c 6" Wide Wall Border (S.Floor)	6,835 1,145 2,235		P.Sft P.Sft P.Rft	
12	Providing and fixing Printed Glazed Ceramic Tiles Flooring (12"x18"x1/4" or above) jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect (Imported Premium Quality costing Rs 1600 per square meter or above) (Refer R.A # 24 on Page no 64) Wash Rooms Flooring (S.Floor)	665		P.Sft	
13	Providing and fixing Printed Glazed Ceramic Tile Dado/ Skirting (12"x18"x1/4" or above) i/c two layers of Printed Borders (2" to 4"Wide) jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect. (Imported Premium Quality costing Rs 1600 per square meter or above) (Refer R.A # 25 on Page no 66) Wash Rooms Wall Dado (F.Floor)	1,380		P.Sft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
14	Applying 3 Coats of Silk Matt Finishing with primary coat and preparing base surface and filling where as required as per requirement of Architecture Drawings and specifications etc complete in all respects as per directives of Engineer In charge. (Refer R.A # 46 on Page no 111)	13,500		P.Sft	
14	P/Applying 3 Coats of Wheather Sheild Paint of superior quality i/c preparing base surface and filling etc complete in all respects as per directives of Engineer In charge (Refer R.A # 45 on Page no 110)	235		P.Sft	
16	Providing and fixing in position Doors Shutter 1-1/2" thick Teak wood ply shutters of first class partal wood skeleton (Solid) styles and rails core of partal wood and Teak ply sheet (3 ply) on both sides including frost glass of 3 mm on top,partal wood lipping around shutter, hold fasts, hinges, iron tower bolts, handles and cleats with cord etc, complete. (Refer R.A # 33 on Page no 93)	625		P.Sft	
17	Providing and fixing with sunk iron screws Oak Wood Architrave approved design/shape having width not less than 2-1/2 inches i/c french polishing etc complete as directed by Engineer Incharge. (Refer R.A # 102 on Page no 187) 2-1/2" Thick	1,030		P.Rft	
18	Providing and Applying French polishing over wood work with liqueur base spirit polish and filling material etc complete in all respect (Refer R.A # 49 on Page no 114)	1,250		P.Sft	
19	Providing and fixing C.P Brass Mortice Lock with Round Handle (Imported) (Refer R.A #103 on Page no 186)	19		Each	
20	Providing and fixing C.P Brass Mortice Lock with Long Handle (Heavy Design Imported) (Refer R.A #104 on Page no 187)	5		Each	
21	Providing and fixing C.P Brass Tower Bolt 24" Long (Heavy Design Imported) as approved by the Engineer. (Refer R.A #104 on Page no 187) 24" Long	24		Each	
22	S/F in position Aluminum box channels framing (100 mm x 40 mm) for office chamber partitions i/c Alminium hinged doors of Alcop made (of approved make and design) with Aluminium Sheet 3 mm on bottom up to 300 mm height , 5 mm thick tinted frost glass glazed on remaining portion (Belgium) , imported Door Closer over Door and Alpha (Japan) locks including handles stoppers etc complete in all respects as per directives of Engineer Incharge.(Prime / Chawla or Equivalent) (Refer R.A # 39 on Page no 104)	135		P.Sft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
23	S/F in position Aluminum box channels framing (100 mm x 40 mm) for Aluminum Doors of Alcop made (of approved make and design) with Aluminum Sheet 3 mm on bottom up to 900 mm height , 5 mm thick tinted frost glass glazed on remaining portion (Belgium) , imported floor hinge two way pivot machine and Alpha (Japan) locks including handles stoppers etc complete in all respects as per directives of Engineer In charge. (Prime/ Chawela or Equivalent) (Refer R.A # 40 on Page no 105)	185		P.Sft	
24	S/F in position Almuniums channels framing (100mm x 40 mm) for sliding windows & ventilator with collar of Alcop made (of approved make and design) with 5 mm thick tinted glass glazing (Belgium) and almunium fly screen channel including handles stoppers & locking arrangements etc complete in all respects as per directives of Engineer In charge (Prime/ Chawla or Equivalent) (Refer R.A # 40 on Page no 105)	1,345		P.Sft	
25	Providing and laying Pre-Polished best quality imported granite beveled edges on staircase treads having 50mm wide unpolished strip, laid over concrete base over 40 mm thick concrete base (1:4) complete in all respect as per detail/ drawing and as directed by the Consultants. (Basic cost of Granite Should be Rs.800.00 per Sq ft or above) (Refer R.A # 20 on Page no 49)				
(iv)	Reception / Vanity / Kitchen Counter 25 mm	112		P.Sft	
26	Providing & applying smooth 3/4" thick to walls columns etc. with 1:4 cement ratio, i/c all corners, recesses, jambs & raking out joints along with (Pudlo- 2 kg per bag of approved quality) complete as per drawings, specifications & as per instructions of Consultant/ Engineer In-charge. (Refer R.A # 72 on Page no 145)	800		P.Sft	
27	Supplying and fixing False Ceiling of gypsum sheet (4'-0"X 2'-0"imported) inpanels including making frame work of imported Aluminium 'T' Channels etc complete as per drawings, specifications & as per instructions of Consultant/ Engineer In-charge. (Refer R.A # 56 on Page no 128)	6,730		P.Sft	
28	P/F Decorative False Ceiling of first quality MDF Lassani boards of various thicknesses (3/4" , 1/2" & 3/8") with wooden logs as per requirement of Architecture Drawings and specifications provided i/c decorative paint or French polish as required and also making excess for decorative false ceiling LED Lights etc complete in all respects as per directives of Engineer In charge.(Refer R.A # 57 on Page no 129)	1,135		P.Sft	
29	Supplying & fixing window printed blinds (Horizontal / Vertical) with printed design and of approved colour i/c fixing in windows with necessary assessories.etc complete in all respects as per directives of Engineer In charge.(Refer R.A # 100 on Page no 181)	465		P.Sft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
30	Providing and fixing Hand Printed Kashi Ceramic Irani Pattern Tiles(Size 8" x 12" or above) on wall facing or in dado jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect.(Premium Quality costing Rs 15,000 per square meter or above) (Refer Additional R.A #106/Page no 190)	485		P.Sft	
TOTAL					
(ii) INTERNAL WATER SUPPLY & SANITARY FITTINGS					
1	Providing & fixing English Commode with Seat cover including flushing cistern,tee stop cock etc complete in all respects (Porta /Marachi or Equivalent) (Classic Model) (Refer R.A # 01 on Page no 01)	4		Each	
2	Providing & fixing Orisa W.C 23" Clear including flushing cistern ,tee stop cock etc complete in all respects (Porta/ Marachi or Equivalent) (Classic Model) (Refer R.A # 02 on Page no 02)	2		Each	
3	Providing & Fixing Wash Basin size 24" x18" with wash basin mixture and pedestal etc complete in all respects (Porta/Marachi or Equivalent) (Classic Model) (Refer R.A # 04 on Page no 04)	4		Each	
4	Providing & Fixing Wash Basin size 24" x18"(Vanity type with top counter and wooden box) with wash basin mixture and pedestal etc complete in all respects (Porta/Marachi or Equivalent)(Classic Model) (Refer R.A # 05 on Page no 05)	2		Each	
5	Providing & fixing Urinal including flushing cistern ,tee stop cock etc complete in all respects (Porta / Marachi or Equivalent) (Classic Model) (Refer R.A # 03 on Page no 03)	2		Each	
6	Supplying/Fixing White glazed Labortary sink bowl of approved made and design (Standard Size) as per standard requiurement i/c bolt kit brackets , c.p waste and waste pipe etc complete in all respects (Refer R.A # 17 on Page no 13)	2		Each	
7	Providing and fixing C.P Brass Double bib cock with Muslim Shower 1/2" dia (Master/ Sonex or equivalent) (Refer R.A # 07 on Page no 07)	6		Each	
8	Providing and fixing C.P Brass Fancy bib cock with crystal head 1/2" dia (Master / Sonex or equivalent). (Refer R.A # 08 on Page no 07)	6		Each	
9	Providing and fixing C.P Brass Concealed stop cock with crystal head 1/2" dia (Master / Sonex or equivalent) (Refer R.A # 13 on Page no 10)	6		Each	
10	Supplying/Fixing C.P Brass Surgical Elbow action Wash Basin Mixture of superior quality with C.P Head and long arm 1/2" dia etc complete in all respects (Refer R.A # 16 on Page no 12)	2		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
11	Providing and fixing Stainless Steel Sink Size 40" x 20" (with double Trey) i/c C.P Brass Sink Mixture , C.P waste, P.V.C Waste Pipe, Bolt kit etc complete in all respects. (Superior quality and heavy gauge) (Refer R.A # 28 on Page no 20)	2		Each	
12	Providing and fixing U.P.V.C. Floor Trap 6"x2" or 6"x3" dia i/c Steel floor Jali grade-I (AGM or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 43 on Page no 32)	14		Each	
13	Providing and fixing U.P.V.C. Pipe 4" dia grade-I (AGM or equivalent) including all fittings such bends tees etc with cutting pipe up to required length, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 37-a on Page no 27) For Single Attached Lavatorv	240		P.Rft	
14	Providing and fixing U.P.V.C. pipe 4" dia grade-I (A.G.M.or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 38 on Page no 28) For General Lavatorv and out side	480		P.Rft	
15	Providing and fixing U.P.V.C. Branch 4"x4" dia with Access door, grade-I (A.G.M or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 39 on Page no 29)	8		Each	
16	Providing and fixing U.P.V.C. Plain.Tee 4"x4" dia or 'Y' Tee grade-I (A.G.M. or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 40 on Page no 29)	8		Each	
17	Providing and fixing U.P.V.C. Plug Bend 4"x4" dia with Access door, grade-I (A.G.M or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. . (Refer R.A # 41 on Page no 30)	8		Each	
18	Providing and fixing U.P.V.C. Plain Bend 4" dia grade-I (A.G.M. or equivalent) including cutting, fitting with collars, clamps and rubber solvent. This rate also includes making holes in walls, plinth, floor and roof for fixing pipe and making good in c.c. 1:2:4. Testing pressure head 200 feet. (Refer R.A # 42 on Page no 30)	12		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
19	Providing & fixing of PPR PN-20 cold water pipes with all required molded fittings PN-20, jointing pipe with heat method, testing. This rate also i/c cutting holes in wall plinth and roof for consealed pipe fittings and making good in c.c 1:2:4 etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 46 on Page no 42)				
(i)	40 mm	300		P.Rft	
(ii)	25 mm	220		P.Rft	
(iii)	20 mm	280		P.Rft	
(iv)	13 mm	320		P.Rft	
20	Providing & fixing of PPR PN-20 Gate Valve with brass threads, jointing with already laid pipe by heat method, testing, etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 46 on Page no 42)				
(i)	40 mm	2		Each	
(ii)	25 mm	4		Each	
(iii)	20 mm	6		Each	
(iv)	13 mm	4		Each	
21	Providing G.I pipes of approved standard company with fittings such as tee, bend, socket, elbow .union & clamps where as required etc i/c threading ,fixing cutting & fitting complete with & i/c the cost of earth excavation up to rquired depth and laying pipe in to the trench and refilling the trench i/c painting two coats of bitumen with hessian cloth after cleaning the pipe etc complete and testing with water to a pressure head of 200 feet and handling. (External I.I.L M or Equivalent) (Refer R.A # 45 on Page no 36)				
(i)	3" Dia pipe	440		P.Rft	
(ii)	2" Dia pipe	380		P.Rft	
(iii)	1-1/2" Dia pipe	440		P.Rft	
22	Providing and fixing Gun Metal wheel Threaded Valve (Made in Italy) (Refer R.A # 23,24,25 on Page no 16)				
(i)	3" Dia Valve	2		Each	
(ii)	2" Dia Valve	2		Each	
(iii)	1-1/2" Dia Valve	4		Each	
21	Providing chambers 9" x 6" (inside dimensions) x 24" deep for stop cocks and valves etc. with 6" thick C.C 1:3:6 cast in situ walls, 6" thick C.C 1:4:8 in foundation 1/2" thick cement plaster 1:3 to all inside wall surface and to top 1" thick C.C 1:2:4 flooring complete with hinged cast iron cover and frame 9"x6" (inside) clear opening (wt 1/2" Qr) etc. fixed in cement concrete 1:2:4 including curing excavation back filling & disposal of earth etc. complete.(Refer R.A # 48 on Page no 64)	6		Each	
22	Supplying & fixing Bath room accessories set (9 Pieces) i/c towel rod, brush holder, Coat Holder & soap tray shelf of approved design i/c cost of screws, nuts etc Complete.(Master Brand or Equivalent). (Refer R.A # 30 on Page no 64)	2		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
23	Supplying & fixing Hydraulic Hand Dryer of approved Make & Design (Imported) (Refer R.A # 62 on Page no 64)	6		Each	
24	Providing & fixing Bavelled edge mirror of belgium glass (Above 3.00 Sft) complete with 3" thick pre polished wooden border , 1/8" thick hard board and C.P. screws fixed to wooden pleat.(Superior Quality) (Refer R.A # 33on Page no 23)	40		P.Sft	
TOTAL					
(iii) INTERNAL SUI GAS FITTINGS					
1	Providing and fixing Brass Gas Cock 1/4" dia imported (Refer R.A # 63 on Page no 64)	6		Each	
2	Providing & fixing of Gas Burner (Three Ways Table Top) of approved make and design with necessary fittings by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer Incharge. (Imported heavy duty) (Refer R.A # 55 on Page no 55)	2		Each	
3	Providing & fixing of Lab Gas Burner of approved make and Design with necessary fittings by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer Incharge (Refer R.A # 57 on Page no 58)	2		Each	
4	Providing & fixing of Gas Geyser of approved and Design (35 Litres) with importede pilot and necessary fittings by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer Incharge (Refer R.A # 54 on Page no 55)	2		Each	
5	Providing & fixing of PE-80 (Polyethylene-Flex) sui gas pipes with all required molded fittings of PE-80 , jointing pipe with approved method, testing , excavating trench in existing external soil, laying pipe, refilling the trench compaction etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 52 on Page no 51)				
(i)	20 mm	320		P.Rft	
(ii)	13 mm	320		P.Rft	
6	Providing & fixing of PE-80 (PolyethyleneT-Flex) Gate Valve with brass threads, jointing with already laid pipe by approved method, testing etc complete in all respects as per specifications and instructions provided by the Engineer In charge. (Refer R.A # 53 on Page no 52)				
(i)	20 mm	2		Each	
(ii)	13 mm	6		Each	
TOTAL					

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
PART 'iv' INTERNAL ELECTRIFICATION WORK					
1	Wiring for light, fan or plug point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required (Refer R.A # 01 on Page no 01)				
(i)	(From D. B to Switch Board)	24		P. Point.	
(ii)	(From Switch Board to Point)	148		P. Point.	
(iii)	(From Point To Point)	36		P. Point.	
2	Wiring for call bell point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required (When push button outside premises). (Refer R.A # 02 on Page no 04)	2		P. Point.	
3	Wiring for two way light point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required (Refer R.A # 03 on Page no 05)	2		P. Point.	
4	Wiring for plug point with 1.5 sq.mm single core, PVC insulated wire copper conductor wire in 3/4" dia PVC conduct recessed in the wall column, roof etc, including 1 sq.mm single core PVC insulated wire as ECC as required . (Nearest light plug) (Refer R.A # 04 on Page no 06)	12		P. Point.	
5	Circuit Wiring for distributing circuits with 2-1/1.38 (3/.036) PVC insulated wire in 25mm (1") PVC conduit fitted (Maximum length of circuit from D.B To Switch Board should be 200 Rft or more) (Refer R.A # 05 on Page no 07)	6		Each	
6	Circuit Wiring for power point with 2-7/0(7/.044) PVC insulated wire with 1-1/36 as ECC in 25mm (1") PVC conduit fitted. (Maximum length of power wiring from D.B to Point should be 160 Rft) (Refer R.A # 06 on Page no 08)	12		Each	
7	Providing & fixing 10Amps polycarbonate flame retardant One way switch with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (E31/2/3A Clipsal Make)(Refer R.A # 08 on Page no 10)				
(a)	One Switch Plate	6		Each	
(b)	Two Switch Plate	6		Each	
(c)	Four Switch Plate	8		Each	
(d)	Six Switch Plate	12		Each	
(e)	Eight Switch Plate	12		Each	
8	Providing & fixing 10Amps polycarbonate flame retardant bell push with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (E31/MBPR Clipsal Make) (Refer R.A # 09 on Page no 11)	2		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
9	Providing & fixing 10Amps polycarbonate flame retardant Two way switch with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required. (E31/2/3A Clipsal Make)(Refer R.A # 07 on Page no 09)	2		Each	
10	Providing & fixing 10Amps polycarbonate flame retardant 2-pin switch socket unit (Universal) with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required. (E-15U Clipsal Make) (Refer R.A # 10 on Page no 11)	12		Each	
11	Providing & fixing 10Amps polycarbonate flame retardant 3-pin switch socket unit (Universal) with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (Clipsal Make) with back & boxing (Refer R.A # 11on Page no 12)	12		Each	
12	Providing & fixing 15Amps polycarbonate flame retardant 3-pin switch socket unit (Universal) with fancy gang plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (Clipsal Make) with back & boxing (Refer R.A # 12 on Page no 13)	12		Each	
13	Providing & fixing A.C/D.C Door Bell (superior quality imported)on die fabricated powder coated metal board recessed in wall or column including connection as required (Refer R.A # 14 on Page no16)	2		Each	
14	Providing & fixing 3"x4"x5" size (14SWG) thick recessed type fan clamp box 5/8" dia MS bar fan clamp fixed in roof at casting time as required. (Refer R.A # 15 on Page no 17)	18		Each	
15	Making hole in the wall for 12" to 16" sweep metallic exhaust fan and fixing of hold fast, dully plaster and making good the damage as required. (Refer R.A # 16on Page no 18)	1		Each	
16	Providing and fixing 6 Amps plastic ceiling rose on PVC round block /round cover fitted on surface including connection as required. (Refer R.A # 24 on Page no 26)	48		Each	
17	Providing and installing 25 CM (12") sweep plastic body Exhaust fan complete with blades, motors, etc fixed in existing hole including connection with 14/.0076" flexible wire complete as required (without regulator) Millat/Pak/Asia/Younus/Climax/Royal. (Refer R.A # 17 on Page no 18)	2		Each	
18	Providing and installing 60CM (24") Wall Bracket Fancy Fan including connection with 14.0076" flexible wire complete as required (Millat/Pak/Asia/Younus/Climax/Royal. (Refer R.A # 18 on Page no 19)	12		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
19	Providing and installing 140 CM (56") sweep ceiling fan with blades, canopy, standard length of down rod including connection with 14.0076" flexible wire complete as required (without regulator) Millat/Pak/Asia/Younus/Climax/Royal. (Refer R.A # 19 on Page no 20)	12		Each	
20	Providing & fixing 15 Amps poly carbonate flame retardant 400 watts fan dimmer with plate fixed on die fabricated powder coated metal board recessed in wall or column including connection as required (E32V400F Clipsal Make) (Refer R.A # 13 on Page no 15)	12		Each	
21	Providing & Laying of following sizes of 3-1/2 core PVC insulated & PVC sheathed 600/1000 volt grade with standard copper conductor unarmoured L.T cable in existing all kind of conduit or cable duct as per Approved specification as required (Refer R.A # 20 on Page no 21)	225		P.Rft	
22	Providing and fixing Earth set with 2'x2'x1/4" copper plate buried in the ground at a depth of 12 feet or less if water comes out from the ground level (with salt and charcoal, or Earth chemical powder) etc.. Making the pit 12 feet deep by excavation of all type of soil (except soft or hard rock) i/c fixing of 8 SWG copper wire in 1/2" G.I conduit complete in all respects as required (Refer R.A # 21 on Page no 22)	1		P.Job	
23	Providing & Fixing basic batten, surface type, fitting complete with TLD 1x36W white day light lamp starter, electronic ballast as Philips Cat. (TMS015/136 L.E.D) (Refer R.A # 23 on Page no 24)	12		Each	
24	Providing & Fixing basic batten, surface type, fitting complete with TLD 2x36W white day light lamp starter, electronic ballast as Philips Cat. (TMS015/136 L.E.D) (Refer R.A # 24 on Page no 25)	18		Each	
25	P/Fixing 2'-0" x 2'-0" Fancy False Ceiling Circo Fan(imported) of approved make and design etc complete in all respects as per directives of Engineer Incharge. (Refer R.A # 26 on Page no 27)	18		Each	
26	Providing & Fixing basic batten, surface type, fitting complete with TLD 4x36W (2'-0" LONG),ALUMINIUM CASING (L.E.D) ,white day light lamp starter, electronic ballast as Philips Cat. (TMS015/136) (Refer R.A #25 on Page no 26)	12		Each	
27	Providing and fixing L.E.D Energy Saver 12 Watts Phillips i/c wall type or ceiling fancy bracket (Refer R.A # 27 on Page no 28)	12		Each	
28	Providing and fixing L.E.D Energy Saver 20 Watts Phillips i/c wall type or ceiling fancy bracket (Refer R.A # 27 on Page no 28)	12		Each	
29	P/Fixing LED Pendent Light with 18 watts bulb in a fancy glass globe casing hanging on 4' Long hallow pipe rod of 3/4" dia pipe of approved make and design etc complete in all respects as per directives of Engineer Incharge (Refer R.A # 29 on Page no 29)	12		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
30	P/Fixing LED Fancy Light with 18 watts bulb and 12"x12" fancy bracket of approved make and design etc complete in all respects as per directives of Engineer Incharge (Refer R.A # 30 on Page no 30)	12		Each	
31	Supply & Installation of following Main / Distribution Pannel Boards of approved make and design concealed in wall/surface mounted or floor standing. 1.5/2/3 mm sheet steel fabricated powder coated , suitable for 500 volts, 3 phase ,4 wires,50 Hz, incorporate following componens & configuration, complete with all mounting & connecting accessories as per Electrical Drawings attached etc complete in all respect as per specification provided and instructions given by the Engineer Incharge. (Refer R.A. Book)				
i	SMDB-MB	1		Each	
ii	EDB-EME	2		Each	
iii	EDB-MB-1	4		Each	
32	Supply, Laying, termination and commissioning of following copper conductor cable in already laid PVC conduit / cable tray / trench as required, as per drawings, specification and instructions given by Engineer Incharge (Cu /pvc/ pvc cable , 600/1000v, Pak /Pioneer/AEG Cables). (Refer R.A # 49 on Page no 58)				
a	4 Core - CU/PVC/ PVC Cable (600/1000V)				
i	4 Core - 10 Sq.mm	600		P.Rft	
iv	4 Core - 35 Sq.mm	950		P.Rft	
vii	4 Core - 95 Sq.mm	740		P.Rft	
c	1 Core - PVC Cable as ECC (600/1000V)				
i	1 core -10 Sq.mm	1,200		P.Mtr	
TOTAL					
(v) C.C.TV System					
1	Supply and Installation of colour LCD standard resolution Camera scene illumination operating on 230V AC ceiling / wall mounted with all accessories, as per drawings & specifications. (Refer R.A # 01 on Page no 01)	8		Each	
2	Supply and Installation of Colour Video Monitor LED size 23".(Refer R.A # 02 on Page no 01)	2		Each	
3	Testing and Commissioning of CCTV System by authorized local representative of the manufacturer. (Refer R.A # 03on Page no 02)	1		P.Job.	
4	CCTV 4-core shielded cable in 1" dia. PVC conduit (Refer R.A # 04 on Paee no 02)	545		P.Mtr.	
5	Electric cabling.(3 x 2.5 mm Cu - PVC) to be pulled in 1"dia PVC conduit/channel. (length subject to check at site(Refer R.A # 05 on Page no 03)	8		P.Job.	
6	Supply and Installation of DVR-06 Channel (Refer R.A # 06 on Page no 03)	1		Each	
TOTAL					

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
(vi) Telephone Net Work & Data Collection System					
1	Supply & installation of following 0.6 mm dia. Shielded telephone cables in 25 mm dia PVC conduit. (Refer R.A # 01 on Page no 01) (a) Cat - 6 (b) Telephone cable 10 pair.	345 185		P.Mtr. P.Mtr.	
2	Supply & installation of following boards as per drawings fabricated from 16 SWG sheet steel powder coated box with hinged covered door. a)Telephone Junction Box with (8 x 25 pair punch block) tag block.(Refer R.A # 02 on Page no 02)	1		Each	
3	Supply & installation of following telephone outlets (i/o + Face Plate) with back box.(Hussain make) (Refer R.A # 03 on Page no 03) a) RJ-45 for telephone system. b) RJ-45 for Data system. c) RJ-45 for Data system. (Duplex)	15 15 4		Each Each Each	
4	Supply and installation of Cat-6 giga speed cable AT & T /clipsal make for data system in 25 mm dia PVC conduit (Refer R.A # 04 on Page no 04).	320		P.Mtr.	
5	Card Access Control System (Refer R.A # 05 on Page no 04)	3		Each	
6	Wiring for Card Access(Refer R.A # 06 on Page no 05)	3		Each	
7	Supply/ Fixing of Industrial UPS 5 Kva i/c wiring with dry battery and neccessary angle iron bracket for errecting UPS (Imported)(Refer R.A # 07 on Page no 05)	2		Each	
8	Following CAT-6, Patch Panels equipped with RJ-45 I/Os for Data communication system with rear cable organizer including all labeling and all mounting accessories Complete in all respects. 24-port CAT-6 patch panel for data (Refer R.A # 09 on Page no 07)	1		Each	
9	Following CAT-6, Patch Panels equipped with RJ-45 I/Os for voice communication system with rear cable organizer i/c all labelling system and all mounting accessories etc complete in all respects. 24-port CAT-6 patch panel for Voice (Refer R.A # 10 on Page no 08)	1		Each	
10	Front Cable Organizer for Voice & Data patch panels / wiring blocks with complete labeling and dressing for incoming cable management. (Refer R.A # 11 on Page no 08)	2		Each	
11	Following CAT-6 , factory certified patch cords of specified color having RJ-45 connectors at both ends for voice communication. (Refer R.A # 12 on Page no 09) a 3 meter long. b 1 meter long.	10 10		Each Each	
12	Supply, Installation, testing and commissioning of Data Switch (10G) for Cat-6 Cable. (Refer R.A # 13 on Page no 10)	1		Each	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
13	Supply / Installation of 42 U Floor mounted Communication Rack. suitable for installation of servers,switches and related equipment etc. Complete with vertical cable managers with at Rack shall be equipped with power distribution units (PDUs) least 5 imported power sockets etc complete in all respects. (Refer R.A # 14 on Page no 10)	1		Each	
14	Testing and commissioning of all above items termination and connectivity at both ends, including submission of detailed test report from the Principals. (Refer R.A # 15 on Page no 11)	1		P.Job	
TOTAL					
<u>(vii) Fire Extinguisher / Alarming System</u>					
1	Supply, installation and connection of conventional type Fire Alarm control panel flush mounted complete with all particulars (Refer R.A # 1 on Page no 1)	1		Each	
2	Supply, installation and connection of photo-electric type accessories, back up battery, indication lamps, internal smoke detectors as per drawings etc (Refer R.A # 2 on Page no 1)	12		Each	
3	Same as item 2 but heat detector. (Refer R.A # 3 on Page no 2)	1		Each	
4	Supply, installation and connection of conventional manual break glass stations with LED indication as per drawing (Refer R.A # 4 on Page no 2).	2		Each	
5	Supply, installation and connection of fire alarm sounders as per specifications & drawing. (Refer R.A # 5 on Page no 3).	2		Each	
6	Wiring of smoke, heat detectors, manual break glass & Fire Alarm sounders with 2C x 1.5sq.mm PVC insulated copper wires in PVC conduit for surface installation complete with all accessories,etc up to fire alarm control panel including termination.(Refer R.A # 6 on Page no 3).	1		P.Job	
7	Power supply to Fire Alarm Control Panel from DB UPS-1, wired with 3C x 2.5mm ² PVC insulated cable in PVC conduit as per Drawing.(Refer R.A # 7 on Page no 4).	1		P.Job	
8	Testing and commissioning of Fire Alarm System by authorized local representative of the manufacturer. (Refer R.A # 8 on Page no 4).	1		P.Job	
9	Supply and Installation of fire extinguisher 6 kg (Refer R.A # 9 on Page no 5).	5		Each	
TOTAL					

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
(viii) HVAC Works (Air-Conditioning System)					
1	Supply, Installation, Testing & Commissioning of following Air Conditioning Split Unit Complete (Inverter Type) in all respect ready to operate complete in all respect. The work should be completed with control wiring with limited copper conduiting as required (Refer R.A # 1 on Page no 1). (Acson / Mitsubishi / Gree)				
a)	1.0 Ton Wall Mounted Split Type.	2		Each	
b)	1.5 Ton Wall Mounted Split Type.	20		Each	
c)	2.0 Ton Wall Mounted Split Type.	5		Each	
2	Supply / Installation and Commissioning of Refrigerant copper piping (Liquid + Gas-1/2 + 1/4 +5/8+3/8) make Muller USA with expanded rubber foam Insulation (Make Aeroflex) Gas Charging if required. Control wiring in PVC conduit between internal and external units etc complete in all respects. (Refer R.A # 2 on Page no 4).	650		P.Rft	
3	Supply & Installation of U-PVC Schedule 40 AGM Pipe with accessories, including cutting of wall with insulation for drain etc. (Refer R.A #3 on Page no 5).				
a)	3/4" dia	220		P.Rftt	
b)	1" dia.	180		P.Rftt	
4	Supply & Installation of floor mounted / wall mounted angel iron bracket for outdoor units as per drawing Complete in all respects.(Refer R.A #4 on Page no7).	27		Each	
5	Supply & installation of following sizes of G.I Powder coated cable tray. Size 6" x 2-1/2"	325		Rft	
				TOTAL	
(ix) FURNITURE WORK					
1	Providing & making Faculty Staff table Size 5'-6" x 2'-3" x 2'-6" make of 17mm thick imported MDF lasani top & side with pvc lipping on edges, tuff formica paste with glue both sides etc complete as per design & directed by the Engineer Incharge.	6		Nos.	
2	Providing & making Faculty Staff Table Side Rack size 3'-0" x 1'-4" x 2'-6" make of 17mm thick imported MDF lasani top & sides, 2/8" thick lasani laminated back, pvc lipping on edges, tuff formica paste with glue both sides i/c 3nos drawer including drawer channel 1no drawer locking arrangement, handle etc. complete as per design & directed by the Engineer Incharge.	4		Nos.	
3	Making & Providing Cabinet with Drawer (22" depth) make of Imported MDF Lasani Lamination 17mm thick, formica (as per approved color) pasting with glue , 2/8" thick laminated lasani back, wood lipping on edges, partial wood framing, ss piano hinges, drawer chanel, s.s handle or nob's complete as per approved design by Architect & Engineer incharge.	300		Sft	
4	Providing & making Lecture Hall Computer Table Size 3'-6" x 2'-0" x 2'-8" make of 17mm thick imported MDF lasani lamination top & side with wood lipping on edges, formica paste with glue, i/c CPU box, Keyboard tray & drawer i/c drawer channel, locking arrangement & S.S Nob's etc complete as per design & directed by the Engineer Incharge..	1		Nos.	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
5	Providing & Fixing artificial white granite i/c gola with polish, marble jelly etc complete as per approved design by Architect & Engineer incharge.	385		Sft	
6	Display units with Shutter (2' depth) & 1-1/2" sides top & bottom size (3'-0" x 7'-0") make of 17mm thick MDF lasani Lamination with formica pasting with glue, beach wood lipping on edges, beach wood door frame, 5mm clear glass, 2/8" thick laminated lasani back, S.S piano hinges, handle or nobs i/c locking arrangement, etc complete (As per Approved design and drawing.)	400		Sft	
7	Providing visitor charis as per approved design and make.	19		Nos.	
8	Providing & making reception counter 6'-0"x4'-6"	1		Nos.	
9	Providing lecture room student chairs with writing top i/c arms as approved design and drawing.	99		Nos.	
10	Providing waiting chair with foam cusion seat and back with S.S. frame.	30		P.Seat	
11	Providing chairs metal frame with plastic base superior quality.	48		Nos.	
				TOTAL	
Part 'C' Over Head Water Tank (8,000 Gls Capacity)					
1	Providing and laying R.C.C Class 'B' Concrete (1:1-1/2: 3) having a minimum crushing strength of 4000 PS I at 28 days, using 6mm to 18mm sizes graded crushed aggregate and fine aggregate including approved quality form work and its removal, all operations of vibrating, leveling, consolidating , curing and cube / cylinder lab tests of pouring material at 07 days & 28 days etc.complete in all respects as per specifications and drawings and approval of Engineer Incharge .This rate does not includes the cost of steel bars and its errection which will be paid seperately.				
(i)	Super Structure Columns (3rd Floor)	230		P.Cft	
(i)	Bottom Slab (3rd Floor)	240		P.Cft	
(ii)	Beams / Structure Walls (3rd Floor)	530		P.Cft	
(iii)	Top Slab (3rd Floor)	120		P.Cft	
2	Fabrication of Cold Twisted Deformed Steel Bars, reinforcement for cement concrete work i/c cutting, bending, laying in proper position, making joints & fastenings etc complete. This rate also include cost of binding wire, over lapping ,extra wastage, laboratory testing of steel and removing rust from bars. (3rd Floor) (Grade 60, Minimum Yield Strength 60000 lbs/P.S.I)	7		P.Ton	
3	Providing & fixing PVC Water Stopper 12" high PVC water stopper for safeguarding them from hydro-static pressures & water seepages of approved quality & maintaining proper alignment, complete in all respects as per drawings, specification & as per instructions of Consultant/ Engineer In-charge.	112		P.Rft	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
4	Providing & laying of 3" thick C.C.Toping with finish floor, preparation & laying in 1:2:4 using Pea Crush or fine crush along with (Pudlo- 2 kg per bag of approved quality) over bottom slab complete as per drawings, specifications & as per instructions of Consultant/Engineer In-charge.	180		P.Sft	
5	Providing & applying smooth 3/4" thick to walls columns etc. with 1:4 cement ratio, i/c all corners, recesses, jambs & raking out joints along with (Pudlo- 2 kg per bag of approved quality) complete as per drawings, specifications & as per instructions of Consultant/ Engineer In-charge.	385		P.Sft	
6	Providing & making roof finishing composed of C C 1:2:4 screeding of (min. 2" thick) laid in pannels in specified slopes over RCC slab complete as per drawings, specifications & as per instructions of Consultant/Engineer In-charge.	180		P.Sft	
7	P/F Steel Man Hole Cover (18" x 18") in water tank roof of approved design with water tight joint etc complete in all respects as per specifications and drawings and approval of Engineer Incharge.	1		Each	
8	P/F in position in C.C foundation 1:3:6 M.S ladder of M.S angle iron 2"x2"x1/4" 1' apart with M.S bar 3/4" dia spaced 1' apart painting 3 coats with anticorrosive steel paint etc complete. in all respects as per specifications and drawings and approval of Engineer Incharge.	45		P.Rft	
9	Providing & fixing Colour Crete to wall surface to provide, durable crust and aesthetics having thickness up to 1/2" with specified colour having water, fire3 and temite resitance over the base of 1/2 " thick cement plaster ratio (1:4) (Refer R.A # 48 on Page no 113) (3rd Floor)	1,130		P.Sft	
10	P/F in position in Precast R.C.C Sphiral Stair case of approved make and design etc complete. in all respects as per specifications and drawings and approval of Engineer Incharge.	15		P.Rft	
TOTAL					
Part 'D' STEEL GLASS PASSENGER LIFT					
1	Purchase , Commissioning & Installation of Pansonic Glass Passenger Lift as per EN-81, tuv OR jis Quality Standard & Components based on the attached specification shall be:- (i) Model => FOB II (800kg) – CO60- 4 : 4 for Passenger Lift. (ii)Traction Machine Type :- Permanent Magnetic Gear less Traction Machine. (iii) Capacity/Load :- 11 Persons / 800 kg for Pess Lift. (iv) Speed :- 60 mpm (1.00 m/sec) (v) Control :- AC Variable Voltage Variable Frequency Control With Fault Diagnostic & Recordind System) (vi)Floors/Openings :- 3 : 3 (in line) (vii) Floor Serve :- G + 2 Floors. (viii)Travel :- As per Site (ix) Operation :- Simplex Selective Collective Control with (Traffic Program Logic Control System) (x) Car Internal Dimension :- For 800 Kg Pessenger Lift as per site requirements	1		P.Job	
TOTAL					

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
PART 'E' PURCHASE & INSTALLATION OF 500 KVA DIESEL GENERATOR					
1	Purchase & Installation of 500 Kva Diesel Generator 380/415V 3 phase 4 wire) etc complete in all respects with 2000 liters standard fuel tank, ATS Engine , Sound proof canopy, Circuit Breaker Panel, exhaust silencer, Battery, Deep Sea Control Panel complete and all other necessary accessories. This rate also i/c carriage of generator from company ware house at Lahore to site of work at Shaheed Benazeer Abad, loading & unloading, installation of generator, testifying , running maintenance up to 07 Days and Two years or 200 hours which comes first for manufacturing comprehensive warranty of mechanical parts. (PERKINS Diesel generating set MADE IN U.K).	1		Each	
2	Providing, Installing and commissioning of WAPDA tested kwh meter etc. for both D.G. sets to comply with all requirements of Electrical Inspector etc. for getting necessary approval.	1		P.job	
3	Providing, Design, Erection of Acoustic panels on Louver Door 6' x 8' of Generator Room (Actual Size to be confirmed from site) Complete in all respect.	1		P.job	
4	Getting necessary Approval / NOC's for Installation of above Generator from concerned Authorities (Electric Inspector), expenses etc. All official fees/ expenses shall be paid by client.	1		P.job	
5	Providing, fabrication and installing of G.I. sheet metal ducting for each D.G Sets radiator exhaust, made with minimum 14 SWG or higher gauge to cater the CFM requirement of the DG Set, as per drawing including flexible canvas duct and cost of all material etc. complete in all respects.	1		P.job	
6	Supply and Handing Over to Client Representative of standard spare parts and Tool Kit as recommended by the manufacturer for the operation of 1000 hours for D.G. Sets (Itemized list of spares to be provided as per specification).	1		P.job	
7	Providing, installing, testing and commissioning of free standing floor mounted, totally enclosed, cubical type, LV Generators synchronizing panel for parallel operation of above mentioned Generators comprising of incoming and outgoing breakers with all accessories, controls, metering, protection relays, including installation accessories etc. as per drawing, specification, data sheets as per the recommendation of manufacturer, complete in all respects.	1		P.job	
8	Supplying, installation, testing and Commissioning of earth pit with earth electrode 20 mm dia copper rod,3 meter long for Genset Neutral and body earth and synch panel. Directly driven in ground and connected with earth leads including Inspection pit 300 x 300x300mm deep with heavy duty cover, complete as per drawing, specification and instruction of consultant.	2		P.job	

SR.#	DESCRIPTION OF ITEMS	QUANTITY	RATE	UNIT	TOTAL
9	Supply, installing, testing, and commissioning of earthing copper conductor 150sq.mm PVC insulated single core in appropriate size of Upvc pipe from earth copper rod/ earth bar to Genset Neutral and body and Synch panel as per specification and drawings.	150		P.Rm	
10	Supply , installation,testing and commissioning of earthing bar 300mm x 50mm x 5mm including all mounting accessories etc. complete in all respects.	1		P.job	
11	Providing, laying, testing and commissioning of 600/1000V grade copper conductor PVC insulated multi core un armoured cable in already installed raceway / cable trench, as per SLD, drawings and specifications, including appropriate size cable glands, terminations and accessories complete in all respects. 4C-300sq.mm. PVC/PVC	45		P.Rm	
12	Providing, installing, testing & commissioning of control cabling with appropriate sized (multi core cable as per manufacturer recommendation, between generator 1 & 2 and synchronizing panel and between synch. Panel and MDB/EMDB including terminations and all mounting accessories, etc. complete in all respects.	1		P.job	
13	Providing, and installation following accessories/ signs as per drawings & specifications, including all mounting accessories, complete in all respects.				
i	Rubber mats in front of Synchronizing panel	1		P.job	
ii	Danger Boards, emergency signs etc	1		P.job	
iii	Cable trench covers consisting of heavy duty MS chequered plate	1		P.job	
14	Providing of appropriate quantity of POL for testing of Genset as per manufacturer's Recommendation, including appropriate sized load bank.	1		P.job	
				TOTAL	

CONTRACTOR