

 Malaviya National Institute of Technology Jaipur SCHEDULE OF QUANTITY FINANCIAL BID					
Name of work : - Renovation of LT-25 and LT-26 for Conversion in Chemical engineering UG labs in MNIT Campus Jaipur					
NAME OF THE FIRM					
S.No	Qty	Items	Unit	Rate	Amount
1		EARTH WORK			
1.1		Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.			
1.1.1	4.8	All kinds of soil	cum	125.95	604.56
1.2		Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.			
1.2.1	50.99	All kinds of soil.	cum	166.40	8484.74
1.3	14.82	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	cum	125.75	1863.62
2		CONCRETE WORK			
2.1		Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level.			
2.1.1	50	1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size).	cum	5481.95	274097.50
2.1.2	1.41	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	cum	4478.15	6314.19
2.2		Centering and shuttering including strutting, propping etc. and removal of form work for :			
2.2.1	3.13	Foundations, footings, bases for columns	sqm	193.95	607.06
2.3	0.23	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size)	sqm	263.10	60.51
3		BRICK WORK			
3.1		Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:			
3.1.1	2.88	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	4970.30	14314.46
3.2		Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in:			
3.2.1	17.39	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5801.50	100888.09
3.3		Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.			
3.3.1	230	Cement mortar 1:3 (1 cement : 3 coarse sand)	sqm	708.70	163001.00
4		MARBLE AND GRANITE WORK			
4.1		Marble work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (vener work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).			
4.1.1		Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.			
4.1.1.1	27.65	Area of slab over 0.50 sqm	sqm	3035.50	83931.58
5		WOOD AND P.V.C. WORK			
5.1		Providing and fixing ISI marked flush door shutters conforming to IS : 2302 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.			
5.1.1	32.3	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	2372.80	76641.44
5.2	34.73	Extra for providing liping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	sqm	365.85	12705.97
5.3		Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :			
5.3.1	8	250x10 mm	each	88.10	704.80
6		STEEL WORK			
6.1	20.12	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	sqm	5360.65	107856.28
6.2		Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.			
6.2.1	397	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	74.05	29397.85
6.3		Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.			
6.3.1	378	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	85.95	32489.10
7		FLOORING			
7.1		Chequered precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).			
7.1.1	16	Light shade pigment using white cement	sqm	906.75	14508.00
7.2		Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :			
7.2.1	20.12	25 mm thick	sqm	1158.10	23300.97

7.3	1.28	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	sqm	1238.20	1584.90
7.4	30	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	744.80	22344.00
7.5	25	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	sqm	688.35	17208.75
7.6		Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.			
7.6.1	390.60	Size of Tile 600x600 mm	sqm	1119.40	437238.00
7.7		Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to IS. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.			
7.7.1	11.24	Size of Tile 800x800 mm	sqm	1432.80	16104.67
8		FINISHING			
8.1		12 mm cement plaster of mix :			
8.1.1	374.34	1:6 (1 cement: 6 fine sand)	sqm	160.35	60025.42
8.2		15 mm cement plaster on the rough side of single or half brick wall of mix :			
8.2.1	405.61	1:6 (1 cement: 6 fine sand)	sqm	185.20	75118.97
8.3		Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade :			
8.3.1	610	New work (two or more coats) over and including water thinnable priming coat with cement primer	sqm	93.70	57157.00
8.4		Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :			
8.4.1	147.19	Two or more coats on new work	sqm	78.40	11539.70
8.5	610	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	87.35	53283.50
9		REPAIRS TO BUILDINGS			
9.1		Renewing glass panes, with putty and nails wherever necessary including racking out the old putty.			
9.1.1	50	Float glass panes of thickness 4 mm	sqm	637.90	31895.00
9.2	20	Renewal of old putty of glass panes (length)	metre	25.45	509.00
9.3		Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade :			
9.3.1	1240.08	Old work (one or more coats)	sqm	33.35	41356.67
9.4	1240.08	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sqm	10.80	13392.86
9.5		Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :			
9.5.1	82.8	One or more coats on old work	sqm	51.30	4247.64
9.6	46.8	Repair to plaster of thickness 12mm to 20 mm in patches of area 2.5 sqm and under, including cutting the patch in proper shape, raking out joints and preparing plastering the wall surface with white cement based polymer modified self curing mortar, including disposal of rubbish, all complete as per the direction of Engineer-In- Charge.	sqm	368.90	17264.52
9.7		Providing & fixing White vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material i/c malba, all complete as per the direction of Engineer-in charge.			
9.7.1	2	Orissa pattern WC Pan of size 580x440 mm	each	2127.85	4255.70
9.8	1	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in- Charge.	each	55.45	55.45
9.9	4	Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in-charge.	each	176.40	705.60
10		DISMANTLING & DEMOLISHING			
10.1		Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.			
10.1.1	150	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	997.05	149557.50
10.2		Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.			
10.2.1	3.83	In cement mortar	cum	842.75	3227.73
10.3		Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :			
10.3.1	10	Of area beyond 3 sq. metres	each	81.00	810.00
10.4		Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead :			
10.4.1	26.28	Thickness up to 40 mm	sqm	119.95	3152.29
10.5	2	Dismantling of flushing cistern of all types (C.I./PVC/Vitreous China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	each	391.20	782.40
10.6	13.49	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	22.40	302.18
10.7	226.23	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	cum	120.55	27272.03

11		SANITARY INSTALLATIONS			
11.1		Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :			
11.1.1	1	W.C. pan with ISI marked white solid plastic seat and lid	each	4593.75	4593.75
11.2		Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required :			
11.2.1	12	Size 600x450x200 mm	each	3211.45	38537.40
11.3		Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.			
11.3.1	1	10 litre capacity - White	each	831.50	831.50
11.4		Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.			
11.4.1		Semi rigid pipe			
11.4.1.1	13	40 mm dia	each	81.40	1058.20
11.5	5	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	817.95	4089.75
12		WATER SUPPLY			
12.1		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.			
12.1.1	88.2	15 mm nominal outer dia Pipes	metre	246.20	21714.84
12.2		Providing and fixing uplasticised PVC connection pipe with brass unions :			
12.2.1		45 cm length			
12.2.1.1	20	15 mm nominal bore	each	67.80	1356.00

12.3		Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.			
12.3.1	5	15 mm nominal bore	each	492.55	2462.75
12.4		Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931			
12.4.1	11	15mm nominal bore	each	475.70	5232.70
13		ALUMINIUM WORK			
13.1		Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :			
13.1.1		For fixed portion			
13.1.1.1	270	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	355.20	95904.00
13.1.2		For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)			
13.1.2.1	310	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	415.05	128665.50
13.2		Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in paneling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.			
13.2.1	9.69	Pre-laminated particle board with decorative lamination on both sides	sqm	866.60	8397.35
13.3		Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):			
13.3.1	21	With float glass panes of 5.50 mm thickness	sqm	1003.95	21082.95
13.4		Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.			
13.4.1	8	With stainless steel cover plate minimum 1.25 mm thickness	each	2054.40	16435.20
13.5		Providing and fixing machine moulded aluminium covering of approved pattern & design, made out of machine cut aluminium sheet and machine holed for receiving dash fastener, over expansion joints on vertical surfaces/ceiling floors, the fixing on plate in one row on one side of joint only shall be done with stainless steel dash fasteners of 8 mm dia and 75 mm long bolt including providing aluminium washers 2 mm thick & 15 mm dia, at a staggered pitch of 200mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete as per direction of Engineer-in-charge.			
13.5.1	23	Anodised aluminium sheet 2.5mm thick (anodised trans- parent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	455.85	10484.55
13.6		Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.			
13.6.1	50	Upto 5mm depth and 5 mm width	metre	62.45	3122.50
13.7		Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.			
13.7.1	16	Anodized (AC 15) aluminium tubular handle bar	each	463.75	7420.00
13.8	4	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	each	359.00	1436.00
13.9	33	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	kg	408.85	13492.05
				Total	2388480.19
				ADD COST INDEX	18.63%
				Grand total	444973.86
				SAY	2833454.05
					2833454.00
					Rs.
Percentage "Above" or "Below" or "At par" the Estimated cost of work/schedule					
Sr.No.	Estimated cost of work (in Rupees)	Rate Quoted by Contractor As		Price	
		"Above" or "Below" or "At Par"	% in Figures	In Words	Total Cost (in Rupees)
1	3	4	5	6	7
1	28,33,454.00			#NAME?	-
TOTAL COST OF SCHEDULES:-	28,33,454.00			TOTAL QUOTED PRICE=	0.00
Grand Total (in words)				#NAME?	
H-Schedule					
S.No	Qty	Items	Unit	Rate	Amount

1	11	S&f fixed wire gauge of stainless steel of 14 mesh x 24 gauge to the aluminium window by Aluminium beading 20x3mm with suitable screws at not exceeding 150mm distance at all heights with all lead and lift with scaffolding.	Sqm		0.00
2	20	Dismantling stone slab/ terrazo chip flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 meters lead.	Sqm		0.00
3		Providing and fixing Superior quality CP Brass fittings of approved make as per direction of Engineer-in-charge.			
3.1	6	Pillar Cock 15 mm nominal size.	Each		0.00
3.2	20	Swan neck pillar cock 15 mm nominal size.	Each		0.00
3.3	2	Two way Bib Cock 15 mm nominal size.	Each		0.00
4		P&F rigid PVC Pipe (IS:4985 mark) class II (4 Kg./Cm ²) approved quality /make including joining the pipe with solvent cement rubber ring and lubricant.			
4.1	25	110 mm dia.	Mtr		0.00
5		Supplying and fixing in walls machine cut and polished stone shelves, tands and in CM 1:3 with machine cut edges :			
5.1	23	Sand or other approved stone 25mm thick.	Sqm.		0.00
5.2	1	Sand or other approved stone 50mm thick.	Sqm.		0.00
5.3	23	Kota stone minimum 30mm thick.	Sqm.		0.00
6		P & F Grating of approved quality/make:			
6.1	15	Stainless Steel Sheet size 125mm dia.	Each		0.00
7		P & F Soap Dish or Tray of approved quality/make			
7.1	5	C.P. brass heavy and superior quality.	Each		0.00
8	2	P & F Jet spray for water closet with C.P. Copper Tube flange of approved make.	Each		0.00
9	5	P & F C.P. brass Urinal Spreader for stall urinal of approved make.	Each		0.00
				TOTAL	0.00
SUM OF G SCHEDULE + H SCHEDULE					0.00
#NAME?					